

Litigating the Climate Emergency

HOW HUMAN RIGHTS, COURTS, AND LEGAL
MOBILIZATION CAN BOLSTER CLIMATE ACTION

Edited by

CÉSAR RODRÍGUEZ-GARAVITO

New York University



CAMBRIDGE
UNIVERSITY PRESS



CAMBRIDGE
UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314-321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009098779

DOI: [10.1017/9781009106214](https://doi.org/10.1017/9781009106214)

© Cambridge University Press & Assessment 2023

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

An online version of this work is published at doi.org/10.1017/9781009106214 under a Creative Commons Open Access license CC-BY-NC-ND 4.0 which permits re-use, distribution and reproduction in any medium for non-commercial purposes providing appropriate credit to the original work is given. You may not distribute derivative works without permission. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/4.0>

All versions of this work may contain content reproduced under license from third parties. Permission to reproduce this third-party content must be obtained from these third-parties directly.

When citing this work, please include a reference to the DOI [10.1017/9781009106214](https://doi.org/10.1017/9781009106214)

First published 2023

A catalogue record for this publication is available from the British Library.

ISBN 978-1-009-09877-9 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

LITIGATING THE CLIMATE EMERGENCY

As the climate emergency intensifies, rights-based climate cases – litigation that is based on human rights law – are becoming an increasingly important tool for securing more ambitious climate action. This book is the first to offer a systematic analysis of the universe of these cases known as human rights and climate change (HRCC) cases. By combining theory, empirical documentation, and strategic debate among preeminent scholars and practitioners from around the world, the book captures the roots, legal innovations, empirical richness, impact, and challenges of this dynamic field of sociolegal practice. It looks specifically at the sociolegal origins and trajectory of HRCC cases, the legal innovations of this type of litigation, and the strategies and impacts of these cases. In doing so, this book equips litigators, researchers, practitioners, students, and concerned citizens with an understanding of an important method of holding governments and corporations accountable for climate harms.

César Rodríguez-Garavito is a professor of clinical law and the chair of the Center for Human Rights and Global Justice at NYU School of Law. He is the director of the Earth Rights Advocacy Clinic and the Climate Litigation Accelerator at NYU Law. He is the editor in chief of *Open Global Rights* and has published widely on international human rights, climate change, environmental justice, socioeconomic rights, and social movements. He has been an expert witness of the Inter-American Court of Human Rights; an adjunct judge of the Constitutional Court of Colombia; a member of the Science Panel for the Amazon; and a lead litigator in climate change, socioeconomic rights, and Indigenous rights cases.

Globalization and Human Rights

The series provides unique and multi-disciplinary perspectives on the interface of the global economy and human rights. It offers space for exploring the challenges of globalization, the role of human rights in framing and shaping regulation and politics and, more critically, whether human rights are a mere product or legitimization of globalization.

Series Editors

Malcolm Langford

César Rodríguez-Garavito

Forthcoming Books in the Series

Jeremy Perelman, *The Rights-ification of Development: Global Poverty, Human Rights, and Globalization in the Post-Washington Consensus*

Contents

<i>List of Figures</i>	<i>page</i> ix
<i>List of Tables</i>	xi
<i>List of Contributors</i>	xiii
Introduction	1
<i>César Rodríguez-Garavito</i>	
PART I THE RIGHTS TURN IN CLIMATE LITIGATION	
1 Litigating the Climate Emergency: The Global Rise of Human Rights-Based Litigation for Climate Action	9
<i>César Rodríguez-Garavito</i>	
2 The Social and Political Life of Climate Change Litigation: Mobilizing the Law to Address the Climate Crisis	84
<i>Lisa Vanhala</i>	
PART II LEGAL STRATEGY IN RIGHTS-BASED CLIMATE LITIGATION	
3 Thinking Strategically about Climate Litigation	97
<i>Ben Batros and Tessa Khan</i>	
4 The Quest for Butterfly Climate Adjudication	117
<i>Catalina Vallejo Piedrahíta and Siri Gloppen</i>	
5 Climate Litigation through an Equality Lens	132
<i>James A. Goldston</i>	

- 6 **Two Reputed Allies: Reconciling Climate Justice and Litigation in the Global South** 145
Juan Auz
- 7 **Staying within Atmospheric and Judicial Limits: Core Principles for Assessing Whether State Action on Climate Change Complies with Human Rights** 157
Sophie Marjanac and Sam Hunter Jones
- 8 **Litmus Tests as Tools for Tribunals to Assess State Human Rights Obligations to Reduce Greenhouse Gas Emissions** 177
Ashfaq Khalfan
- 9 **The Farmer or the Hero Litigator? Modes of Climate Litigation in the Global South** 187
Jolene Lin and Jacqueline Peel
- 10 **The Impacts of High-Profile Litigation against Major Fossil Fuel Companies** 206
Joana Setzer

PART III BEYOND THE LAW: SCIENCE AND NARRATIVES
IN RIGHTS-BASED CLIMATE LITIGATION

- 11 **Climate Science and Human Rights: Using Attribution Science to Frame Government Mitigation and Adaptation Obligations** 223
Michael Burger, Jessica Wentz, and Daniel J. Metzger
- 12 **The Evolution of Corporate Accountability for Climate Change** 239
Richard Heede
- 13 **Providing Evidence to Support Strategic Climate Enforcement and Litigation** 255
Reinhold Gallmetzer
- 14 **The Case for Climate Visuals in the Courtroom** 267
Kelly Matheson
- 15 **The Story of Our Lives: Narrative Change Strategies in Climate Litigation** 289
Laura Gyte, Violeta Barrera, and Lucy Singer

PART IV THE CLIMATE EMERGENCY ON TRIAL:

HUMAN RIGHTS AND CLIMATE LITIGATION AROUND THE WORLD

- 16 **Courts, Climate Action, and Human Rights: Lessons from the *Friends of the Irish Environment v. Ireland* Case** 305
Victoria Adelmant, Philip Alston, and Matthew Blainey
- 17 **Closing the Supply-Side Accountability Gap through Climate Litigation** 319
Michelle Jonker-Argueta
- 18 **Climate Litigation before International Tribunals: The Six *Portuguese Youth v. 33 Governments of Europe* Case before the European Court of Human Rights** 335
Gerry Liston and Paul Kingsley Clark
- 19 **Is There a Brazilian Approach to Climate Litigation? The Climate Crisis, Political Instability, and Litigation Possibilities in Brazil** 349
Julia Mello Neiva and Gabriel Mantelli
- 20 **Climate Change Litigation in India: Its Potential and Challenges** 364
Arpitha Kodiveri
- 21 **The Tide of Climate Litigation Is upon Us in Africa** 376
Pooven Moodley
- 22 **Pakistan: A Good Story That Can Go Awry If Shortcomings Remain Unacknowledged** 387
Waqas Ahmad Mir
- Index* 396

Tables

1.1	Human rights-based climate cases (2005–2021)	<i>page</i> 40
4.1	Climate currents in administrative litigation	126
4.2	Important precedents in administrative and constitutional climate cases	129
9.1	Prototypical modes of climate litigation in the Global South	197
12.1	Operational and product emissions attributed to the top twenty major carbon producers, 1965–2020	250

Contributors

Victoria Adelmant is a research scholar at the Center for Human Rights and Global Justice at New York University School of Law. Her research centers around the rights of people living in poverty, focusing particularly on climate change and the digitalization of government. Victoria previously worked for the Oak Foundation, Minority Rights Group International, the United Nations, and the Academy of European Law. She has also taught schoolchildren about climate change and campaigned with Oxfam. In 2019–20, Victoria was a Hauser Global Scholar and a Human Rights Scholar at New York University. She also holds an LLM (*summa cum laude*) from the London School of Economics and a first class law degree from the University of Oxford.

Philip Alston is the John Norton Pomeroy Professor at New York University School of Law. From 2014 to 2020, he was the UN Special Rapporteur on extreme poverty and human rights.

Juan Auz is an Ecuadorian lawyer and a PhD candidate at the Hertie School's Center for Fundamental Rights in Berlin. Before this, he was an Alexander von Humboldt fellow at the Potsdam Institute for Climate Impact Research (PIK). His research focuses on the nexus between human rights and climate change law, particularly in Latin America. Juan previously worked for several years in Ecuador on Indigenous peoples' rights in Amazonia as the co-founder of Terra Mater and executive director of Fundación Pachamama. He holds an LLB from the Universidad de las Americas in Quito and an LLM in Global Environmental Law from the University of Edinburgh. Juan is a member, among other organizations, of IUCN's World Commission on Environmental Law.

Violeta Barrera holds a Law and Sociology BA from the University of Warwick, and an MA in Legal and Political Theory at University College London. Her master's thesis explores the role of deeply held convictions in a liberal state. Violeta has worked in Oxfam GB's legal team in Oxford as a paralegal since 2015.

Ben Batros is an international law practitioner focused on the intersection of climate change, human rights, and accountability. He has eighteen years of experience pursuing accountability for human rights violations and international crimes, including conducting strategic human rights litigation with the Open Society Justice Initiative, serving as appeals counsel in the Office of the Prosecutor at the International Criminal Court, and working on regional cooperation to combat transnational crime for the Australian Attorney-General's Department. For the past four years, Ben has used this experience to explore how law and strategic litigation can best support climate action. He is currently a director at Strategy for Humanity and legal advisor at the Center for Climate Crime Analysis.

Matthew Blainey specializes in human rights, climate change, and strategic litigation. He is a fellow at Just Atonement, where he is developing and implementing its climate litigation strategy. Previously, Matthew served as a judicial law clerk and was a lawyer and senior associate in the litigation departments of two preeminent international law firms, where he worked on complex litigation and provided pro bono advice to Indigenous communities and women at risk of homelessness. Matthew holds an LLM in International Legal Studies from NYU School of Law, as well as a Bachelor of Laws (Honours) and a Bachelor of International Relations from La Trobe University. He is admitted to legal practice in Australia and is applying for admission in New York.

Michael Burger is the executive director of the Sabin Center for Climate Change Law and a Senior Research Scholar at Columbia Law School. His research and advocacy focus on legal strategies to reduce greenhouse gas emissions and promote climate change adaptation through pollution control, resource management, land use planning, and green finance. He is the editor of two recent books: *Combating Climate Change with Section 115 of the Clean Air Act: Law and Policy Rationales* (2020) and *Climate Change, Public Health and the Law* (2018). He is also Of Counsel at the environmental law firm Sher Edling LLP. He is a graduate of Columbia Law School and Brown University and holds a Master of Fine Arts from the Creative Writing program at NYU.

Paul Kingsley Clark is a barrister, practicing from Garden Court Chambers, London, and a co-founder of the Global Legal Action Network (GLAN). He specializes in public, civil, and international law, with a focus on social justice. His international work includes advising and representing states in inter-state proceedings and representing defendants and states in pre-trial, trial, and appeal proceedings before the International Criminal Court, the International Criminal Tribunal for the Former Yugoslavia, and the Special Court for Sierra Leone. His domestic practice includes judicial review, private law, inquests, and inquiries, across a range of areas including prisons, criminal justice, trafficking, discrimination, and mental health.

Reinhold Gallmetzer is an appeals counsel at the Office of the Prosecutor of the International Criminal Court. He is also the founder and chairperson of the Board of Directors of the Center for Climate Crime Analysis, a non-profit organization of prosecutors and law enforcement experts established to support and scale up judicial climate action (see www.climatecrimeanalysis.org). Previously, Mr. Gallmetzer served, among other things, as a legal officer at the UN War Crimes Tribunal for the Former Yugoslavia (ICTY) and as a judicial training officer with the Organization for Security and Co-operation in Europe (OSCE). Mr. Gallmetzer studied law in Innsbruck (Austria), Padova (Italy), and Glasgow (Scotland).

Siri Gloppen is Professor of Government at the University of Bergen, Norway and director of LawTransform (the CMI-UiB Centre on Law & Social Transformation), a global center for the study of the role of law and legal institutions in social change. Gloppen is also the co-director of the Bergen School of Global Studies. Her core research area is the use of law and courts as strategies and arenas for social change (lawfare), including in areas such as climate change, sexual and reproductive rights, the right to health elections, and democratic governance. She has led and participated in numerous international research projects in these fields, including “Climate Change Discourses, Rights and the Poor,” “Climate Crossroads,” and “PluriLand Theorizing Conflict and Contestation in Plural Land Rights Regimes.”

James A. Goldston is the executive director of the Open Society Justice Initiative. A leading practitioner of international human rights and criminal law, Goldston has litigated leading cases before the European Court of Human Rights and United Nations treaty bodies. Goldston previously served as coordinator of prosecutions in the Office of the Prosecutor at the International Criminal Court, as legal director of the Budapest-based European Roma Rights Centre, as director general for human rights at the

Mission to Bosnia-Herzegovina of the Organization for Security and Co-operation in Europe, and as assistant United States attorney for the Southern District of New York, where he focused on organized crime. Goldston is an adjunct professor of law at NYU School of Law.

Laura Gyte is a public interest litigator, specializing in climate litigation and campaigns legal strategy. At the time of writing, Laura was senior legal advisor at Oxfam. She is now special counsel at FILE Foundation and a co-founding director at Rights: Community: Action. Laura has worked for fifteen years as a legal advisor to NGOs and governments in the Global North and South. She holds a degree in law from the University of Oxford and studied comparative human rights law at the University of Konstanz, Germany.

Richard Heede leads the Climate Accountability Institute's (CAI) "Carbon Majors" initiative that attributes emissions to the largest fossil fuel companies that produce and market carbon fuels worldwide. He and his colleagues modeled the CO₂, temperature, sea level rise, and ocean acidification traced to major carbon producers. Richard investigates how oil and gas companies can align production and investment with (and correct perverse incentives with respect to) the $\leq 1.5^{\circ}\text{C}$ pathway. He founded CAI in 2011 to use science to leverage climate stewardship, following the arc of his 1983 NCAR thesis *A Geography of Carbon*, his energy and climate work with the Rocky Mountain Institute from 1984 to 2001, and his municipal and corporate inventories with Climate Mitigation Services from 2001 to 2011. He designed and built his low-carbon home at 2,300 meters in the Rocky Mountains.

Sam Hunter Jones is qualified as a solicitor in England and Wales. Alongside acting in an individual capacity for the claimants in the Torres Strait climate case, Sam is an in-house lawyer at the environmental law charity ClientEarth, where his work focuses on public interest climate litigation. He holds an LLM in environmental law and policy from University College London, where he was awarded the Maxi Alexander prize for research. Before ClientEarth, Sam practiced as an international disputes lawyer at the law firm Freshfields Bruckhaus Deringer, where he led a number of pro bono initiatives relating to human rights.

Michelle Jonker-Argueta is acting senior legal counsel for Strategic Litigation at Greenpeace International. She advises campaigns on the development and implementation of strategic litigation to hold governments and corporations accountable for climate change and biodiversity loss, as well as the resulting human rights violations. Prior to joining Greenpeace International, Michelle worked in international human rights law and international criminal law in

prosecution and appeals. She also has experience in the private sector on EU competition law. Michelle is an attorney registered with the New York State Bar and holds a Juris Doctor from Yale Law School. She is also a Dutch Lawyer.

Ashfaq Khalfan is a researcher/advisor on obligations beyond borders and as Economic, Social and Cultural Rights Policy Coordinator, focusing on the legal enforcement of rights. He previously led the Right to Water Programme at the Centre on Housing Rights and Evictions. His published work has covered a range of topics, including extraterritorial human rights obligations, human rights change strategies, sustainable development law, and the rights to water and sanitation. He has a doctoral degree in law from Oxford University and degrees in common and civil law and political science and international development from McGill University. He was a founding director of the Centre for International Sustainable Development Law and now chairs its board.

Tessa Khan is an international climate change and human rights lawyer and advocate. She is the founder and director of Uplift, which supports a just transition away from fossil fuel production in the United Kingdom. Previously, she was co-founder and co-director of the Climate Litigation Network, a project of the Urgenda Foundation. She has supported grassroots, regional, and international movements for justice and has served as an expert advisor to UN human rights bodies and governments, while working in Thailand, Egypt, India, the United States, the Netherlands, the United Kingdom, and Australia. She has BA and LLB (*Hons*) from the University of Western Australia and a BCL (*Dist.*) from the University of Oxford. She is a regular commentator in the United Kingdom and international media.

Arpitha Kodiveri is a postdoctoral fellow at the Climate Litigation Accelerator (CLX) at NYU Law. She received her doctoral degree from the European University Institute as a Hans Kelsen Fellow, where her research examined land conflicts in India's forests. She previously worked as an environmental lawyer supporting forest-dwelling communities. She has an LLM from UC Berkeley and a BSL LLB from ILS College, Pune.

Jolene Lin is associate professor at the Faculty of Law, National University of Singapore and director of the Asia Pacific Centre for Environmental Law. Her research interests are transnational environmental and climate change law and climate litigation. She is the author of *Governing Climate Change: Global Cities and Transnational Lawmaking* (2017) and, with Jacqueline Peel, is co-authoring a book on Global South climate litigation.

Gerry Liston is a qualified solicitor (Ireland), a PhD candidate at the Irish Centre for Human Rights, and a legal officer with the Global Legal Action Network (GLAN), the organization instructing counsel on behalf of the Portuguese youth-applicants in their case against thirty-three European countries before the European Court of Human Rights.

Gabriel Mantelli is pursuing a PhD in Philosophy and Legal Theory at the Faculty of Law at the University of São Paulo (USP). He holds a Master's of Law and Development from São Paulo Law School and completed a visiting research period at Kent Law School (University of Kent, United Kingdom). Gabriel is currently a human rights and environmental lawyer. He is also a law professor at São Judas University (USJT) and coordinates its Human Rights Clinic as well as the Center for Law and Decolonization. Based in São Paulo, Brazil, he is an officer within the Protection of Socioenvironmental Rights program at Conectas Human Rights.

Sophie Marjanac is the climate accountability lead at ClientEarth. Her work focuses on strategic litigation and other legal interventions to drive governments and companies towards reducing their emissions in line with the Paris Agreement. She is acting for the claimants in the Torres Strait climate case in an individual capacity. Before ClientEarth, Sophie was a senior lawyer in the environment and planning law practice of the Australian law firm, Clayton Utz. She also previously worked in Indigenous land rights in the remote Torres Strait region. Sophie is qualified as a solicitor in the State of Victoria, Australia. She has a Bachelor of Laws with First Class Honors and a Bachelor of International Studies with Distinction from the University of New South Wales.

Kelly Matheson is a human rights lawyer and award-winning filmmaker who spent the last 15 years working at WITNESS, an international human rights organization that specializes in using video and technology to defend human rights. As a human rights lawyer and filmmaker, she specialized in the use of video evidence in environmental human rights and international criminal justice investigations and proceedings. Kelly now serves as the Deputy Director of Global Climate Litigation for Our Children's Trust, a non-profit public interest law firm that provides strategic, campaign-based legal services to youth from diverse backgrounds to secure their legal rights to a safe climate.

Daniel J. Metzger is a climate law fellow at Columbia Law School's Sabin Center for Climate Change Law. His work focuses on climate change litigation, including research on litigation risk, international law, and the law and science of climate change attribution. Daniel earned his JD from Vanderbilt

Law School and a master's degree in natural resource management from Iceland's University Centre of the Westfjords.

Waqqas Ahmad Mir is a practicing lawyer based in Lahore and a partner at Axis Law Chambers. His litigation practice primarily focuses on constitutional, antitrust, taxation, and commercial law. Waqqas also appears in matters relating to environmental law as well as animals' rights. He has been appointed as *amicus curiae* on three different occasions by the Lahore High Court in matters relating to taxation, energy, constitutional interpretation, the environment, and local government. Waqqas was called to the Bar of England and Wales in 2007 and is also a graduate of Harvard Law School, which he attended on a Fulbright scholarship.

Pooven Moodley is a human rights lawyer and social justice activist from South Africa. He is currently the executive director of Natural Justice, an organization of lawyers for the community and the environment. Before joining Natural Justice, he was the associate country director of Oxfam GB in South Africa and the global head of campaigning for ActionAid International. He has worked extensively in over twenty countries, starting with the anti-apartheid movement. Pooven has also campaigned with a range of communities and activists from the local to the global levels on issues around the environment, land, extractives, basic services, and the climate and planetary crisis. He is the ICCA Consortium co-chair of the "Defending the Territories of Life" stream of work.

Julia Mello Neiva is pursuing a PhD in Human Rights at the Faculty of Law of the University of São Paulo (USP). She holds a Master of Human Rights (LLM) from Columbia Law School (Columbia University, New York) and is a human rights specialist for the Faculty of Law of the University of São Paulo (USP). Based in São Paulo, Brazil, she is the coordinator of the Protection of Socioenvironmental Rights program at Conectas Human Rights. She is a lawyer and human rights activist. She worked for many years as a representative and senior researcher at the Business and Human Rights Resource Centre and for other NGOs and academic institutions.

Jacqueline Peel is a professor at Melbourne Law School and director of Melbourne Climate Futures. She is an expert in environmental and climate law and climate litigation. She has published widely on this topic, including *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (with Hari Osofsky) and, with Jolene Lin, is co-authoring a book on Global South climate litigation.

César Rodríguez-Garavito is a professor of clinical law and chair of the Center for Human Rights and Global Justice at NYU School of Law. He is the founding director of the Earth Rights Advocacy (ERA) Clinic and the Climate Litigation Accelerator (CLX) at NYU Law. César is also the editor-in-chief of *Open Global Rights*. He has been a visiting professor at Stanford, Brown, the University of Melbourne, the European University Institute, the University of Pretoria, the Getulio Vargas Foundation (Brazil), and the Andean University of Quito. He has published widely on global governance, international human rights, climate litigation, Indigenous rights, socioenvironmental conflicts, and business and human rights. César has also served as an expert witness of the Inter-American Court of Human Rights, an adjunct judge of the Constitutional Court of Colombia, a member of the Science Panel for the Amazon, and a lead litigator in climate change, socioeconomic rights, and Indigenous rights cases.

Joana Setzer is an assistant professorial research fellow at the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science (LSE), where she leads the Climate Change Laws of the World project – the most comprehensive global resource on climate legislation and litigation. Joana was a British Academy post-doctoral fellow. She holds a PhD and an MSc from LSE and a Masters and a BA in Law from the University of São Paulo. Prior to moving to the United Kingdom, she worked as an environmental lawyer in Brazil. Joana regularly advises a range of international, governmental, and nongovernmental organizations. She has authored over thirty peer-reviewed papers and book chapters.

Lucy Singer is an intellectual property solicitor working for Gowling WLG LLP in their London office. Lucy has a keen interest in sustainability and undertook a six-month secondment to the legal team at Oxfam, where she was fortunate to become involved with this project.

Catalina Vallejo Catalina Vallejo is a postdoctoral fellow at the University of Bergen School of Law for the project “Causes and Consequences of the Legal Architecture of Climate Politics” (2020–23). She is affiliated to LawTransform in Norway and is country-case researcher for the project “Riverine Rights: Exploring the Currents and Consequences of Legal Innovations on the Rights of Rivers in Colombia, New Zealand, and India” funded by the Research Council of Norway (2020–24). She holds a Ph.D. in Law from Los Andes University, Bogotá, an MA in Peace & Conflict studies from Innsbruck University, a degree in Law from UNAULA and a postgraduate degree in

Administrative Law from Universidad de Antioquia, both in Colombia. Her doctoral dissertation was devoted to climate change litigation and emerging climate jurisprudence in cases involving State parties.

Lisa Vanhala is Professor of Political Science at University College London. She is the principal investigator on a European Research Council Starting Grant on the Politics of Climate Change Loss and Damage (CCLAD, grant number 755753) and has a long-standing interest in environment-related legal mobilization. Her work on climate change litigation and climate change loss and damage has been published in *Global Environmental Change*, *WIREs Climate Change*, *Global Environmental Politics*, *Environmental Politics*, and *Law & Policy*.

Jessica Wentz is a non-resident senior fellow at Columbia Law School's Sabin Center for Climate Change Law. Her work has spanned a variety of topics related to climate change mitigation and adaptation. Much of her research focuses on the role of climate science in litigation, environmental impact assessment, and natural resource management. Jessica previously worked as a visiting associate professor and environmental program fellow at the George Washington University Law School, where she received an LLM in Energy and Environmental law. She also has a JD from Columbia Law School and a BA in international development from the University of California, Los Angeles.

Introduction

CÉSAR RODRÍGUEZ-GARAVITO

As the climate crisis intensifies and becomes acutely visible, promising responses have been developed by scientists, advocates, and scholars around the world. Mobilizations such as #FridaysforFuture and Extinction Rebellion are converging with Indigenous peoples' movements and other social justice movements to convey the urgency and the scale needed for climate action. Reports by the Intergovernmental Panel on Climate Change, informed by developments in attribution science, establish more precise links between greenhouse gas emissions, extreme weather events, and human impacts.¹ In the meantime, collaborations between scientists and journalists have drawn the broader public's attention to detailed information about the magnitude of planet-warming emissions associated with the activities of major fossil fuel companies.²

In this edited volume, we explore a specific advocacy and regulatory tool that is gaining momentum around the world: human rights–based climate change (HRCC) litigation. Brought before national and international judicial and quasi-judicial bodies – from domestic courts to regional courts to UN human rights bodies – a growing wave of cases lays bare the profound impacts that a warming planet has on basic rights, such as the rights to life, health, and physical integrity of the victims of floods, fires, heat waves, and other extreme weather events; the right to housing and family life of the up to a billion human beings that may become climate refugees by 2050;³ and the whole

¹ See “Climate Change 2022: Impacts, Adaptation, and Vulnerability” <<https://www.ipcc.ch/report/ar6/wg2/>>. See also “Special Report: Global Warming of 1.5°C” (2018) IPCC, <<https://www.ipcc.ch/sr15/>>.

² See Matthew Taylor and Jonathan Watts, ‘Revealed: The 20 Firms Behind a Third of All Carbon Emissions’, *The Guardian*, October 9, 2019.

³ See Baher Kamal, “Climate Migrants Might Reach One Billion by 2050,” Inter Press Service, August 21, 2017.

range of rights of young people and future generations that may inherit an uninhabitable planet if carbon emissions are not urgently and drastically cut, in line with the recommendations of the IPCC and the goals of the Paris Climate Agreement.

The increasing use of human rights norms and litigation to advance climate action was not a foregone conclusion. Rather, it is a remarkable development, given the litany of failed efforts to create linkages between human rights and climate action in international law, starting with the omission of human rights in the landmark Rio Declaration of 1992. It took over two decades for human rights impacts to be recognized in a major international climate agreement (the 2015 Paris Agreement). The trend in climate litigation is striking also because human rights organizations were relatively slow to take on climate change. In fact, both in international law and domestic advocacy, it was environmental organizations that took the lead in bringing human rights frames and norms to bear on efforts against global warming.⁴

As I show in Chapter 1, prior to 2015, only a handful of rights-based climate cases had been filed anywhere in the world. Between 2015 and 2021, litigants brought 148 suits against states (and, to a much lesser extent, corporations) for human rights violations related to climate change in thirty national jurisdictions and in eight international judicial or quasi-judicial bodies.

In addition to well-known cases such as *Urgenda v. the Netherlands*, *Neubauer v. Germany*, and *Leghari v. Pakistan*, the growing body of lawsuits and court rulings include successful challenges to coal mining in Europe, South Africa, and Australia; legal challenges against the utterly insufficient pledges that governments in Europe, Brazil, South Korea, and the United Kingdom have made to cut carbon emissions; lawsuits brought on behalf of young plaintiffs and future generations in the Americas, Australia, Europe, India, and South Korea; a human rights investigation against major fossil fuel companies in the Philippines; and challenges to high-emission economic activities, from the construction of new airport runways in Vienna and London to oil exploration in the Norwegian Arctic to cattle ranching driving deforestation in the Amazon rainforest. At the international level, the UN Human Rights Committee examined a petition against New Zealand that affirmed states' duty to refrain from sending climate refugees to another state in which their life or physical integrity would be seriously endangered due to climate harms. Another petition, initiated by Greta Thunberg and other

⁴ See César Rodríguez-Garavito, "International Human Rights and Climate Governance: Origins and Implications of the Rights-Based Climate Litigation," paper presented at the Litigating the Climate Emergency Conference, NYU School of Law (March 9–10, 2020).

young activists, was presented to the UN Committee on the Rights of the Child, challenging top polluters among countries subject to the Committee's jurisdiction.

As this "rights turn" in climate litigation has taken hold, actors undertaking, supporting, or encouraging it have proliferated apace.⁵ They include environmental and human rights organizations at the domestic and international levels, social and climate justice movements, UN special rapporteurs, Indigenous peoples' organizations, public prosecutors, and governmental and intergovernmental human rights bodies. Indeed, rights-based climate litigation is an idea whose time has come.

While there is abundant literature on climate litigation, studies on rights-based litigation are far less common. Moreover, the dominant modality in the literature on HRCC lawsuits are in-depth studies of a single or a few particularly successful cases, usually from Global North jurisdictions. This volume seeks to fill this scholarly and practical gap by offering a systematic overview of HRCC litigation and analyzing the opportunities and challenges it raises for climate action and human rights around the world. The book is the result of a conference held at New York University School of Law in early March 2020. Convened by NYU Law's Center for Human Rights and Global Justice, the conference brought together leading scholars, practitioners, scientists, and other actors that have contributed to HRCC litigation research and practice in different parts of the world.

At the conference and during the editorial process, we invited contributors to engage with a common set of questions: What analytical and strategic lessons can be extracted from the body of lawsuits and rulings for future research and advocacy? What ideas and experiences from other fields of research and practice (such as socioeconomic rights advocacy) can be usefully applied to understand and strategize future lawsuits and submissions before national and international courts and human rights bodies? Given the unique challenges that global warming poses, what types of litigation efforts may contribute to attaining the scale and urgency that, according to science, are needed for climate action to be timely and effective?

The chapters in this book offer evidence-based and thought-provoking answers to these questions.⁶ They highlight the considerable usefulness and

⁵ See Jacqueline Peel and Hari M. Osofsky, "A Rights Turn in Climate Litigation?" (2018) 7 *Transnational Environmental Law* 37.

⁶ Preliminary versions of some of these answers can be found in a blog series that resulted from the aforementioned conference, from which this introduction is adapted. See "Up Close: Litigating the Climate Emergency," OpenGlobal Rights, <<https://www.openglobalrights.org/up-close/climate-emergency-litigation/#up-close>>.

potential – but also the limitations and the blind spots – of existing human rights concepts and norms in dealing with the unique features of climate change, from its multicausality to its nonlinear temporality.

The volume is divided into four parts. Part I provides the empirical and analytical background for the rest of the volume. It includes an assessment of the trends, norms, contributions, and challenges of the universe of HRCC cases (Chapter 1) as well as a discussion of the contributions of the subsequent chapters to the broader literature on legal mobilization (Chapter 2).

Part II focuses on legal strategy. Contributors to this part of the book offer analyses and actionable ideas for some of the most complex strategic issues in HRCC cases, including choosing targets and remedies (Chapter 3); litigating less spectacular and visible cases that can nonetheless make a considerable aggregate contribution to climate action (Chapter 4); pursuing strategies that address inequalities in climate impacts (Chapter 5); reconciling climate litigation with global climate justice (Chapter 6); assessing whether states' action on climate change complies with human rights (Chapter 7); determining whether states' climate action meets their socioeconomic rights obligations (Chapter 8); understanding the different modalities of legal action that are available to litigants, especially in the Global South (Chapter 9); and the costs and impact of litigating against major fossil fuel companies (Chapter 10).

Part III shifts the analytical gaze from the law to fields of knowledge and expertise that have proved equally important in the practice of HRCC litigation. Based on research and court experience, contributors discuss lessons from attribution science to frame government mitigation and adaptation obligations (Chapter 11); the science of accounting for fossil fuel companies' emissions and its usefulness in litigation (Chapter 12); strategies for building robust evidence that can hold in court in HRCC cases (Chapter 13); and the uses of communications, narratives, and video as evidence and campaign tools in support of litigation (Chapters 14 and 15).

Going from the general to the particular, Part IV homes in on specific cases and the lessons they offer for the future of HRCC litigation. Drawing on a combination of scholarly research and participation in the cases, authors offer illuminating accounts of leading cases in Ireland (Chapter 16), Norway (Chapter 17), the European Court of Human Rights (Chapter 18), Brazil (Chapter 19), India (Chapter 20), South Africa (Chapter 21), and Pakistan (Chapter 22).

This book is the result of a collective effort undertaken under extraordinary circumstances. As readers may have already noticed, the date of the conference where contributors to this volume got together in New York City overlapped almost perfectly with the moment when the COVID-19 outbreak

was declared a global pandemic and our lives were upended overnight. In fact, we had to shut the doors of one of NYU Law School's buildings behind us at the end of the conference, as the school announced that it would be closing indefinitely the day after. While we were discussing the climate crisis, the onset of another existential crisis was becoming palpable.

It is a testament to the contributors' commitment to climate research and action that we managed to complete the revisions of the chapters and the submission of the manuscript during a global pandemic. Aware that "one crisis doesn't stop because another one starts" and that the pandemic could be a "dress rehearsal" for the climate crisis that will ensue unless humanity urgently changes course,⁷ we doubled down on our efforts and continued collaborating online.

In addition to this volume, the aforementioned conference resulted in the establishment of the Climate Litigation Accelerator (CLX). Hosted by the Earth Rights Advocacy Clinic and the Center for Human Rights and Global Justice at NYU School of Law, CLX is a global collaborative hub dedicated to advancing legal actions, advocacy, and research that build the speed and scale necessary to spur action on the climate emergency. As part of this work, CLX hosts a growing Global Community of Practice that currently includes over 200 organizations, litigators, and researchers from the Global North and the Global South. CLX also produces publications, litigation databases, monthly webinars, case studies, and online educational modules that examine key, strategic, and forward-looking issues and legal developments in the climate change and human rights space.⁸

Neither the book nor CLX would have been possible without the support and solidarity of colleagues at NYU Law. I'm especially grateful to Philip Alston, Meg Satterthwaite, and Gráinne de Búrca for welcoming me to the NYU community and believing in this project from the start with their usual generosity. Thanks also to Ben Batros, Melina de Bona, Carlos Andrés Baquero, Sukti Dhital, Elizabeth Donger, Ellie Happel, Kelly Matheson, Sienna Merope-Sing, Nikki Reich and Lauren Stackpoole for having played key roles in the conference. I'm also grateful to my CLX colleagues, especially Jacqueline Gallant, whose superb legal and research skills are matched only by her editorial talent and generosity in taking on the whole range of tasks involved in readying a manuscript for publication.

Outside of NYU, the support of the Open Society Foundations and the FILE Foundation were crucial for the completion of this project.

⁷ Bill McKibben, "One Crisis Doesn't Stop Because Another Starts," *The New Yorker*, 14 May 2020.

⁸ See <clxtoolkit.com>

PART I

The Rights Turn in Climate Litigation

Litigating the Climate Emergency

The Global Rise of Human Rights–Based Litigation for Climate Action

CÉSAR RODRÍGUEZ-GARAVITO

In April 2021, the German Constitutional Court stunned observers and even the young plaintiffs who had challenged the country’s climate law by holding that “the national climate targets and the annual emission amounts allowed [by the Federal Climate Change Act] until 2030 are incompatible with fundamental rights insofar as they lack sufficient specifications for further emission reductions from 2031 onwards.”¹ The court’s landmark judgment in the *Neubauer* case prompted the government to increase its 2030 greenhouse gas (GHG) emissions reduction target, specify further increases thereafter, and move up the date of net carbon neutrality to 2045. The ruling built on and expanded legal innovations introduced by litigants and courts since the mid-2010s on issues such as the impact of global warming on human rights, judicial review of governmental action on climate change, the rights of future generations, and the binding nature of governments’ international pledges on climate action.

Among the key precedents quoted by the German Constitutional Court is the 2019 Dutch Supreme Court’s ruling in the *Urgenda* case, which upheld the lower courts’ rulings from 2015 to 2018 that the Dutch government has a duty to urgently and significantly slash the country’s planet-warming emissions.² *Urgenda* was the first case to establish that climate inaction is a violation of internationally recognized human rights and to hold a government legally accountable for its international commitments and national targets regarding GHG emission cuts. The court ordered the government to

¹ “Constitutional Complaints against the Federal Climate Change Act Partially Successful,” Bundesverfassungsgericht, April 29, 2021, <www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2021/bvg21-031.html>.

² See HR 20 December 2019, 41 NJ 2020, m.nt. J.S. (*Urgenda/Netherlands*) (Neth.) (hereinafter “*Urgenda*”).

increase the nation's GHG emissions reduction target from 20 to 25 percent relative to 1990 levels by the end of 2020 – in line with the country's prior target and the minimum contribution required from industrialized countries for the planet to avoid the most extreme scenarios of global warming, according to the scientific assessments of the UN Intergovernmental Panel on Climate Change (IPCC) and the goals of the 2015 Paris Agreement, both of which the Dutch Supreme Court cited extensively in its ruling, just as the German Constitutional Court would do in *Neubauer*.

Prior to 2015, only nineteen rights-based climate cases had been filed anywhere in the world, according to the database compiled for this study. Launched in early 2020 and updated regularly, this is the first specialized database to collect detailed information about human rights and climate change (HRCC) cases, based on a systematic reading of submissions and rulings as well as interviews with key actors in cases filed before national and international judicial and quasi-judicial bodies (see Table 1.1 in the Appendix for the list of cases).³ Between 2015 and December 2021, litigants brought 148 climate cases involving rights language or arguments in thirty-eight national jurisdictions and in eleven international judicial or quasi-judicial bodies. As Figure 1.1 shows, human rights-based climate cases proliferated at a steady pace in this period, even as (and sometimes as a reaction to) progress stalled with regard to the implementation of the 2015 Paris Agreement.

Outside of the United States, the proportion of climate cases that are argued on human rights grounds has risen to approximately 91 percent since 2015, with Europe as the most active region with respect to rights-based climate litigation (see Figure 1.2).⁴ *Urgenda*-like suits have been filed, with mixed results, in, for example, Belgium, Brazil, Canada, the European Union,

³ There is an ongoing debate in the literature about which legal actions should count as climate litigation. See Jacqueline Peel and Hari M. Osofsky, *Climate Change Litigation* (Cambridge: Cambridge University Press, 2015), pp. 4–8. Following Peel and Osofsky, this chapter includes only cases in which litigants or judicial or quasi-judicial bodies explicitly referenced climate change and human rights in their submissions or decisions.

⁴ The database on which this study is based is publicly available and regularly updated by the Climate Litigation Accelerator (CLX) at New York University School of Law. The information in CLX's database was generated by a systematic analysis of the texts of the HRCC submissions and rulings as well as interviews with litigants and judges and participation in expert meetings. See the NYU Climate Litigation Accelerator's Toolkit, which includes the database, at <clxtoolkit.org>. To check for consistency and thoroughness, CLX researchers also keep track of potentially relevant new cases that are included in the databases on climate litigation kept by the Sabin Center for Climate Change Law ("Climate Change Litigation Databases," Sabin Center for Climate Change Law, <www.climatecasechart.com>) and the Grantham Research Institute on Climate Change and the Environment ("Climate Change Laws of the

Case Count vs. Year

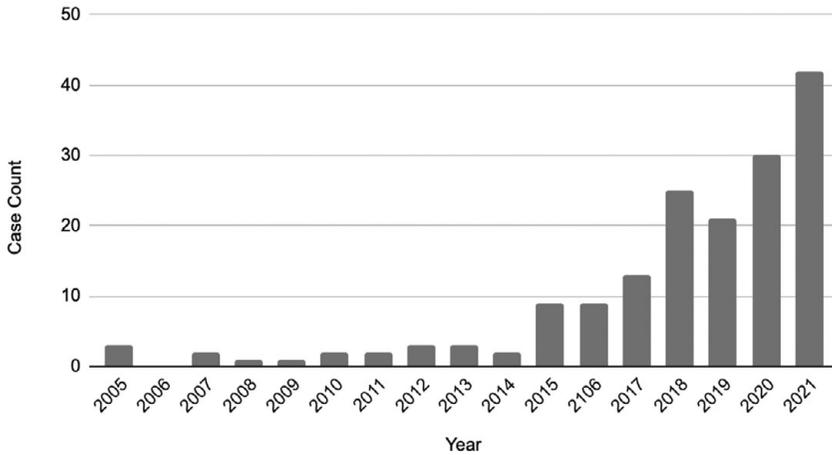


FIGURE 1.1 HRCC cases filed per year

France, Germany, India, Ireland, Nepal, South Korea, Spain, Switzerland, and the United Kingdom.⁵ Beyond Europe, in 2015, Pakistan’s Lahore High

World,” Grantham Research Institute on Climate Change and the Environment, <<https://climate-laws.org>>).

- ⁵ For information on the Belgium climate case *VZW/ASBL Klimaatzaak*, see “Overview of the Progress of Our Legal Action,” *L’Affaire Climat*, <<https://affaire-climat.be/fr/the-case>>. For an unofficial translation of the complaint submitted by the petitioners in *Notre Affaire à Tous v. France*, see “‘Affaire du Siècle’ (Case of the Century): Brief on the Legal Request Submitted to the Administrative Court of Paris on 14 March 2019,” *Notre Affaire à Tous*, <<https://notreaffaireatous.org/wp-content/uploads/2019/05/Brief-juridique-ADS-EN-1.pdf>>. For an overview of the case filed by the Commune de Grande-Synthe against the French government, see RFI, “French Mayor Goes to Court over Government’s ‘Climate Inaction,’” RFI, January 13, 2019, <www.rfi.fr/en/environment/20190123-french-mayor-goes-court-over-government-s-climate-inaction>. For the Supreme Court judgment in *Friends of the Irish Environment v. Ireland*, see *Friends of the Irish Environment v. Ireland* [2019] IEHC 747, 748 (H. Ct.) (Ir.). For an unofficial English translation of the judgment in the Swiss case, see “Verein KlimaSeniorinnen Schweiz v. DE: Judgment of 27 November 2018,” *KlimaSeniorinnen*, 2020, <<https://klimaseniorinnen.ch/wp-content/uploads/2019/02/Judgment-FAC-2018-11-28-KlimaSeniorinnen-English.pdf>>. For the initial decision in the UK case *Plan B Earth v. Secretary of State for Business, Energy and Industrial Strategy*, see *Plan B Earth v. Sec’y of State for Bus., Energy & Indus. Strategy* [2018] EWHC 1892 CO/16/2018 (appeal taken from Eng.) (UK). For information on *La Rose v. Her Majesty the Queen*, see “La Rose v. Her Majesty the Queen,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/la-rose-v-her-majesty-the-queen/>>. See also “Pandey v. India,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/pandey-v-india/>>; see also “Duarte Agostinho and Others v. Portugal and 32 Other States,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/youth-for-climate-justice-v-austria-et-al/>>; see also Case T-330/T18, *Carvalho v. Parliament*, Gen. Ct. of the European Union

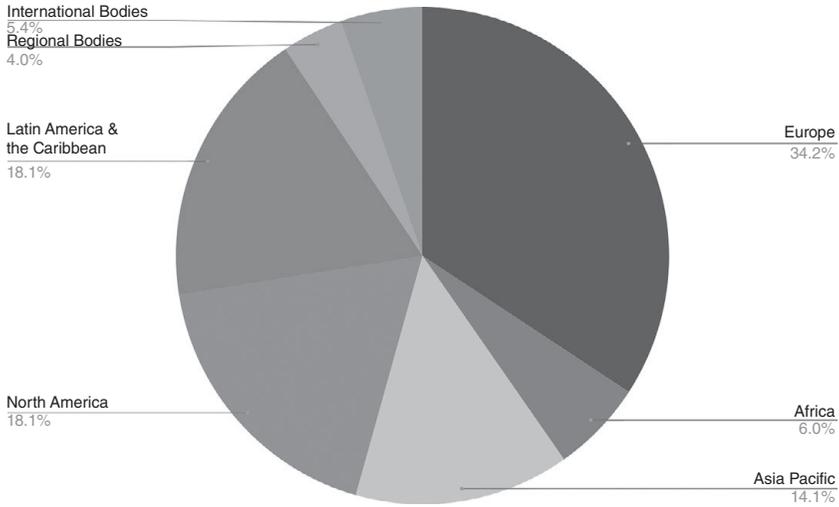


FIGURE 1.2 HRCC cases per region since 2015

Court found that the government's delay in enacting the country's climate laws violated citizens' fundamental rights.⁶ In 2018, the Colombian Supreme Court ruled in favor of young plaintiffs who sued the government to hold it accountable to its own international climate-related pledge to reduce deforestation in the Amazon region.⁷ Other rights-based lawsuits involving young plaintiffs have been filed in Argentina, Australia, Brazil, Canada, the European Union, Germany, India, Mexico, Pakistan, Peru, South Korea, the United Kingdom, and the United States, as well as in the European Court of Human Rights.⁸ Courts and human rights bodies in the Global South – from

(Second Chamber) (May 8, 2019); see also "Shrestha v. Office of the Prime Minister et al.," Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/shrestha-v-office-of-the-prime-minister-et-al/>>; see also "Mathur, et al. v. Her Majesty the Queen in Right of Ontario," Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/mathur-et-al-v-her-majesty-the-queen-in-right-of-ontario/>>; see also "Lho'imggin et al. v. Her Majesty the Queen," Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/gagnon-et-al-v-her-majesty-the-queen/>>.

⁶ See *Leghari v. Pakistan* (W.P. No. 25501/2015), Lahore High Court Green Bench, Order of September 4, 2015.

⁷ Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala de Casación Civil, abril 5, 2018, M.P.: L.A. Tolosa Villabona, Expediente 11001-22-03-000-2018-00319-01 (Colom.), <<http://climatecasechart.com/non-us-case/future-generation-v-ministry-environment-others/>>.

⁸ See *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020); see also "Youth Verdict v. Waratah Coal," Grantham Research Institute for Climate Change and the Environment, <https://climate-laws.org/cclow/geographies/australia/litigation_cases/youth-verdict-v-waratah-coal/>;

South Africa and Indonesia to the Philippines and India⁹ – have formally recognized climate harms as human rights violations. In 2022, the Brazilian Supreme Court held that the Paris Agreement should be enforced as a human rights agreement, and held the government accountable for the human rights violations stemming from omissions driving deforestation in the Amazon.¹⁰

At the international level, in a case against New Zealand, the United Nations Human Rights Committee held that states have a duty to refrain from sending asylum seekers back to another state in which their life or physical integrity would be seriously endangered due to climate harms.¹¹ A petition filed by Greta Thunberg and other young climate activists against Argentina, Brazil, France, Germany, and Turkey asked the UN Committee on the Rights of the Child to declare that the respondents have violated the petitioners' rights by contributing to global warming and to recommend actions for respondents to reduce GHG emissions and adapt to the impacts of climate change.¹² And though the Committee ultimately dismissed the petition on procedural grounds, they did find that states can be accountable for harms

see also “La Rose v. Her Majesty the Queen,” above note 5; see also Jeff Tollefson, “Canadian Kids Sue Government over Climate Change,” *Nature*, October 25, 2019, <www.nature.com/articles/d41586-019-03253-5>; see also “Pandey v. India,” above note 5; see also Chloe Farand, “Nine-Year-Old Girl Files Lawsuit against Indian Government over Failure to Take Ambitious Climate Action,” *Independent*, April 1, 2017, <www.independent.co.uk/environment/nine-ridhima-pandey-court-case-indian-government-climate-change-uttarakhand-a7661971.html>; see also “Duarte Agostinho and Others v. Portugal and 32 Other States,” above note 5; see also “Ali v. Federation of Pakistan,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/ali-v-federation-of-pakistan-2/>>; see also Case T-330/T18, *Carvalho v. Parliament*, above note 5; see also “Mathur, et al. v. Her Majesty the Queen in Right of Ontario,” above note 5; see also “Jóvenes v. Gobierno de México,” Our Children’s Trust, September 2, 2021, <www.ourchildrenstrust.org/mexico>; see also “Six Youths v. Minister of Environment and Others,” Sabin Center for Climate Change Law; see also Isabella Kaminski, “UK Students Sue Government over Human Rights Impacts of Climate Crisis,” *The Guardian*, April 21, 2021.

⁹ See *Earthlife Africa Johannesburg v. Minister of Envntl. Affairs* 2017 (2) All SA 519 (GP) (S. Afr.). For information on an Indian case involving considering climate impacts in environmental impact assessments, see “Pandey v. India,” above note 5.

¹⁰ See “PSB et al. v. Brazil (on Climate Fund),” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/psb-et-al-v-federal-union/>>; also Chapter 19.

¹¹ Human Rights Comm., Views Adopted by the Committee under Article 5(4) of the Option Protocol, concerning Communication No. 2728/2016, ¶9.11, U.N. Doc. CCPR/C/127/D/2728/2016 (October 24, 2016) (hereafter “Human Rights Comm. on Ioane Teitiota”).

¹² “Sacchi et al. v. Argentina et al.,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/sacchi-et-al-v-argentina-et-al/>>.

resulting from emissions generated within their territory and felt by children living outside their territorial borders.

Commenting on a handful of early lawsuits in this trend, analysts rightly identified a “rights turn” in climate litigation.¹³ Thus far, the literature on this trend has tended to focus on accounts of one case or a few particularly successful cases.¹⁴ In the absence of systematic analyses of the “rights turn,” we lack a robust understanding of its legal doctrines and implications for climate action.

This edited volume helps fill this scholarly and practical gap. This chapter provides the empirical background for the subsequent chapters and proposes a framework for understanding the key traits and emerging norms of rights-based climate litigation. In it, I summarize the results of my study of the universe of HRCC cases filed in domestic courts and in regional and international judicial and quasi-judicial bodies. Drawing on theories of global governance and legal mobilization, I elsewhere have offered an extended discussion of the results of the study.¹⁵ In doing so, I have sought to theorize and empirically document the origins, typology, norms, and impact of the rights turn, as well as its interaction with the adoption and implementation of the 2015 Paris Agreement.

This chapter focuses on the post-Paris period, during which the large majority of cases have been filed or decided. While I report on the universe of cases, my analysis concentrates on the type of case that predominates both the practice of HRCC litigation and the chapters in this book – that is, lawsuits that primarily seek to hold states accountable for their duties regarding climate mitigation (i.e., the reduction of planet-warming emissions) as opposed to their duties regarding climate adaptation (i.e., the protection of people and ecosystems from the already inevitable impacts of global warming). This analytical choice is justified by the fact that approximately 94 percent of HRCC cases filed since 2015 are primarily geared toward expanding and speeding up climate mitigation. The focus on state targets (rather than corporations) is explained by the fact that approximately 85 percent of HRCC cases filed since 2015 target governments.

¹³ See Jacqueline Peel and Hari M. Osofsky, “A Rights Turn in Climate Litigation?” (2018) 7 *Transnational Environmental Law* 37.

¹⁴ For a survey of the literature remarking on this limitation of climate litigation studies, see Joana Setzer and Lisa C. Vanhala, “Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance” (2019) 10 *WIREs Climate Change* 1.

¹⁵ See César Rodríguez-Garavito, “International Human Rights and Climate Governance: Origins and Implications of the Rights-Based Climate Litigation,” paper presented at the Litigating the Climate Emergency Conference, NYU School of Law (March 9–10, 2020).

I argue that the regulatory logic and the strategy of HRCC litigation should be examined at the intersection of international and domestic governance. Specifically, I posit that litigants have predominantly followed a two-pronged strategy. They have (1) asked courts to take the goals of the climate regime (as set out in the Paris Agreement, IPCC reports, and other authoritative sources) as benchmarks to assess governments' climate action and (2) invoked the norms, frames, and enforcement mechanisms of human rights to hold governments legally accountable for such goals. In the face of governments' reluctance or hostility toward taking the urgent measures that are needed to address the climate emergency, HRCC litigation can be fruitfully viewed as a bottom-up mechanism that provides domestic traction for the international legal and scientific consensus on climate action. Put differently, HRCC litigation contributes to addressing the climate emergency by providing at least part of the missing link between international promises and domestic action. In so doing, it offers a much-needed leverage point for scaling and speeding up climate action at a moment when time is running out to prevent the most catastrophic scenarios of global warming.

However, climate change is too complex a problem for any single regulatory tool to adequately address. Rights-based litigation is only one such tool – one that, as we will see, has its own challenges and blind spots, including insufficient attention to climate adaptation and the limitations of human rights norms in dealing with the complex causality and temporality of global warming.

This chapter proceeds in three sections. In Section 1.1, I offer an overview of trends in HRCC litigation after the Paris Agreement and characterize the dominant type of case in this period. In Section 1.2, I analyze the legal rules and principles emerging from HRCC lawsuits and court decisions. Rather than examining the outcomes and impacts of these cases (which I have done elsewhere),¹⁶ here I am primarily concerned with norm emergence – that is, identifying new norms that HRCC adjudicators and litigants, regardless of outcome, are articulating to address the unique regulatory challenges of climate change. In Section 1.3, I offer some conclusions about the potential and challenges of HRCC litigation in advancing climate action.

1.1 THE POST-PARIS REGIME AND CLIMATE RIGHTS LITIGATION

The Paris Agreement's regulatory logic stands in contrast with the pre-Paris regime. In terms of de Búrca, Keohane, and Sabel's typology of global

¹⁶ Ibid.

governance, international climate governance went from an unsuccessful effort to establish an integrated, top-down regime (the 1997 Kyoto Protocol to the UN Framework Convention on Climate Change) to an ongoing attempt to consolidate a bottom-up, experimental regime (the Paris Agreement) that creates incentives for states to act on climate change through an iterative process of international negotiations, domestic civil society pressure, emissions reporting based on IPCC methodologies, and periodic stocktaking and peer review of progress on climate mitigation and adaptation.¹⁷

The Paris Agreement does not establish a binding obligation for states to implement their nationally determined contributions (NDCs) to emission cuts, nor does it specify any procedure to ensure that states are transparent in their accounting of those contributions.¹⁸ Since the success of the Paris system hinges on transparency, the model will only work if states have material and reputational incentives to deliver on their commitments and to increase their ambition in order to reduce the considerable gap between the mitigation targets to which they committed in Paris and the emissions cuts that, according to the IPCC, are needed to keep global warming between 1.5°C and 2°C.¹⁹

The large majority of HRCC suits and complaints (which focus on emissions cuts) can be understood as strategies to provide the post-Paris climate regime with procedural and substantive mechanisms for translating the aforementioned targets into legally binding commitments at the domestic level. In the lead-up to and after the 2015 climate summit, litigants have often leveraged the Paris framework to put pressure on states and, to a much lesser extent, corporations.²⁰ As noted, states are the target of all but 22 of the 148 cases filed between 2015 and 2021 (see Table 1.1). The exceptions²¹ are lawsuits filed against oil companies Shell in the Netherlands (one case) and in South Africa (one case), Total in France (two cases), PetroOriental SA in Ecuador (one case), and Wintershall Dea in Germany (one case); a case filed against Casino

¹⁷ See Gráinee de Búrca et al., “New Modes of Pluralist Governance” (2013) 45 *NYU Journal of International Law and Politics* 723.

¹⁸ Paris Agreement to the United Nations Framework Convention on Climate Change, Art. 13, December 12, 2015, T.I.A.S. No. 16-1104.

¹⁹ Article 4, paragraph 2 of the Paris Agreement states the following: “Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with *the aim of* achieving the objectives of such contributions.” *Ibid.*, Art. 4, para. 2 (emphasis added).

²⁰ See Joana Setzer and Rebecca Byrnes, “Global Trends in Climate Change Litigation: 2019 Snapshot,” *Grantham Research Institute on Climate Change and the Environment*, 2019, <www.lse.ac.uk/GranthamInstitute/publication/global-trends-in-climate-change-litigation-2019-snapshot/>.

²¹ For more on the potential impact of certain HRCC cases against corporations, see Joana Setzer’s contribution to this volume (Chapter 10).

in France; a case filed against *Electricité de France*; two cases filed against automobile companies in Germany; a case challenging corporations with high GHG emissions in New Zealand; a case challenging a proposed coal mine in Australia; OECD complaints filed against the Polish company Group PZA S.A. and a company involved in fracking in Slovenia; a case filed against a private pension company in the United Kingdom; five cases challenging thermolectric power plants in Argentina; and one case challenging a coal-fired power plant in Japan, as well as the multiyear, transnational inquiry launched by the Philippines Commission on Human Rights against the forty-seven largest fossil fuel companies known as “carbon majors.”²² The commission initiated the inquiry in response to a complaint filed on international human rights grounds by Greenpeace and Filipino citizens affected by Typhoon Haiyan and other extreme weather events, whose occurrence has

²² For information on the case filed against Shell in the Netherlands, see “Milieudéfensie et al. v. Royal Dutch Shell plc,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/milieudefensie-et-al-v-royal-dutch-shell-plc/>>. For information on the case in France against Total, see “Assignment de Total en Justice!,” *Notre Affaire à Tous*, <<https://notreaffaireatous.org/>>. See also “Notre Affaire à Tous and Others v. Total,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/notre-affaire-a-tous-and-others-v-total/>>. For information on the “Carbon Majors” investigation within the Philippines Commission on Human Rights, see “In re Greenpeace Southeast Asia and Others,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/in-re-greenpeace-southeast-asia-et-al/>>. For more information, see “National Inquiry on Climate Change,” Republic of the Philippines Commission on Human Rights, <<http://chr.gov.ph/nicc-2/>>. For information on the case in Ecuador against PetroOriental SA, see “Ecuador: Waorani Community Sues Fossil Fuel Company for Contributing to Climate Change,” International Federation for Human Rights, December 10, 2020, <www.fidh.org/en/region/americas/ecuador/ecuador-waorani-community-sues-fossil-fuel-company-for-contributing>. For information on the case against *Electricité de France*, see “Mexico: Civil Lawsuit: French Energy Company EDF Must Comply with Human Rights Obligations,” International Federation for Human Rights, October 13, 2020, <www.fidh.org/en/issues/human-rights-defenders/mexico-civil-lawsuit-french-energy-company-edf-must-comply-with-human>. For information on the other cases, see also “Youth Verdict v. Waratah Coal,” above note 8; see also “Development YES – Open Pit Mines NO v. Group PZU S.A.,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/development-yes-open-pit-mines-no-v-group-pzu-sa/>>; see also “OAAA v. Araucaria Energy SA,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/oaaa-v-araucaria-energy-sa/>>; see also “Carballo et al. v. MSU S.A., UGEN S.A., & General Electric,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/carballo-et-al-v-msu-sa-ugen-sa-general-electric/>>; see also “FOMEQ v. MSU S.A., Rio Energy S.A., & General Electric,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/fomeq-v-msu-sa-rio-energy-sa-general-electric/>>; see also “Citizens’ Committee on the Kobe Coal-Fired Power Plant v. Kobe Steel Ltd., et al.,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/citizens-committee-on-the-kobe-coal-fired-power-plant-v-kobe-steel-ltd-et-al/>>; see also *Smith v. Fronterra Co-Operative Group Ltd.* [2020] NZHC 419 (N.Z.).

been made more likely by global warming. In May 2022, the commission released its final report, which incorporated a number of legally significant findings, including, among others, that “the corporate responsibility to refrain from contributing to climate change impacts that impair the full enjoyment of human rights extends not only to the whole group of companies of each Carbon Major . . . but also to all business enterprises in each of the Carbon Majors respective value chains.”²³ The commission also squarely addressed Carbon Majors’ role in cloaking climate science in doubt and interfering with the transition away from fossil fuels. Namely, in addition to finding that “Carbon Majors, directly by themselves or indirectly through others, singly and/or through concerted action, engaged in willful obfuscation of climate science, which has prejudiced the right of the public to make informed decisions about their products, concealing that their products posed significant harms to the environment and the climate system,” the commission also concluded that this willful obfuscation could serve as a basis for liability.²⁴ At the very least, this made the Carbon Majors, according to the commission, morally culpable.²⁵

In terms of the specific objects of the legal actions, litigants and petitioners have used two general avenues to challenge the actions and inactions contributing to climate change. The first strategy involves challenging state or corporate policies, including – but not limited to – the ambition, speed, or level of implementation of states’ mitigation targets. This is the route followed by approximately 74 percent of the post-2015 cases, including *Urgenda* and more recent lawsuits such as the one filed in 2021 by Brazilian youth alleging that the glaringly insufficient emissions goal set by the Brazilian government violates its obligations under the National Policy on Climate Change, the Paris Agreement, and the Brazilian constitution. In the *Neubauer v. Germany* case, the youth plaintiffs challenged not only the insufficient ambition but also the short-term focus and the vagueness of the implementation measures of the German government’s GHG emissions reduction plan. The German Constitutional Court sided with the government with regard to the constitutionality of the overall ambition of the climate plan but declared that the plan’s insufficient detail and urgency violated young peoples’ and future generations’ fundamental rights.²⁶ This also, however, includes a handful of

²³ “National Inquiry on Climate Change Report,” Commission on Human Rights of the Philippines (2022) 112–13.

²⁴ *Ibid.* 108–9.

²⁵ *Ibid.* 115.

²⁶ See “Neubauer, et al. v. Germany,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/neubauer-et-al-v-germany/>> for access to the German Constitutional Court’s decision.

cases that resist policies (or projects) intended to address climate change and aid the transition to zero-carbon economies. *In the Matter of the Greenhouse Gas Pollution Pricing Act* (Alberta), for example, involved the Alberta provincial government's attempt to invalidate Canada's carbon pricing bill, on the grounds that the federal government overstepped its constitutional authority.²⁷

The second route comprises challenges to specific projects and policies that produce GHG emissions on a scale that, according to litigants, is incompatible with states' duties to act against global warming. For instance, litigants have sued governments to stop new coal or oil projects in Ecuador, Uganda, Tanzania, and Mozambique; new airport strips in Vienna and London; policies promoting deforestation in the Brazilian Amazon; and subsidies to biomass-derived energy projects in South Korea.²⁸ Like with cases targeting policies, this also includes a handful of cases in which plaintiffs challenged projects intended to advance climate action. In *IPC Petroleum France v. France*, for example, a fossil fuel company challenged the government's decision to put a time limit on its extraction permit, on the grounds that it, among other things, violated its right to property.²⁹ *European Center for Constitutional and Human Rights (ECCHR) and Proyecto de Derechos Económicos, Sociales y Culturales (ProDESC) v. Electricité de France (EDF)*, moreover, challenges the construction of a large wind farm on the basis that EDF failed to satisfy its obligation to consult with an affected Indigenous community.³⁰

²⁷ See "In the Matter of the Greenhouse Gas Pollution Pricing Act, SC 2018, c.12," Sabin Center for Climate Change Law.

²⁸ See also "Center for Food and Adequate Living Rights et al. v. Tanzania and Uganda," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/center-for-food-and-adequate-living-rights-et-al-v-tanzania-and-uganda/>>; see also "In re Vienna-Schwechat Airport Expansion," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/in-re-vienna-schwachat-airport-expansion/>>; see also "Plan B Earth and Others v. Secretary of State for Transport," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/plan-b-earth-v-secretary-of-state-for-transport/>>; see also "Institute of Amazon Studies v. Brazil," Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/institute-of-amazonian-studies-v-brazil/>>; see also "Ecuador: Waorani Community Sues Fossil Fuel Company for Contributing to Climate Change," above note 22; see also "Friends of the Earth v. UK Export Finance," Sabin Center for Climate Change Law, May 7, 2021, <<http://climatecasechart.com/climate-change-litigation/non-us-case/friends-of-the-earth-v-uk-export-finance/>>; see also "Kim Yujin et al. v. South Korea," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/kim-yujin-et-al-v-south-korea/>>.

²⁹ See "IPC Petroleum France SA v. France," Sabin Center for Climate Change Law.

³⁰ See also "Mexico: Civil Lawsuit: French Energy Company EDF Must Comply with Human Rights Obligations," above note 22.

Notably, our database also includes criminal cases brought against climate protesters for their participation in activities challenging either policies or projects that contribute to the climate emergency. While these cases can be categorized according to this policy-project distinction based on the underlying target of the protests, they do operate distinctly insofar as the core of the case does not hinge on a particular policy or project but rather the protests themselves, regardless of their specific intent.

In terms of outcomes, most cases are still pending, which should not be surprising given that the rights turn is a relatively recent phenomenon. As Figure 1.3 shows, approximately 66 percent of HRCC lawsuits are either pending or on appeal.³¹ Moreover, in two cases, the possibility of appeal is

³¹ See “VZW Klimaatzaak v. Kingdom of Belgium & Others,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/vzw-klimaatzaak-v-kingdom-of-belgium-et-al/>>; see also *Juliana*, above note 8; see also “*Ali v. Federation of Pakistan*,” above note 8; see also “*Pandey v. India*,” above note 5; see also “*Maria Khan v. Federation of Pakistan et al.*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/maria-khan-et-al-v-federation-of-pakistan-et-al/>>; see also “*Notre Affaire à Tous v. France*,” above note 5; see also “*Friends of the Earth Germany, Association of Solar Supporters, and Others v. Germany*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/friends-of-the-earth-germany-association-of-solar-supporters-and-others-v-germany/>>; see also “*ENVironnement JEUnesse v. Canada*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/environnement-jeunesse-v-canadian-government/>>; see also Case T-330/T18, *Carvalho v. Parliament, Gen. Ct. of the European Union (Second Chamber)* (May 8, 2019), <<http://curia.europa.eu/juris/liste.jsf?num=T-330/18&language=EN>>; see also “*Sacchi v. Argentina*,” above note 12; see also “*Commune de Grande-Synthe v. France*,” above note 5; see also “*The Case*,” EU Biomass Legal Case, <<http://eubiomasscase.org/the-case/>>; see also “*Milieudefensie et al. v. Royal Dutch Shell plc*,” above note 22; see also “*Notre Affaire à Tous and Others v. Total*,” above note 22; see also “*La Rose v. Her Majesty the Queen*,” above note 5; see also “*Álvarez v. Peru*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/alvarez-et-al-v-peru/>>; see also “*Petition of Torres Strait Islanders to the United Nations Human Rights Committee Alleging Violations Stemming from Australia’s Inaction on Climate Change*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/petition-of-torres-strait-islanders-to-the-united-nations-human-rights-committee-alleging-violations-stemming-from-australias-inaction-on-climate-change>>; see also “*Rights of Indigenous People in Addressing Climate-Forced Displacement*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/rights-of-indigenous-people-in-addressing-climate-forced-displacement/>>; see generally Brent Jang, “*Wet’suwet’en Nation Hereditary Launch Climate Lawsuit Against Ottawa*,” *Globe & Mail*, February 12, 2020, <<https://www.theglobeandmail.com/canada/british-columbia/article-wetsuweten-nation-hereditary-chiefs-launch-climate-lawsuit-against/>>; see also “*Kim Yujin et al. v. South Korea*,” above note 24; see also “*Neubauer v. Germany*,” above note 23; see also “*Youth Verdict v. Waratah Coal*,” above note 8; see also “*Sagoonick v. State of Alaska*,” Our Children’s Trust, <<https://www.ourchildrenstrust.org/alaska>>; see also “*Aji P. v. State of Washington*,” Our Children’s Trust, <<https://www.ourchildrenstrust.org/washington>>; see also “*Jóvenes v. Gobierno de México*,” above note 8; see also *Held v. State of Montana*, Our Children’s Trust, <<https://www.ourchildrenstrust.org/montana>>

still open but not yet taken,³² and in two other cases, there were rulings for the state and there is no evidence that the plaintiffs will appeal.³³

The definitive rulings that have been issued by courts thus far are more or less evenly split between outcomes for the plaintiffs and outcomes for the

www.ourchildrenstrust.org/montana>; see also “PSB et al. v. Brazil (on Climate Fund),” above note 10; see also “PSB et al. v. Brazil (on Amazon Fund),” above note 10; see also “Duarte Agostinho and Others v. Portugal and 32 Other States,” above note 5; see also “Greenpeace v. Spain,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/greenpeace-v-spain/>>; see also “Landslide Victims Take Ugandan Government to Court,” *ClientEarth*, October 22, 2020; see also “Indigenous Organizations and NGOs Warn Top French Supermarket Casino: Stop Gambling with Our Forests!,” *Mighty Earth*, September 20, 2020; see also “PSB et al. v. Brazil (on deforestation and human rights),” above note 10; see also “Instituto Socioambiental v. IBAMA and the Federal Union,” Sabin Center for Climate Change Law; see also “Ecuador: Waorani Community Sues Fossil Fuel Company for Contributing to Climate Change,” above note 22; see also Verein KlimaSeniorinnen Schweiz, above note 5; see also “Young People v. UK Government: Stop Financing Our Deaths,” Plan B; see also “Greenpeace Mexico v. Ministry of Energy (National Electric System Policies),” Sabin Center for Climate Change Law; see also “Greenpeace Mexico v. Ministry of Energy (Energy Sector Program),” Sabin Center for Climate Change Law; see also “Mexico: Civil Lawsuit: French Energy Company EDF Must Comply With Human Rights Obligations,” above note 64; see also “Six Youths v. Minister of Environment and Others,” above note 8; see also “Citizens’ Committee on the Kobe Coal-Fired Power Plant v. Kobe Steel Ltd.,” above note 22; see also “Center for Food and Adequate Living Rights et al. v. Tanzania and Uganda,” above note 24; see also “South Korean Biomass Plaintiffs v. South Korea,” Sabin Center for Climate Change Law; see also “Friends of the Earth v. UK Export Finance,” above note 24; see also “OAAA v. Araucaria Energy SA,” above note 22; see also FOMEQ v. MSU SA, Rio Energy SA, & General Electric, above note 22; see also Carballo v. MSU S.A., above note 22; see also “Asociación Civil por la Justicia Ambiental v. Province of Entre Ríos, et al.,” Sabin Center for Climate Change Law; see also “Sierra Club v. U.S. Army Corps of Engineers,” Sabin Center for Climate Change Law; see also Smith v. Fronterra Co-Operative Group Ltd., above note 22; see also “Six Youths v. Minister of Environment and Others,” above note 8; see also “Sharma and others v. Minister for the Environment,” Sabin Center for Climate Change Law; see also “Guyanese Citizens File Climate Case Claiming Massive Offshore Oil Project Is Unconstitutional,” CIEL, 21 May 2021, <<https://www.ciel.org/news/guyana-constitutional-court-case-oil-and-gas/>>; see also “The Last Judgment,” Giuizio Universale, <<https://giuiziouniversale.eu/home-english-version/>>; see also “Górska et al. v. Poland,” Sabin Center for Climate Change Law; see also “Mex M. v. Austria,” Sabin Center for Climate Change Law.

³² See “Family Farmers and Greenpeace Germany v. Germany,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/family-farmers-and-greenpeace-germany-v-german-government>>; see also “Friends of the Earth et al. v. Total,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/friends-of-the-earth-et-al-v-total/>>.

³³ See “Greenpeace Luxembourg v. Schneider,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/greenpeace-luxembourg-v-schneider/>>; see also “PUSH Sweden, Nature and Youth Sweden and Others v. Government of Sweden,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/push-sweden-nature-youth-sweden-et-al-v-government-of-sweden/>>.

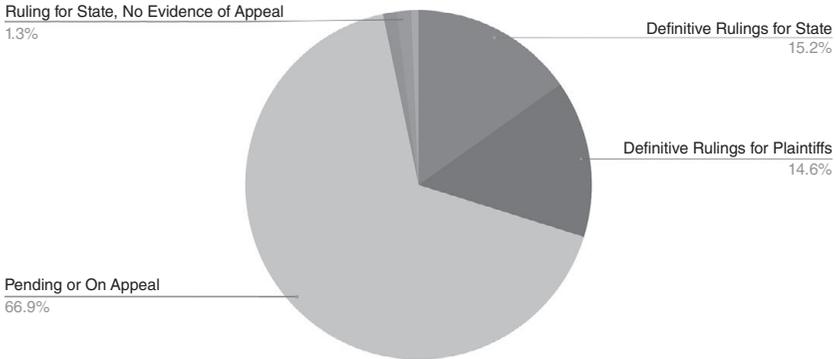


FIGURE 1.3 Status of cases filed since 2015

defendants. Indeed, approximately 15 percent have ended with a decision for petitioners, while approximately 14 percent have ended in a definitive ruling for the state. Successful cases include *Urgenda Foundation v. Netherlands*; *Rodríguez Peña v. Colombia* (“Amazon’s Future Generations”); *Leghari v. Pakistan*; *in re Carbon Majors*; *Friends of the Irish Environment v. Ireland*; *Commune de Grande-Synthe v. France*; *Notre Affaire à Tous v. France*; *Castilla Salazar v. Colombia*; *Save Lamu v. National Environmental Management Authority*; *Willmeng v. Thorton*; *Farooq v. Pakistan*; *Private Corporation for the Development of Asyén v. Environmental Evaluation Service*; *Instituto Preservar c. Copelmi Mineracao Ltda*; *Moncayo et al. v. PetroAmazonas et al.*; *Neubauer v. Germany*; *Shrestha v. Prime Minister*; *Client Earth v. European Investment Bank*; and *Development YES – Open Pit Mines NO v. Group PZU S.A.*, as well as the ruling of the Mexican Supreme Court on ethanol legislation, a successful challenge by Earthlife against South African authorities’ permit for a new coal-fired plant, and a successful challenge against an administrative decision allowing an urban development that would have threatened a local aquifer in South Africa. In *Roberts v. Regina*, climate protesters who were criminally charged and convicted for public nuisance had their sentences overturned.³⁴ Additionally, an advisory opinion by the Inter-American Court of Human Rights acknowledges an autonomous right to a healthy environment as well as states’ responsibility for territorial or extra-territorial harms to the climate and the environment that violate human rights and can be attributed to their actions or omissions.³⁵ Twenty-three

³⁴ See “R v. Regina,” Sabin Center for Climate Change Law.

³⁵ See *Urgenda*, above note 2; see also “Future Generations v. Ministry of Environment & Others,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/>

lawsuits since 2015 have ended with definitive rulings for the state or defendant corporation, including: *Plan B Earth v. UK Secretary of State for Business, Energy, and Industrial Strategy*; *Ioane Teitiota v. New Zealand's Ministry of Business, Innovation and Employment*; *in re Vienna-Schwechat Airport Expansion*; *Reynolds v. Florida*; *Plan B Earth v. UK Secretary of State for Transport* (on Heathrow Airport's third runway); *Pandey v. India*; the EU Biomass case; *Greenpeace Nordic Association v. Ministry of Petroleum and Energy*; *Armando Ferrão Carvalho v. European Parliament*; *Friends of the Irish Environment v. Fingal County Council*; *Zoubek v. Austria*; *Sacchi v. Argentina*; *Segovia v. Climate Change Commission*; *Clean Air Council v. United States*; *In the Matter of the Greenhouse Gas Pollution Pricing Act* (Alberta); *In the Matter of the Greenhouse Gas Pollution Pricing Act* (Saskatchewan); *Greenpeace Netherlands v. Ministry of Finance*; *Attorney General v. Crosland*; *Border Deep Sea Angling Association v. Shell*; Decision No. 2021-825 DC ["In re Climate Resilience Bill"]; and *Views Adopted by the UN Human Rights Committee Concerning the Communication by Ioane Teitiota*.³⁶ This also includes "anti-climate action" cases wherein the state prevailed in defending its policy or action intended to address climate change: *Portland Pipeline*

[future-generation-v-ministry-environment-others/](#)>; see also *Leghari v. Pakistan*, above note 6; see also "National Inquiry on Climate Change," above note 22; see also "Plan B Earth and Others v. Secretary of State for Transport," above note 24; see also "Friends of the Irish Environment," above note 5; see also *Philippi Horticultural Area Food & Farming Campaign v. MEC for Local Gov't, EIntl. Affairs Dev. Planning 2020 ZAWCHC 8* (High Court Western Cape Division) (S. Afr.); see also "Ruling on Modification to Ethanol Fuel Rule," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/ruling-on-modification-to-ethanol-fuel-rule/>>; see also *Earthlife Africa Johannesburg v. Minister of EIntl. Affairs*, above note 9; see also *The Environment & Human Rights, Advisory Opinion OC-23/17, Inter-Am. Ct. H.R. (ser. A), No. 23*, <http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf>.

³⁶ See *Plan B Earth v. Secretary of State for Business, Energy and Industrial Strategy*, above note 5; see also *Teitiota v. Ministry of Business, Innovation & Employment* [2015] NZSC 107 (N.Z.); see also "In re Vienna-Schwechat Airport Expansion," above note 24; see also *Human Rights Comm. on Ioane Teitiota*, above note 11; see also "Verein KlimaSeniorinnen Schweiz," above note 5; see also Case C-565/19P, *Carvalho v. European Parliament*, E.C.J. (Sixth Chamber) (March 25, 2021), <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62019CJ0565>>; see also "Pandey v. India," above note 5; see also "The Case," EU Biomass Legal Case, above note 26; see also "Greenpeace Nordic Ass'n v. Ministry of Petroleum and Energy," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/greenpeace-nordic-assn-and-nature-youth-v-norway-ministry-of-petroleum-and-energy/>>; see also "Plan B Earth and Others v. Secretary of State for Transport," above note 24; see also *Friends of the Irish Environment v. Fingal County Council*, Sabin Center for Climate Change Law, <<http://climatecasechart.com/climate-change-litigation/non-us-case/friends-irish-environment-clg-v-fingal-county-council/>>; see also "Zoubek et al. v. Austria," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/greenpeace-v-austria/>>.

Corporation v. South Portland; *IPC Petroleum France v. France*; and *D.G. Khan Cement Company Ltd. v. Punjab*.

Again, given that HRCC litigation is still in its infancy, it is too early to extract hard and fast conclusions about its outcomes. Rather than focusing on outcomes, this and subsequent chapters are concerned with analyzing how litigants and courts have dealt with the complex legal questions posed by climate change through the use of new norms and doctrines emerging from the universe of submissions and rulings, regardless of outcomes. Indeed, this is the task of Section 1.2.

1.2 KEY QUESTIONS AND EMERGING NORMS IN CLIMATE RIGHTS LITIGATION

Despite the diversity of jurisdictions, litigants, and adjudicators involved in them, HRCC lawsuits tend to revolve around a common set of questions and norms. In sketching emerging legal doctrines and norms, I organize the discussion in terms of the core components of the standard HRCC lawsuit. Rather than an accurate description of the various cases, the model is a Weberian ideal type – a stylized account that is meant to capture the underlying logic that cuts across the large majority of cases. Some lawsuits and decisions approximate the ideal type more than others, but they all exhibit some of its features.

Since procedural rules of standing vary widely across jurisdictions and the large majority of courts that have ruled on HRCC cases have carried out a merits review, I will focus on the substantive norms arising from the typical case, as opposed to procedural rules of standing, in this section. As we will see in Part II, matters of standing – that is, proof of individualized human rights injuries suffered by the plaintiffs and a causal link between those harms and governmental climate action – pose particularly complex challenges for human rights concepts and doctrines, and no clear international norms are currently detectable with regard to these issues.³⁷

The ideal-typical HRCC case proceeds in three steps and spans the two levels (international and domestic) of the post-Paris regime. Each step can be seen as addressing a key legal question:

- (1) What are the standards that, by virtue of international and domestic law, apply to the judicial assessment of governments' climate action? The

³⁷ For more on the attribution science that is being used in litigation to establish this causal link, see Michael Burger, Jessica Wentz, and Daniel Metzger's chapter in this volume (Chapter 11).

nascent norms and legal doctrines that address this question concern the legal status of international and domestic HRCC standards, from the rules of the Paris Agreement and the IPCC's recommendations to the rules of international human rights and constitutional rights.

- (2) In light of those standards, do governments have a justiciable legal obligation to reduce GHG emissions? Courts and litigants tackle this question through emerging norms on the judicial reviewability of climate policy and the existence of a justiciable right to a climate system capable of sustaining human life.
- (3) Are government policies (regarding emissions targets or specific GHG-emitting activities) compatible with such rights and duties? Emerging norms on this issue seek to set standards, in light of climate change and human rights obligations, governing countries' "fair share" of contribution to global climate mitigation, the compatibility of governmental actions and policies with this fair share, and the remedies, if any, that courts should grant to hold governments accountable.

In Section 1.2.1, I distill the nascent norms on each of these three issues in turn.

1.2.1 *The Baseline Norms: An International "Common Ground" on Climate Rights*

The first step in the typical HRCC case is the establishment of baseline rights and duties that apply to the litigation as a matter of climate change and human rights law. In determining the relevant legal standards for judicial assessments of governments' climate action (or inaction), litigants and courts have often used the European Court of Human Rights' (ECtHR) doctrine of the legal "common ground" applicable to domestic human rights cases or its equivalent in other regional or domestic regimes.³⁸ In addition to international human rights treaties, this common ground includes other "elements of international law," states' interpretations of such elements, and state practice reflecting common values.³⁹ As the ECtHR put it in *Demir and Baykara v. Turkey*, a judgment widely used by litigants and courts in European climate rights cases: "It is not necessary for the respondent State to have ratified the entire collection of instruments that are applicable in respect of the precise subject matter of the case concerned. It will be sufficient for the Court that the relevant

³⁸ See Judgment, *Case of Demir and Baykara/Turkey*, App. No. 34503/97, IHRL 3281 (2008).

³⁹ See *ibid.*

international instruments denote a continuous evolution in the norms and principles applied in international law or in the majority of member States of the Council of Europe and show, in a precise area, that there is common ground in modern society.”⁴⁰

Regardless of the outcome of the case, virtually all of the submissions and rulings on climate mitigation adopt some version of the common ground doctrine.⁴¹ As is evident in Table 1.1, exactly which legal instruments are deemed part of the international common ground varies from jurisdiction to jurisdiction. In general, it comprises universal and regional human rights treaties and declarations ratified by the state – including procedural and substantive environmental rights in international law, which courts and quasi-judicial bodies in the large majority of the cases under examination recognize as a matter of international positive or customary law.⁴²

Importantly, the common ground in HRCC cases includes not only human rights law but also the two central elements of the global climate change regime: the Paris Agreement and the IPCC’s reports. As the IPCC’s findings and recommendations became more explicit and precise with regard to the impact of global warming on human beings in its 2014 and 2018 reports, litigants and adjudicators embraced them as the scientific gold standard for assessing human rights violations. Specifically, they have incorporated the Paris Agreement’s goal of “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C” into the justiciable international common ground.⁴³ This has been the case regardless of the outcome of the litigation. Courts have used this Paris-IPCC standard in rulings issued against the state for failing to take into account or do enough to contribute to attaining those goals (such as those on Ireland’s climate plan and Mexico’s regulation on ethanol). Courts have also recognized this standard in decisions finding for the state, where they concluded that the government was taking sufficient measures to contribute to achieving those targets – as in *Greenpeace Germany v. Germany*, in which a group of organic farmers and Greenpeace sought to hold the government accountable to its mitigation goals – or that the plaintiffs

⁴⁰ Ibid. ¶186.

⁴¹ A notable exception is the decision of the Ninth Circuit in the *Juliana* case, which does not invoke international human rights law instruments or standards, in line with the relative impermeability of US courts to such legal sources. See *Juliana*, 947 F.3d at 1159.

⁴² See César Rodríguez-Garavito, “A Human Right to a Healthy Environment? Moral, Legal, and Empirical Considerations,” in John H. Knox and Ramin Pejan (eds.), *The Human Right to a Healthy Environment* (Cambridge: Cambridge University Press, 2018), pp. 155–88.

⁴³ Paris Agreement, above note 18, at art. 2.1.a.

did not have standing to sue – as in *Verein KlimaSeniorinnen Schweiz v. Fed. Dep't of Env't, Transport, Energy & Commc'ns*, in which an association of senior citizens demanded greater mitigation ambition by the Swiss government.

If confirmed by future litigation, the emerging recognition of an international normative common ground would consolidate the convergence of human rights, environmental protection, and climate governance. This convergence has been in the making for three decades, through legal developments such as the dissemination of the right to a healthy environment in national constitutions and laws, the proliferation of rights-based environmental litigation around the world on issues such as air pollution, and the articulation of explicit international standards by the UN Rapporteurship on human rights and the environment.⁴⁴

1.2.2 A Justiciable Right to Climate Action

Against this background of common legal and scientific standards, the second step of the post-Paris ideal-typical litigation entails extracting the specific rights and duties regarding climate action that follow from those standards. The key question here is: Do governments have justiciable legal obligations, as a matter of international human rights and climate change law, to reduce GHG emissions?

Regardless of the type and ultimate outcome of the case, judicial and quasi-judicial bodies in HRCC litigation have almost invariably answered this question in the affirmative. Specifically, two emerging norms have been upheld in this body of case law. First, a justiciable right to a climate system capable of sustaining human life has been recognized as following from universally recognized human rights or as included in the constitutional right to a healthy environment. Importantly, some rulings have homed in on the rights of young people and future generations to a livable planet. Recognizing that young and future human beings will bear the brunt of climate harms, courts in cases such as *Neubauer v. Germany* and *Amazon's Future Generations v. Colombia* have interpreted constitutional human rights provisions as recognizing a justiciable right to government climate action that is in line with the magnitude and the urgency of the problem.

The second norm relates to the legal competence of courts to enforce governments' duties regarding climate action in general and emissions reduction in particular. The question of justiciability raises issues concerning the harmonization of (1) the protection of rights with deference for governmental

⁴⁴ See John H. Knox, "Constructing the Human Right to a Healthy Environment" (2020) 16 *Annual Review of Law and Social Science* 79.

policy discretion and (2) the duty of courts to provide remedies for rights violations with the principle of the separation of powers. Although common in human rights and public interest litigation writ large, those issues are compounded by the scale, temporality, and uncertainty that characterize the problem of global warming.

Unsurprisingly, judges have given a range of different answers to this question, in line with contrasting jurisprudential traditions on the redressability of rights violations by courts in different jurisdictions. However, regardless of outcome, courts in a majority of HRCC rulings have asserted their competence to review government climate policy and redress human rights violations stemming from it. Although granting governments latitude in setting climate goals and choosing policies to attain them, most courts have held that such decisions are not exempt from judicial review and that governmental discretion is not absolute. In cases like *Greenpeace Nordic Association*, judges have used the margin of appreciation doctrine to assess governmental policies' impact on emissions reduction and conclude that the policies under challenge were within that margin.⁴⁵ In other cases, like *In re Modification to Ethanol Fuel Rule* (Mexico) and *Urgenda*, courts have used the same doctrine and ruled against the state, finding that the climate policies at issue unreasonably and disproportionately affected human rights and thus surpassed that margin.

In sum, the emerging norm regarding judicial review of climate action is that “courts have not considered the entire subject matter as a ‘no go’ area,” as the High Court of New Zealand concluded in *Thomson v. Minister for Climate Change Issues*⁴⁶ – a case on mitigation targets that, although not hinging on human rights arguments, summarized and built on a number of HRCC decisions. While adjudicators have recognized that governments have a wide margin of appreciation in dealing with the complexities of climate policy, they have tended to conclude that climate change is a regulatory and scientific issue that is amenable to judicial scrutiny based on national and international standards on climate change and human rights, as opposed to a political issue in which governments have full policy discretion. Indeed, the Paris Administrative Court in *Notre Affaire à Tous v. France* went as far as finding the French state responsible for moral damages stemming from its failure to take sufficiently ambitious climate action, noting specifically that “in view of the State’s wrongful failure to implement public policies enabling it to achieve the greenhouse gas emission reduction targets it has set itself, the

⁴⁵ For more on the rationale driving the *Greenpeace Nordic Association* case, see Michelle Jonker-Argueta’s chapter in this volume (Chapter 17).

⁴⁶ *Thomson v. Minister for Climate Change Issues* [2018] 2 NZLR 160 at [133] (N.Z.).

applicant associations may claim compensation from the State for those wrongful failings.”⁴⁷

1.2.3 *The Legally Enforceable “Fair Share” of Climate Mitigation*

The final step of the ideal-typical case examines the compatibility of government policies with climate rights and duties. In some cases, the driving question is: What levels of ambition and urgency with regard to national emission reductions are compatible with such rights and duties? This is the question, for instance, at the core of the average European lawsuit (including the challenge to the European Union’s mitigation targets in *Ferrão Carvalho v. Europe*)⁴⁸ and the petition of a youth association to the South Korean Constitutional Court, which requests that the country’s low mitigation target be declared unconstitutional.⁴⁹ In other suits, rather than the level of ambition itself, plaintiffs challenge the consistency of government-authorized projects or policies with the mitigation target that the government has formally adopted through national or international law. This is the case, for instance, in the legal challenges to new airport runways in Vienna and London.⁵⁰ Most Global South lawsuits⁵¹ fit this second type, in that they do not challenge mitigation targets but rather specific government actions (or lack thereof) hindering progress towards those targets – from the omission of climate impacts in environmental impact assessments in South Africa and India⁵² to bureaucratic gridlock in Peru and Pakistan.⁵³

⁴⁷ *Notre Affaire à Tous v. France*, Sabin Center for Climate Change Law, <http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2021/20210203_NA_decision-1.pdf> (Paris Administrative Court decision, ¶41).

⁴⁸ See Case T-330/T18, *Carvalho v. Parliament*, above note 26 (finding that the plaintiffs lacked standing and consequently that the case was inadmissible).

⁴⁹ See “Kim Yujin et al. v. South Korea,” above note 24.

⁵⁰ See “In re Vienna-Schwechat Airport Expansion,” above note 24; see also “Plan B Earth v. Sec’y of State for Transport,” above note 24.

⁵¹ For detailed analyses on climate litigation in Global South jurisdictions, see the chapters by Juan Auz (Chapter 6), Jolene Lin and Jaqueline Peel (Chapter 9), Arpitha Kodiveri (Chapter 20), Poooven Moodley (Chapter 21), and Waqqas Mir (Chapter 22), and, in this volume.

⁵² See *Earthlife Africa Johannesburg v. Minister of Emytl. Affairs*, above note 9. For information on an Indian case involving considering climate impacts in environmental impact assessments, see “Pandey v. India,” above note 5. For the order dismissing that case, see *Pandey v. India*, App. No. 187/2017, Nat’l Green Tribunal (Jan. 15, 2019), <<https://static1.squarespace.com/static/571d109b04426270152febe0/t/5cb424defa0d60178b2900b6/1555309792534/2019.01.15.NGT+Order-Pandey+v.+India.pdf>>.

⁵³ See *Leghari v. Pakistan*, above note 6; see also “Álvarez v. Peru,” above note 26.

Both modalities of litigation raise complex questions about how to set and enforce a country's level of mitigation ambition. The controversy over different criteria of equity for determining countries' appropriate share of GHG emission cuts involves core issues of climate ethics and politics that are beyond the scope of this chapter.⁵⁴ Partly due to this complexity, litigants and courts in the typical HRCC case have tended to take a cautious approach by closely tying their claims and remedies to the ambition levels prescribed by the Paris Agreement and the IPCC.

This approach has been translated into two embryonic norms. First, with regard to a country's share of emission reductions, HRCC cases have articulated a view that stresses individual states' duties. States' line of defense in mitigation lawsuits has hinged on the nature of the climate system as a public good. From this perspective, since emission reductions by one country will not make a dent in preventing global warming without other countries contributing their share, citizens have no justiciable rights-based claim to state climate action.

In contrast, litigants and courts have relied on a responsibility-based interpretation of the Paris Agreement. In this view, states have a duty to contribute their "minimum fair share" to emissions reduction, regardless of other countries' actions. As noted, the determination of a country's fair share has been guided by estimates stemming from the IPCC's recommendations and reports.

The most explicit articulation of the "minimum fair share" norm can be found in the Dutch Supreme Court's decision in *Urgenda*. According to the court, under the European Convention on Human Rights and the global climate regime, "the Netherlands is obliged to do 'its part' in order to prevent dangerous climate change, even if it is a global problem."⁵⁵ The court bases its legal opinion on an interpretation of the UNFCCC whereby "all countries will have to do the necessary" to attain global emission targets, as well as on the generally accepted principle of international law according to which countries must avoid causing harm to others. "This approach justifies partial responsibility: each country is responsible for its part and can therefore be called to account in that respect"⁵⁶ in judicial forums. Using the heuristics of a "carbon budget" – the amount of GHG that is left for humanity to burn before surpassing the 1.5 degrees Celsius to 2 degrees Celsius threshold of global warming – the court concludes that "no reduction is negligible," as all

⁵⁴ For a classic treatment of these issues, see John Broome, *Climate Matters: Ethics in a Warming World* (New York: W.W. Norton & Co., 2012).

⁵⁵ See *Urgenda*, above note 2, at ¶5.7.1.

⁵⁶ See *ibid.* ¶5.7.5.

emissions contribute to using up the global budget, regardless of the size of the country or its emissions.⁵⁷

Although in a less elaborate way, courts have reasoned along comparable lines in other HRCC cases. The High Court of Ireland used a similar rationale to conclude that, “no country, particularly that of the size of this State, can tackle the [global warming] problem on its own. That, however, does not lessen the requirement to do what is necessary to achieve scientifically advised targets.”⁵⁸

As can be readily seen, if this norm takes hold in international and comparative climate rights law, it will create further incentives for litigation at the domestic level, as litigants in different jurisdictions would seek to exert bottom-up pressure on their own governments to contribute to global mitigation efforts, regardless of (or precisely because of) limited top-down pressure from intergovernmental negotiations. There is evidence that this process of transnational dissemination of judicial precedents and legal strategies is taking place. Litigants and courts in jurisdictions as diverse as Brazil, New Zealand, Norway, and South Korea are actively invoking some version of the “minimum fair share” norm to hold governments accountable for mitigation targets.

Nevertheless, this norm remains underspecified. Given that the meaning of “minimum fair share” varies according to the criterion of fairness used, this remains an open question in HRCC litigation (see Part II). One interesting case seeking to address this question is *Duarte Agostinho v. Portugal*, which was filed in the European Court of Human Rights by six Portuguese youth against a number of European states for their failure to take sufficiently ambitious climate action. The petitioners argue that the burden of proving that the respondent states’ climate policies are collectively consistent with the Paris temperature target should be on the states – the wrongdoers – as opposed to the petitioners – the victims of climate harms. In doing so, the petitioners seek to avoid a ruling that would fall within the low end of the necessary emissions reductions estimated by the IPCC but would collectively fail to limit warming to the Paris temperature target. By bringing this case in a regional court, moreover, the petitioners aim to secure a single ruling binding on most European states, thereby eliminating the potential for

⁵⁷ See *ibid.* ¶5.7.8.

⁵⁸ See *Friends of the Irish Environment v. Ireland* [2019] IEHC 747, 748 (H. Ct.) (Ir.). For more on the Supreme Court’s decision in *Friends of the Irish Environment*, see Victoria Adelmant, Philip Alston, and Matthew Blainey’s chapter in this volume (Chapter 16).

inconsistent domestic rulings on the adequacy of states' emissions reduction ambition.⁵⁹

Moreover, this limitation has been partially compensated by a second emerging rule, which relates to remedies. In decisions issued in favor of the plaintiffs, litigants and courts have sought to take a cautious approach to mitigation remedies in order to strike a balance between climate rights and deference to government policy. Some lawsuits have focused on holding governments accountable to the mitigation pledges they set themselves, as in *Torres Strait Islanders v. Australia*⁶⁰ (which seeks to hold the government to the target recommended by its Climate Change Authority), *Amazon's Future Generations* (where the Colombian Supreme Court enforced the government's own targets regarding the reduction of deforestation), and *Greenpeace Germany v. Germany* (which unsuccessfully sought to hold the German government to its own 2020 target). Other lawsuits demand that governments increase their mitigation commitments but either limit themselves to asking the court to declare the existing target unconstitutional and mandate the government to determine a new target (as in *Kim Yujin v. South Korea*) or set the proposed target at the minimum level of emissions reduction that is required from the respective government, according to IPCC recommendations. The latter was the rationale behind the *Urgenda* ruling, which required the Dutch government to reduce the nation's GHG emissions by 25 percent relative to 1990 levels by 2020, which sits at the lower end of the 25 to 40 percent range recommended by the IPCC and upholds the target that the government had adopted prior to 2011. Still other lawsuits challenge the most GHG-intensive policies or projects of a given country and request greater governmental scrutiny and transparency about their compatibility with the country's stated mitigation targets. An illustration of this type of case is *Zoubek et al. v. Austria*, which challenges legislation that grants tax credits for air travel but not for rail transportation.

In sum, the norms emerging from HRCC litigation contribute to addressing some of the most complex and novel legal issues raised by the climate emergency – including the applicable corpus of international law, the status of the right to climate action and a livable climate system, and individual countries' duties regarding contributions to climate mitigation. At least in the ideal-typical version that most lawsuits approximate, they fit the post-Paris governance

⁵⁹ See “Duarte Agostinho and Others v. Portugal and 32 Other States,” above note 5. For an analysis of the legal rationale of the case, see Gerry Liston and Paul Clark's chapter in this volume (Chapter 18).

⁶⁰ For more on the *Torres Strait Islanders* case, see Sophie Marjanac and Sam Hunter Jones' chapter in this volume (Chapter 7).

framework. HRCC cases help provide this framework with some of the procedural and substantive parameters that it is missing and that are necessary for climate regulation to make substantial progress against global warming.

This does not mean, however, that the HRCC framework by itself can adequately handle the complexities of climate regulation, nor that human rights concepts and doctrines adequately address key outstanding issues in climate litigation. My study reveals interesting, if as of yet preliminary, potential blind spots and limitations of HRCC litigation. To these, I turn in closing.

1.3 LOOKING AHEAD: THE POTENTIAL AND CHALLENGES OF RIGHTS-BASED CLIMATE LITIGATION

As mentioned in my Introduction to this volume and as shown by the figures on the rapid growth of HRCC lawsuits and petitions, rights-based climate litigation is an idea whose time has come. Although it is too early to systematically assess the impact of this trend on a range of relevant variables – from governmental and corporate climate action to climate social movements to the future of the Paris Agreement’s implementation – it is possible to extract some initial, forward-looking lessons about the potential of this type of legal action as well as its outstanding challenges.

The future-oriented implication of the argument and the evidence presented in this chapter is that the rights-based lawsuits that are most likely to contribute to climate action are those that explicitly incorporate the standards and regulatory logic of the global climate regulatory regime, namely, the Paris Agreement and the IPCC assessments. I argue that this type of HRCC litigation can provide material incentives for governments to put climate action at the center of their agendas, overcome policy gridlock, increase compliance and ambition, and foster transparency and participation in climate policy. Evidence of the potential of these incentives can be found in the impact on the aforementioned government climate commitments resulting from rulings such as those in *Urgenda* and *Neubauer*. Further, by publicly reframing the problem of climate change as a source of grievous impacts on identifiable human beings and as a violation of universally recognized norms, HRCC litigation can create symbolic incentives for governments and other domestic actors to put climate action at the center of their agenda and align their actions with the goals of the global climate regime.⁶¹ As courts adjudicate ongoing cases and new legal actions reach national and international

⁶¹ For a fuller formulation of this argument on the material and symbolic impacts of HRCC litigation, see Rodríguez-Garavito, above note 15.

tribunals, empirical case studies will be able to assess the material and symbolic potential of HRCC litigation.⁶²

Nevertheless, as with other types of litigation, HRCC litigation also has limitations that are worth bearing in mind when considering it as a strategic tool. For instance, rather than being an end in and of itself, the key contribution of the typical HRCC is that it helps set a regulatory floor upon which other forces – from social movement pressure to interstate negotiations – can build. This is the approach articulated in some of the most promising recent cases, such as the Torres Strait Islanders petition before the UN Human Rights Committee. Based on the aforementioned principles of international human rights law, the petition proposes a “minimum core obligation” that states need to meet in order to discharge their responsibility for climate mitigation. In addition to alignment with IPCC recommendations, this obligation includes procedural guarantees such as consistency (with previous state commitments, with relevant state policies, and with measures taken by states with comparable resources) and due process (adequate reason-giving and public participation).⁶³

Another limitation of HRCC litigation in the context of the international climate regime is its geographic reach. For very different reasons, rights-based litigation faces particularly difficult obstacles in the legal traditions of two of the key players in climate governance: the United States and China. However, the geographic spread of the ongoing wave of litigation suggests that it may be influential in some regions and countries that rank among the world’s largest GHG emitters, from Europe to the United Kingdom, Canada, Brazil, India, and Indonesia.

An important oversight that is evident in the universe of HRCC litigation is the dearth of cases on climate adaptation. This blind spot is particularly striking for two reasons. First, adaptation is the most pressing issue for a large majority of countries, including most of the Global South, which continue to contribute relatively small amounts of GHG and are already experiencing the brunt of the human impact of global warming. Second, the norms and frames of human rights lend themselves more easily to litigating adaptation – that is, measures designed to protect specific individuals and communities from the effects of forced displacement, economic disruption, health impacts, and other consequences of global warming that are already inevitable. By focusing

⁶² For a study in this vein, on the early impacts of the *Urgenda* case, see Anke Wonneberger and Rens Vliegthart, “Agenda-Setting Effects of Climate Change Litigation: Interrelations Across Issue Levels, Media, and Politics in the Case of *Urgenda* against the Dutch Government, Environmental Communication” (2021) *Environmental Communication* 1.

⁶³ See Sophie Marjanac and Sam Hunter Jones’ chapter in this volume (Chapter 7).

on mitigation, HRCC litigation has overlooked half of the problem, one with urgent repercussions for most of the world's population.

In terms of types of defendants, the most visible gap is the dearth of cases against corporations. As noted, only twenty-four climate lawsuits have ever been filed against corporations on human rights grounds. This is not entirely surprising, given the long-standing difficulties that human rights norms and concepts have had in dealing with non-state actors in general and corporations in particular. However, recent regulatory and socioeconomic developments may increasingly open the door for rights-based litigation against corporate actors. In the *Casino* case, for instance, litigants leveraged a combination of corporate law tools (specifically, the 2017 Corporate Duty of Due Diligence Law) and international Indigenous rights law to demand that Casino supermarkets take all necessary measures to exclude beef tied to deforestation and the grabbing of Indigenous territories from its supply chains in Brazil, Colombia, and elsewhere.

In the future, litigants will likely explore the use of the UN Guiding Principles on Business and Human Rights and other transnational regulatory frameworks (for instance, the OECD's standards on corporate behavior) to hold corporations responsible for the human rights violations associated with their carbon emissions or to compel them to compensate governments or individuals for the costs incurred adapting to global warming.⁶⁴ In this way, litigants would effectively be translating into human rights language the claims against fossil fuel corporations that local governments in the United States have been advancing on common law grounds.⁶⁵ The human rights case, moreover, could be bolstered by growing evidence that some of these corporations have been aware of those harms for several decades and chose not only not to disclose it but also to actively lobby against climate action.⁶⁶ Indeed, a combination of these arguments underlies Greenpeace's petition against carbon majors before the Philippines' Commission on Human Rights; this strategy may well be replicated in other jurisdictions.

More broadly and conceptually, the nature of climate change exposes the shortcomings of long-held assumptions in human rights law and practice. The

⁶⁴ See generally César Rodríguez-Garavito (ed.), *Business and Human Rights* (Cambridge: Cambridge University Press, 2017).

⁶⁵ See, e.g., Karen Savage, "2019: The Year Climate Litigation Hit High Gear," *The Climate Docket*, December 30, 2019, <<https://www.climatedocket.com/2019/12/30/2019-climate-litigation-exxon/>>.

⁶⁶ See, e.g., "America Mislead: How the Fossil Fuel Industry Deliberately Misled Americans About Climate Change," George Mason University Center for Climate Change Communications, <<https://www.climatechangecommunication.org/america-misled/>>.

original articulation of these difficulties is also the clearest. In the first UN study on the implications of climate change, the Office of the High Commissioner for Human Rights concluded that “qualifying the effects of climate change as human rights violations poses a series of difficulties.”⁶⁷ Some difficulties have to do with causality, as it might be “virtually impossible to disentangle the complex causal relationships linking historical greenhouse gas emissions of a particular country with a specific climate change-related effect, let alone with the range of direct and indirect implications for human rights.”⁶⁸ Others relate to temporality, as “adverse effects of global warming are often projections about future impacts, whereas human rights violations are normally established after the harm has occurred.”⁶⁹

These issues are particularly challenging for traditional human rights strategies and concepts. As Kathryn Sikkink has observed, drawing on Iris Young’s theory of justice, the dominant paradigm in human rights advocacy is the “liability model of responsibility,” a backward-looking approach that focuses on determining guilt for individualized rights violations.⁷⁰ However, the liability model cannot adequately address structural injustices like climate change and economic inequality. Indeed, climate action requires a different, forward-looking approach to human rights. Following Young, the key question in this model is not so much “who is to blame?” as “what should we do to accomplish climate goals?” Forward-looking HRCC litigation contributes to answering the latter question by using what Sabel and Simon call “destabilization rights”⁷¹ – legal doctrines and concepts that may help disrupt dysfunctional institutional equilibria, like those common in climate policy, by prodding governments and other stakeholders to take more urgent and meaningful action against global warming.

My study of HRCC litigation highlights the initial signs of forward-looking concepts and doctrines that have the potential to deal with the difficulties associated with the causality and temporality of global warming. With regard to causality, HRCC cases have made progress in establishing the link between

⁶⁷ Human Rights Council, “Report of the Office of the United Nations High Commissioner of Human Rights on the Relationship between Human Rights and Climate Change,” UN Doc. A/HRC/61 (January 15, 2009), ¶70.

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*

⁷⁰ See Kathryn Sikkink, *The Hidden Face of Rights: Toward a Politics of Responsibility* (New Haven: Yale University Press, 2020); see also Iris Marion Young, *Responsibility for Justice* (Oxford: Oxford University Press, 2011).

⁷¹ See Charles F. Sabel and William H. Simon, “Destabilization Rights: How Public Law Litigation Succeeds” (2004) 117 *Harvard Law Review* 1015.

a country's responsibility for GHG emissions and violations of human rights. As noted, litigants and courts have articulated an emergent "minimum fair share" norm, whereby countries are responsible for contributing to mitigation efforts, regardless of actions by other states. Relatedly, they can be held accountable for the human rights impacts associated with their GHG emissions. However, courts' reticence to establishing a causal link between GHG emissions and plaintiffs' individual human rights harms has been an important procedural obstacle in HRCC litigation. Several courts have thrown out cases for lack of standing, finding that the plaintiffs had not shown specific injuries from climate change, as in the challenge brought by citizens of Europe and other regions against the European Union's mitigation targets in *Ferrão Carvalho v. Europe*⁷² and the challenge against the Swedish government's sale of a coal-fired plant to a polluting energy company in *PUSH Sweden v. Sweden*.⁷³

This conventional and individualistic conception of standing ignores the nature of global warming as an omnipresent phenomenon affecting all human beings and indeed all forms of life on Earth. In contrast to it, recent decisions have articulated a new view of standing that better fits the nature of the problem. This is notably the case in the ruling of the German Constitutional Court in the *Neubauer* lawsuit, where the court held that the fact that climate impacts will affect virtually all persons living in Germany did not prevent the young plaintiffs from being affected in their own right and thus meant that they had standing to sue the government to demand more ambitious and urgent climate action.⁷⁴

The temporal dimensions of climate change also raise challenges to the linear, backward-looking temporality of human rights law. The most consequential human rights impacts associated with global warming will materialize in the future and will affect members of future generations, who are not recognized as rights-holders. Moreover, unlike other long-term human rights violations, the temporality of climate impacts is non-linear: delays are costly; the effects of inaction are compounded through time; some impacts are already irreversible; locked-in effects will continue to have adverse impacts on human rights even after climate action is accelerated (if it is ever

⁷² See Case T-330/T18, *Carvalho v. Parliament*, above note 26 (finding that the plaintiffs lacked standing and consequently that the case was inadmissible).

⁷³ See "PUSH Sweden, Nature and Youth Sweden and Others v. Government of Sweden," above note 28.

⁷⁴ See "Constitutional Complaints against the Federal Climate Change Act partially successful," Bundesverfassungsgericht, above note 1.

accelerated); and tipping points and feedback loops may drastically worsen human rights violations in unpredictable ways.⁷⁵

Sensitivity to time may be one of the contributions of future climate-rights lawsuits and judicial decisions. Some of the existing cases offer useful pointers. In several of the rulings that deny the protection requested by the plaintiff, adjudicators explicitly tie their decision to present conditions and leave open the possibility of changing their views as global warming worsens. For instance, in the case against New Zealand brought by a climate migrant from Kiribati who had been denied asylum, the UN Human Rights Committee ruled against the migrant because sea level rise was unlikely “to render the Republic of Kiribati uninhabitable” for another “10 to 15 years,” but added: “given that the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized.”⁷⁶ Moreover, cases filed on behalf of young plaintiffs address the objection that climate harms entail future, as opposed to current, human rights violations by demonstrating that the dire impacts predicted for 2050 or even 2100 will be suffered by people who are already alive today.

With regard to the non-linear character of climate impacts over time, the *Urgenda* decision to enforce swift emission cuts invoked the cost of delays to dismiss the Dutch government’s argument that mitigation targets should be evaluated in 2030 as opposed to 2020. One of the clearest formulations of the non-linearity of climate change in HRCC litigation can be found in the dissent to the US Ninth Circuit Court’s decision to throw out the *Juliana* case on the basis of standing. “The majority portrays any relief we can offer as just a drop in the bucket,” wrote the dissenting judge.⁷⁷ “In a previous generation, perhaps that characterization would carry the day and we would hold ourselves impotent to address plaintiffs’ injuries. But we are perilously close to an overflowing bucket. These final drops matter. *A lot.*”⁷⁸

An even crisper and more consequential judicial pronouncement in this regard can be found in the German Constitutional Court’s ruling in *Neubauer*, which, to my mind, should be seen as the first comprehensively time-sensitive judicial decision on climate change. Mindful of the non-linear temporality of global warming, the court held that postponing climate action

⁷⁵ See Richard Lazarus, “Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future” (2009) 94 *Cornell Law Review* 1153.

⁷⁶ See Human Rights Comm. on Ioane Teitiota, above note 11, at ¶9.12.

⁷⁷ *Juliana v. United States*, above note 8.

⁷⁸ *Ibid.* at pp. 45–46.

to a later day is constitutionally inadmissible inasmuch as it “irreversibly offload[s] major emission reduction burdens” onto the future and imposes “radical abstinence” on future generations.⁷⁹ Therefore, “the obligation to take climate action is accorded increasing weight as climate change intensifies.”⁸⁰ In a conceptual turn that addresses some of the aforementioned conceptual limitations of human rights, the court held that “fundamental rights [are] intertemporal guarantees of freedom.”⁸¹

In conclusion, the continued contribution of HRCC litigation to climate action will hinge on the dissemination of these and other jurisprudential innovations, as well as on the fate of ongoing efforts by litigants and courts to expand and update climate and human rights law in matters ranging from legal standing to the rights of future generations to legal liability for multi-causal human rights harms. As the sociolegal literature on strategic litigation in other thematic fields has amply documented, it will also depend on whether litigants can successfully coordinate their law-centered strategies with the efforts of other advocates and movements that are at the forefront of the global mobilization for climate action, from youth organizations to Indigenous peoples to collectives of concerned scientists. And it will all need to happen at a much greater scale and faster pace if we are to match those of the most urgent challenge of our time.

⁷⁹ “Constitutional Complaints against the Federal Climate Change Act partially successful,”

Bundesverfassungsgericht, above note 1.

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

APPENDIX

TABLE 1.1 *Human rights-based climate cases (2005–2021)*

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2005	Dismissed (in 2006)	<i>Inter-American Commission of Human Rights (IACHR) (defendant: U.S.)</i>	Petition to the IACHR Seeking Relief from Violations Resulting from Global Warming Caused By Acts and Omissions of the United States	Inuit woman (on her own behalf and on behalf of other Inuit in the Arctic)	Seeking relief from human rights violations resulting from global warming caused by acts and omissions of the US. Based on the rights to traditionally occupied land, life, physical integrity and security, culture, property, health, their own means of sustenance, residence and movement, and inviolability of the home.
2005	Granted	<i>Nigeria Federal High Court of Nigeria</i>	<i>Gbemre v. Shell Petroleum Development Company of Nigeria [FHC/B/CS/53/05]</i>	Adult male	Challenging the practice by the Nigerian government and Shell Oil of gas flaring in the Niger Delta. Based on the rights to life and dignity of human persons, health, healthy environment, and environment favorable to their development.
2005	Granted	<i>Europe European Committee of Social Rights</i>	<i>Marangopoulos Foundation for Human Rights v. Greece</i>	Marangopoulos Foundation for Human Rights	Alleging that Greece failed to comply with provisions of the human rights guaranteed by the European Social Charter, including the right to just work conditions and the right to safe and healthy working conditions, by failing to adequately consider, inter alia, the environmental impacts associated with operation of certain coal mines and coal-fired power plants, including climate impacts.

2007	Dismissed	<i>United States U.S. District Court for the Northern District of California</i>	<i>A. Philip Randolph Institute (SF Chapter) v. U.S. Environmental Protection Agency</i>	Two NGOs & two individuals	Seeking an order requiring the EPA to comply with the ruling of <i>Massachusetts v. EPA</i> by determining whether carbon dioxide causes or contributes to harmful air pollution and challenging the Bay Area Air Quality Management District for issuing construction permits for two natural gas power plants as violations of state and federal administrative and environmental law as well as procedural due process rights.
2007	Granted	<i>United Kingdom High Court of Justice</i>	<i>Greenpeace v. Secretary of State for Trade and Industry</i>	Greenpeace	Alleging that the public consultation process conducted by the government while reviewing its nuclear power policy was flawed, including in relation to rights guaranteed under the Aarhus Convention and climate considerations.
2008	Dismissed	<i>United States</i>	<i>Sunflower Electric Power Corporation v. Sebelius</i>	Electric company	Challenging the Kansas government's decision to deny the plaintiff the air quality permit required for the construction of new coal-fired electricity units on the basis that the decision violates the dormant Commerce Clause and the equal protection clause of the US Constitution. The state government had denied the permit on the basis that the new coal-fired energy would contribute to global warming.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2009	Dismissed	<i>United Kingdom High Court of Justice</i>	<i>People and Planet v. HM Treasury</i>	NGO	Challenging the adoption of a policy by the UK Treasury on the basis that it does not use its investment in the Royal Bank of Scotland to advance or require changes to RBS' commercial lending practices such that RBS does not support businesses or ventures that are insufficiently respectful of human rights or harmful to the environment by virtue of their carbon emissions.
2010	Granted	<i>Nepal Supreme Court of Nepal</i>	<i>Pro Public v. Godavari Marble Industries Pvt. Ltd.</i>	Nonprofit (Propublic)	Seeking to void a government permit for a marble mine in the Godavari hills outside Kathmandu, as the mine was inconsistent with the constitutional rights to live in a healthy environment and to live with dignity and Nepalese laws on environmental protection.
2010	Granted (settled)	<i>Philippines Supreme Court of the Philippines</i>	<i>Global Legal Action on Climate Change v. Climate Change Commission</i>	NGO	Alleging that various government agencies' failure to fully comply with two statutes on flood control puts Filipinos at risk of dangers from flooding, which is expected to worsen as climate change becomes more severe and infringes on their right to environmental protection.

2011	Dismissed	<i>United States of America United States District of Columbia District Court</i> (2012)	<i>Alec L. v. McCarthy</i> [14-405]	Five youth and two NGOs (Kids vs Global Warming and Wildearth Guardians)	Alleging violations of the public trust by the government through its actions exacerbating climate change and, on appeal, alleging constitutional violations of equal protection guarantees and due process rights to life, liberty, and property.
	Affirmed	<i>U.S. Court of Appeals for the D.C. Circuit</i> (2014)			
2011	Opinion given	<i>Ecuador Constitutional Court</i>	Advisory Opinion in Case No. 0034-11-TI	Government	Examining whether the Agreement of Cooperation on Climate Change, Conservation of Biodiversity, and Environmental Development signed by Ecuador and Peru is consistent with the Ecuadorian Constitution, including certain constitutional rights like the right to a healthy environment.
2012	Granted	<i>United Kingdom High Court of Justice in Northern Ireland</i>	<i>In the Matter of an Application by Brian Quinn and Michael Quinn</i>	Two landowners	Challenging the decision by the Commissioner of the Planning Appeals Commission to refuse to grant authorization to the plaintiffs to develop a wind farm on their land, on the basis that, among other things, the Commissioner's decision breached their right to a fair hearing and failed to account for the environmental and social benefits of renewable energy development, including the reduction of GHG emissions.
2012	Pending	<i>Uganda High Court of Uganda Holden</i>	<i>Mbabazi and Others v. The Attorney General and</i>	Nonprofit (Greenwatch) on	Alleging that the government is violating its constitutional duties by not addressing climate change and enforcing

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
			<i>National Environmental Management Authority</i> [Civil Suit No. 283 of 2012]	behalf of four Ugandan children	international climate treaties. Based on the public trust doctrine and constitutional rights and freedoms, including the right to a clean and healthy environment.
2012	Dismissed	<i>United States Pennsylvania Commonwealth Court</i>	<i>Funk v. Pennsylvania Department of Environmental Protection</i>	Ashley Funk (young adult)	Challenging the state environmental agency's rejection of the plaintiff's petition for rulemaking to establish rules to reduce greenhouse gas emissions, arguing that the rejection was unfounded as the state has the legal authority under the Constitution to issue these regulations, citing in particular state citizens' constitutional right to clean air and water.
2013	Granted	<i>India National Green Tribunal</i>	<i>Court on Its Own Motion v. State of Himachal Pradesh</i>	Court on its own motion (National Green Tribunal)	Alleging that the emission of black carbon in the ecologically sensitive region of Rhotang Pass drives the melting of glaciers and causes other effects that impermissibly infringe on Indian citizens' constitutional rights.
2013	Pending	<i>IACHR (defendant: Canada)</i>	Petition to the IACHR Seeking Relief from Violations of the Rights of Arctic Athabaskan Peoples Resulting from Rapid Arctic	Arctic Athabaskan Council (on behalf of the Arctic Athabaskan peoples of Canada and the US)	Challenging Canada's failure to implement measures to reduce black carbon emissions as violations of the Athabaskan people's human rights as a result of the arctic warming produced from black carbon emissions. Based on the rights to enjoy the benefits of culture,

			Warming and Melting Caused by Emissions of Black Carbon by Canada		to property, to the preservation of health, and to their own means of subsistence.	
	2013	Granted	<i>Netherlands Hague District Court (2015)</i>	<i>Urgenda Foundation v. Netherlands</i>	NGO (Urgenda Foundation)	Seeking a declaratory judgment and an injunction to compel the Dutch government to do more to reduce GHG emissions. Alleged violations of the rights to life and to private and family life.
		Affirmed	<i>Hague Court of Appeal (Civil Law Division)(2018)</i>			
		Affirmed	<i>Supreme Court of the Netherlands (Hoge Raad)(2019)</i>			
45	2014	Granted	<i>New Zealand Immigration & Protection Tribunal</i>	<i>In re: AD (Tuvalu) [[2014] Cases 501370-371]</i>	Family (Tuvalu)	Seeking resident visas for a family displaced from Tuvalu, based on the rights to family unity; life; be free of cruel, inhuman or degrading treatment; water; and asylum.
	2014	Denied	<i>United States Massachusetts Superior Court(2015)</i>	<i>Kain v. Massachusetts Department of Environmental Protection</i>	Four teenage residents of Massachusetts & two environmental nonprofits	Challenging the state environmental agency's refusal to issue binding greenhouse gas emission reduction regulations and targets, arguing that it is inconsistent with the state's environmental law as well as the fundamental right to clean air.
		Granted	<i>Massachusetts Supreme Court(2016)</i>			

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2015	Dismissed	<i>New Zealand Supreme Court</i>	<i>Ioane Teitiota v. Chief Executive of the Ministry of Business, Innovation and Employment</i> [[2015] NZSC 107]	Adult male (from Kiribati)	Seeking refugee status for a Kiribati citizen, based on the risks generated by the effects of climate change to his right to life.
2015	Dismissed (2019)	<i>UN Human Rights Committee (defendant: New Zealand)</i>	Views Adopted by the Committee under Article 5(4) of the Optional Protocol, Concerning [the Teitiota Communication] [CCPR/C/127/D/2728/2016]	Family (Kiribati)	Arguing that New Zealand's denial of refugee status to a displaced family from Kiribati violated international human rights law, based on the right to life and the risk the plaintiff faced of the arbitrary deprivation of life.
2015	Granted	<i>Pakistan Lahore High Court (2015)</i>	<i>Leghari v. Pakistan</i> [(2015) W.P. No. 25501/201]	Adult male	Challenging the Pakistani government for their failure to carry out the core provisions of the 2012 climate law, based on rights to life, dignity, water, to a healthy environment, and the principle of intergenerational equity.

2015	Pending	<i>Nepal Supreme Court of Nepal</i>	<i>Shayka v. Durbar et al.</i>	Indigenous activist	Alleging that various government ministers and the implementation agency for REDD+ (a climate adaptation program funded by the World Bank) have violated the constitutional rights to live in a clean environment; dignity; culture; social justice; participation and equality for women, Dalits, Indigenous peoples, Madhesi, and other groups; and equality. Also alleging additional violations of the rights of Indigenous peoples enshrined under international law.
2015	Granted(2021)	<i>Belgium Brussels Court of First Instance</i>	<i>VZW Klimaatzaak v. Belgium</i>	NGO and class (35,000+ citizens)	Requesting that federal and regional governments reduce greenhouse gas emissions, based on the rights to life and private and family life and the principle of intergenerational justice.
2015	Appeal Pending (2021) Allowed to Proceed (Motion to Dismiss Denied) Dismissed Appeal pending	<i>United States of America United States District Court of Oregon (Eugene Division) (2016)</i> <i>9th Circuit Court of Appeals(2020)</i> <i>U.S. Supreme Court (2021)</i>	<i>Juliana v. United States</i> [18-36082]	21 youth; a representative of “future generations;” NGO (OCT)	Asserting that the federal government violated the constitutional rights of youth citizens by causing dangerous carbon dioxide concentrations, based on the rights to life, liberty, and property, and equal protection.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2015	Investigation Concluded in Favor of the Plaintiffs	<i>Philippines Commission on Human Rights</i>	Carbon Majors Inquiry	Greenpeace Philippines and Filipino NGOs and citizens	Asserting that “carbon majors” are responsible for climate-induced violations of the rights to life, food, health, water, sanitation, adequate housing, and self-determination.
2015	Dismissed(2018)	<i>United States U.S. District Court, District of Maine</i>	<i>Portland Pipeline Corp. v. South Portland</i>	Pipeline operator	Challenging the city of South Portland’s local ordinance prohibiting loading crude oil onto tankers and the construction of new structures for that purpose as a violation of the dormant Commerce Clause and Foreign Commerce Clause of the US Constitution as well as the pipeline operator’s civil and constitutional rights.
	Dismissed(2021)	<i>First Circuit Court of Appeals</i>			
2015	Granted	<i>Colombia Constitutional Court of Colombia</i>	<i>Castilla Salazar v. Colombia</i> [Decision C-035/16]	Colombian citizens	Challenging the constitutionality of certain laws establishing provisions of Colombia’s National Development Plan, on the basis that they threatened the health of the páramos (high altitude ecosystems) and infringed on constitutional rights, including the right to a healthy environment.

2016	Dismissed	Norway <i>Oslo District Court</i> (2018)	<i>Greenpeace Nordic Ass'n v. Ministry of Petroleum and Energy</i> [16-166674TVI-OTIR/06]	NGOs	Challenging the constitutionality of the Norwegian government's decision to license new blocks of the Barents Sea for deep-sea oil and gas extraction. Based on the rights to life, private and family life, health, an environment that is conducive to health and to a natural environment whose productivity and diversity are maintained, and the no harm principle.
	Dismissed	Norway <i>Borgarting Court of Appeal</i> (2020)			
	Dismissal Upheld	<i>Supreme Court of Norway</i> (2020)			
2016	Dismissed	Switzerland <i>Federal Administrative Court of Switzerland</i> (2018)	<i>Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council and Others</i> [No. A-2992/2017]	Senior citizen women	Challenging the adequacy of the government's climate change mitigation targets and implementation measures and possible infringement on human rights. Based on the rights to life and private and family life.
	Dismissed (2020)	Switzerland <i>Federal Supreme Court of Switzerland</i>			
	Pending(2020)	European Union <i>European Court of Human Rights</i>			
2016	Pending	Pakistan <i>Pakistan Supreme Court</i>	<i>Ali v. Pakistan</i>	Child	Challenging various actions and inactions by the federal and provincial government, including plans to develop the Thar Coalfield. Based on the rights to life, dignity, property, equality, and the principles of sustainable development and inter-generational equality.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2016	Dismissed	<i>Sweden Stockholm District Court</i>	<i>PUSH et al. v. Sweden</i>	NGOs, youth, and individuals	Challenging the sale of coal-fired plants in Germany by the Swedish state-owned energy firm, allegedly in violation of the government's duty of care and the plaintiffs' rights to life, health, private and family life, and a non-harmful climate. (Plants were sold to a Czech firm with poor climate record).
2016	Granted	<i>South Africa High Court of South Africa (Gauteng Division)(2017)</i>	<i>EarthLife Africa Johannesburg v. Minister of Environmental Affairs</i> [65662/16]	NGO	Challenging the government's failure to adequately consider climate change-related impacts in the development of a coal-fired power plant, based on the right to a healthy environment.
2016	Decided	<i>Americas Inter-American Court of Human Rights (2017)</i>	A Request for an Advisory Opinion from the Inter-American Court of Human Rights Concerning the Interpretation of Article 1(1), 4(1) and 5(1) of the American Convention on Human Rights	Colombia	In an advisory opinion, the Inter-American Court of Human Rights recognized the right to a healthy environment as a human right, based on the rights to life and personal integrity.

	2016	Granted	<i>United States Massachusetts Superior Court</i>	<i>First Parish in Bedford, Unitarian Universalist v. Historic District Commission</i>	Religious association & certain members of it	Challenging the Bedford's Historic District Commission's decision to deny the plaintiff association's application of appropriateness to install solar panels on the roof of its Meetinghouse, on the basis that the decision was unreasonable / arbitrary and capricious and violated the plaintiffs' rights to exercise their religious beliefs under the Mass. Declaration of Rights and the First Amendment of the US Constitution.
51	2016	Granted	<i>Kenya National Environmental Tribunal at Nairobi (2019)</i>	<i>Save Lamu v. National Environmental Management Authority</i>	Community organization (Save Lamu) & five individuals	Challenging the National Environmental Management Authority's decision to issue an Environment Impact Assessment (EIA) license to a company (Amu Power) heading the construction of a 900–1000 MW coal fired power plant in Lamu County on the basis that the decision, among other things, violated administrative law; will generate climate, biodiversity, and health impacts; and failed to include adequate pollution mitigation measures.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2016	Dismissed(2018)	<i>United States U.S. District Court for the Southern District of New York</i>	<i>Exxon Mobil Corp. v. Healey</i>	Exxon Mobil (oil company)	The plaintiff brought suit against the Attorney General of Massachusetts, seeking an injunction to bar the enforcement of a civil investigative demand and a declaration that the demand violates the plaintiff's rights under state and federal law, including its rights to free speech and due process. The underlying investigation is into whether Exxon engaged in deceptive practices / mislead consumers / investors as to the role fossil fuels play in driving climate change and the risks of climate change to Exxon's business.
	Pending	<i>Second Circuit Court of Appeals</i>			
2017	Dismissed (2018)	<i>United States Alaska Superior Court</i>	<i>Sinnok, et al. v. State of Alaska, et al. [S17297]</i>	Sixteen youth	Asserting that the Alaska state government violated the constitutional rights of youth citizens by enacting energy policies that allow substantial greenhouse gas emissions and lead to dangerous carbon dioxide concentrations, based on the public trust doctrine, the rights to life, liberty, and property, and equal protection.
	Appealed(2018)	<i>Alaska Supreme Court</i>			

2017	Dismissed	<i>Ireland High Court of Ireland(2019)</i>	<i>Friends of the Irish Environment v. Ireland</i> [2017 No. 793 JR]	NGO	Alleging Ireland’s National Mitigation Plan is in violation of international and national law because it is not designed to reduce greenhouse gas emissions sufficiently in the near-term. Based on the rights to life, liberty and security, integrity of the person, respect for family and private life, property, and the rights of the child, the rights of the elderly, equality between men and women, environmental protection, and the principles of intergenerational solidarity and vigilant and effective protection of the environment.
	Granted in part (for plaintiff) & Dismissed in part (against plaintiff)	<i>Ireland Supreme Court of Ireland(2020)</i>			
2017	Dismissed	<i>India National Green Tribunal</i>	<i>Pandey v. India</i>	Child	Challenging the failure of the Indian government to take greater action to mitigate climate change by implementing its environmental laws and satisfying its obligations under the Paris Agreement, given the particularly adverse impact of nonaction on children and future generations. Based on violation of children’s rights to life and a healthy environment.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2017	Granted	<i>Nepal Supreme Court, Division Bench</i>	<i>Shrestha v. Prime Minister</i>	Nepalese citizen	Alleging that the government's failure to take sufficient action to mitigate and adapt to climate change (including through the failure to adopt a specific climate change law) violated the Nepalese Constitution, domestic environmental law, and international law.
2017	Dismissed	<i>Ireland High Court</i>	<i>Friends of the Irish Environment CLG v. Fingal County Council</i>	Friends of the Irish Environment, Irish citizens	Alleging that the government's decision to authorize the expansion of the Dublin Airport was inconsistent with the government's climate obligations and violated rights guaranteed under the EU Charter of Fundamental Freedoms and the Aarhus Convention.
2017	Pending	<i>Argentina Federal Court</i>	<i>FOMEA v. MSU S.A., Rio Energy S.A., & General Electric</i>	NGO	Alleging that the construction and operation of a thermoelectric plant violates international climate law, international human rights law, the Argentina Constitution, and domestic environmental law.
2017	Pending	<i>Argentina Federal Court (Azul City)</i>	<i>Carballo v. MSU S.A.</i>	Individuals & NGOs	Alleging that the construction and operation of a thermoelectric plant violates international climate law, international human rights law, the Argentina Constitution, and domestic environmental law.

2017	Pending	<i>Argentina Federal Court of Compana</i>	<i>Hahn v. Araucaria Energy Sociedad Anónima</i>	NGOs & individuals	Challenging the construction of the Matheu thermoelectric power plant on the basis that the defendant company failed to properly comply with applicable environmental law (including carrying out a proper Environmental Impact Assessment) and that the plant itself would harm the health of nearby residents and infringe upon the right to a healthy and balanced environment.
2017	Pending	<i>Argentina Federal Court of Compana</i>	<i>Hahn v. APR Energy SRL</i>	NGOs & individuals	Challenging the construction of the Matheu II thermoelectric power plant on the basis that the defendant company failed to properly comply with applicable environmental law (including carrying out a proper Environmental Impact Assessment) and that the plant itself would harm the health of nearby residents and infringe upon the right to a healthy and balanced environment.
2017	Dismissed	<i>Philippines</i>	<i>Segovia v. Climate Change Commission</i>	Various people interested in having walking and bike options for road use, including carless people, parents representing their	Asking the Court to compel the implementation of various environmental laws and regulations and require the government respondents to take various actions to make roads more accessible for bike and pedestrian use. Alleging that the government's failure to

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
				children, and people with cars who would use other modes of transport if available	fully implement these laws and regulations and take these types of actions prejudices the life, health, and property of all Filipinos and violates the right to a balanced and healthful ecology.
2017	Dismissed	United Kingdom High Court of Justice, Queen's Bench Division (Administrative Court)(Feb. 14, 2018)	Plan B Earth v. The Secretary of State for Business, Energy, and Industrial Strategy [Claim No. CO/16/2018]	NGO & 11 citizens (including the elderly and children)	Challenging the Secretary of State's failure to revise the UK's 2050 carbon emissions reduction target in light of the UK's international obligations under the Paris Agreement and the international scientific consensus on climate change.
	Dismissed	High Court of Justice, Queen's Bench Division (Administrative Court)(July 20, 2018)			
	Appeal Request Dismissed	Court of Appeal (Civil Division)(Jan. 25, 2019)			
2017	Granted	Austria Federal Administrative Court (Feb. 2, 2017)	In re Vienna-Schwechat Airport Expansion	NGOs and several adult individuals	Challenging the government's approval of the construction of a third runway at Vienna's main airport, based on rights to environmental protection.
	Repealed (Lower Court's decision is overturned)	Austria Austrian Constitutional Court (June 2017)			

2017	Dismissed	<i>United States U.S. District Court for the District of Eastern Pennsylvania</i>	<i>Clean Air Council v. United States</i>	NGO & two children	Alleging that the U.S. federal government’s rollback of regulations meant to address and minimize the United States’ contribution to climate change affirmatively increases the US contribution to climate change and its effects, endangering the lives and welfare of US citizens in violation of their constitutional rights, including the plaintiffs’ right to a life-sustaining climate system.
2018	Dismissed	<i>United States Florida Circuit Court</i>	<i>Reynolds et al. v. State of Florida</i> [37 2018 CA 000819]	Eight youth	Asserting that the Florida state government violated the constitutional rights of youth citizens by enacting energy policies that allow substantial greenhouse gas emissions and lead to dangerous carbon dioxide concentrations, based on the public trust doctrine, the rights to life, liberty, and property, and equal protection.
2018	Dismissed (2019)	<i>United States U.S. District Court for the District of Oregon</i>	<i>Animal Legal Defense Fund v. United States</i>	Two NGOs & six individuals	Arguing that there is a constitutional right to wilderness and that the US government has violated this right through their actions and inactions contributing to climate change.
	Pending	<i>Ninth Circuit Court of Appeals</i>			

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2018	Granted (Settled)	<i>United States U.S. District Court for the District of Colorado</i>	<i>Willmeng v. Thorton</i>	Two city residents	Alleging that the city of Thorton, Colorado violated the plaintiffs' First Amendment rights to speech and to petition the government when the mayor pro tem removed the plaintiffs' comments critical of hydraulic fracking from his official Facebook page and blocked them from further commenting.
2018	Pending	<i>Indonesia State Administrative Court of Denpasar</i>	<i>Greenpeace Indonesia v. Governor of Bali Province</i>	NGO & three local residents	Challenging the granting of environmental permits for the expansion of a coal-fired power plant on the basis that these actions, among other things, are inconsistent with Indonesia's obligations under international climate law and that the decisions were made without adequate public participation. Moreover, the plaintiffs allege that the permits were granted without adequate consideration of socioeconomic impacts and the impacts the plant expansion would have on pollution, health, and wildlife, among other things.

2018	Dismissed (defense not allowed)(2019)	<i>Canada Supreme Court of British Columbia</i>	<i>Trans Mountain Pipeline ULC v. Mivasair</i>	Oil pipeline company for the underlying injunction against interference with the oil pipeline terminals; the state (prosecutor) for the contempt charges	The state brought charges against two climate activists for contempt of an injunction that prohibited interference with an oil pipeline and its terminals. The defendant activists sought to use the climate necessity defense – derived from criminal law and the Canadian Charter – arguing that the urgent and severe threat of climate change justified their actions to block access to oil pipeline terminals.
2018	Pending Granted	<i>Court of Appeals of British Columbia Pakistan High Court of Lahore</i>	<i>Sheikh Asim Farooq v. Pakistan</i>	Civil society leaders and NGO members	Arguing that proper implementation of various domestic environmental statutes is necessary due to rapidly decreasing forest coverage in Pakistan. The petitioners further argue that trees in forests and other natural resources are covered by the public trust doctrine, which means that the government should conserve forests for public use instead of allowing them to be used for commercial or private purposes. The government's inaction on this matter is evidenced by their failure to protect existing trees or to plant new trees, despite the mandate under the Trees Act.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2018	Pending	<i>Argentina Public Prosecutor of City of Neuquén</i>	<i>Mapuche Confederation of Neuquén v. Secretary of Territorial Development and Environment</i>	Indigenous association	<p>The petitioners also argue that the government has failed to implement its own climate change policies. Finally, the petitioners allege that the government has failed to satisfy its obligations under law and policy to preserve, maintain, and grow forest coverage in Pakistan and in Punjab specifically. The petitioners urge action to protect their fundamental rights guaranteed under the Pakistani Constitution.</p> <p>Seeking the opening of a criminal investigation into the responsibility of the defendant government officials and companies for the contamination of the Neuquén basin with hazardous industrial waste generated from oil activities, in violation of criminal environmental law and the legal rights protected by criminal environmental law.</p>
2018	Pending	<i>Switzerland Federal Supreme Court of Switzerland</i>	“Cases Against Credit Suisse Protestors”	State (prosecutor); climate activists (defendants)	<p>The defendant climate activists argued that they should not be convicted and pay a fine for trespass associated with a protest (wherein they staged a fake tennis match to protest Credit Suisse’s fossil fuel investments and pressure Roger Federer to end his sponsorship with them) because the severity and urgency of climate change justified their actions.</p>

	2018	Dismissed	<i>United States Washington Superior Court</i>	<i>Aji P. v. State of Washington</i> [96316-9]	Twelve youth	Asserting that the Washington state government violated the constitutional rights of youth citizens by causing dangerous carbon dioxide concentrations, based on the public trust doctrine, the rights to life, liberty, and property, and equal protection.
		Appealed (2019)	<i>Washington Supreme Court</i>			
	2018	Granted(2021)	<i>France Administrative Court of Paris (complaint submitted in 2019)</i>	<i>Notre Affaire à Tous v. France</i>	NGOs (Fondation pour la Nature et l'Homme; Greenpeace France; Notre Affaire à Tous; Oxfam France)	Challenging the government's failure to take further action on climate change based on the rights to life, health, private and family life, and the right of every person to live in a healthy and ecologically balanced environment.
61	2018	Pending	<i>Germany Federal Constitutional Court</i>	<i>Friends of the Earth Germany v. Germany</i>	NGOs & single claimants	Challenging the government's failure to meet greenhouse gas emission reduction goals, based on citizens' rights to life, health, occupational freedom, and property.
	2018	Dismissed	<i>Canada Superior Court of Québec(2019)</i>	<i>ENVironnement JEUnesse v. Canada</i> [500-06]	Class (Québec citizens aged 35 and under)	Challenging the government's failure to set an adequate greenhouse gas emission reduction target and develop a sufficient plan to avoid dangerous climate change impacts, based on the rights of youngest generations to life, inviolability, security of the person, and equality.
		Appealed (2019)	<i>Québec Court of Appeals</i>			

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2018	Dismissed	<i>Germany Administrative Court (Berlin)</i> (2019)	<i>Family Farmers and Greenpeace Germany v. Germany</i> [00271/17/R /SP]	Three German families & NGO	Challenging insufficient action by the government to meet its 2020 greenhouse gas emissions reduction target, based on the rights to life and health, occupational freedom, and property.
2018	Dismissed	<i>United Kingdom High Court of Justice, Queen's Bench Division, (Planning Court, Divisional Court)</i> (2019)	<i>Plan B Earth v. Secretary of State for Transport</i> [[2019] EWHC 1070 (Admin)]	NGO	Challenging government approval of an expansion to the Heathrow International Airport as failing to adequately consider the UK's climate change commitments. Based on the rights to life, property, private and family life, and nondiscrimination (for those with certain protected characteristics, in particular the poor).
	Granted	<i>Court of Appeal (Civil Division)</i> (2020)			
	Reversed	<i>Supreme Court</i> (2020)			
2018	Dismissed	<i>European Union EU General Court (Second Chamber)</i> (2019)	<i>Armando Ferrão Carvalho v. European Parliament</i> [Case no. T-330/18]	10 families, including children (Portugal, Germany, France, Italy, Romania, Kenya, Fiji, & Swedish Sami Youth Association Sáminuorra)	Seeking an injunction to order the EU to enact more stringent greenhouse gas emissions reduction targets through existing programs. Based on the rights to life, health, occupation, property, and equal treatment (based on age and geographic place of birth), and the rights of children.
	Dismissed	<i>Court of Justice of the European Union</i> (2021)			

2018	Granted	<i>Colombia Supreme Court</i> (2018)	<i>Future Generations v. Ministry of the Environment</i> [1100122 03 000 2018 00319 00]	25 youth	Seeking to enforce the fundamental right to a healthy environment in the face of threats from climate change and deforestation. Based on the rights to life and human dignity, health, food, water, and the enjoyment of healthy environment.
2018	Pending	<i>Pakistan Lahore High Court</i>	<i>Maria Khan et al. v. Pakistan</i> [No. 8960 of 2019]	Adult women	Challenging government inaction on climate change based on the rights of women and future generations to a healthy environment and a climate capable of supporting human life and on equal protection for women.
2018	Pending	<i>Japan Kobe District Court</i>	<i>Citizens' Committee on the Kobe Coal-Fired Power Plant v. Kobe Steel Ltd.</i>	Japanese families, Citizens' Committee on the Kobe Coal-Fired Power Plant	Alleging that the construction and operation of a new coal-fired power plant would violate constitutional rights by virtue, inter alia, of the air pollutants and GHG emissions it would produce.
2018	Dismissed	<i>France Council of State</i>	<i>IPC Petroleum France v. France</i>	Fossil fuel company	Challenging the decision of the French government to grant an extension of an existing fossil fuel extraction permit with an expiration date, on the basis that it violated its right to property.
2018	Pending	<i>France Marseille Administrative Court</i>	<i>Friends of the Earth v. Prefect of Bouches-du-Rhône & Total</i>	NGOs	Challenging the permit issued to Total to operate a biorefinery and its continued operation on the basis that the relevant government decision failed to adequately consider the climate and environmental harms associated with the use of imported palm oil and comply with obligations concerning the right to a healthy environment.

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2018	Granted	<i>OECD Guidelines for Multinational Enterprises Polish National Contact Point</i>	<i>Development YES – Open-Pit Mines NO v. Group PZU S.A.</i>	NGO	Alleging that chapters of the OECD Guidelines (on general policies, disclosures, human rights, and consumer interests) had been violated by the company's failure to include certain information related to GHG emissions in its 2017 non-financial statement.
2018	Pending	<i>Argentina Federal Court</i>	<i>OAAA v. Araucaria Energy SA</i>	NGO	Alleging that the construction and operation of a thermoelectric plant violates international climate law, international human rights law, the Argentina Constitution, and domestic environmental law.
2018	Convicted	<i>United Kingdom Crown Court at Preston</i>	<i>Roberts v. Regina</i>	State (prosecutor); three climate activists (defendants)	The defendants were convicted in a lower court for public nuisance contrary to common law for sitting on top of trucks and blocking part of a road for several days to protest the authorization of fracking for gas at a particular site. The defendants appealed the convictions on the basis that imprisonment for nonviolent protest is an inappropriate and excessive sentence and inconsistent with their right to peaceful protest under domestic law and the European Convention on Human Rights, in addition to an error the judge made interpreting the law.
	Overtured (Appeal granted)	<i>Court of Appeal (Criminal Division)</i>			

2018	Granted	<i>Chile Third Environmental Tribunal</i>	<i>Private Corporation for the Development of Asyén v. Environmental Evaluation Service</i>	Two NGOs & one individual	Challenging the defendant's approval of a hydroelectric project on the basis that the environmental impact assessment failed to consider a number of material impacts, including biodiversity and climate impacts.
2019	Dismissed	<i>Pakistan Supreme Court of Pakistan(2021)</i>	<i>D.G. Khan Cement Company Ltd. v. Punjab</i>	Cement company	Challenging an ordinance that disallows the establishment and enlargement of cement plants in a certain area within the Chakwal and Khushab Districts, on the basis that the government lacked jurisdiction to pass the ordinance; it infringed upon the owner of the cement company's constitutional right to trade, business, and profession; the petitioner didn't have an adequate opportunity to be heard; the government discriminated against similarly situated cement companies; and the required studies weren't undertaken.
2019	Pending	<i>OECD Slovenian and UK National Contact Point (NCP) for the OECD Guidelines</i>	Specific Instance under the OECD Guidelines for Multinational Enterprises, submitted to the Slovenian and UK National Contact	Coalition of NGOs	Alleging that Ascent Resources plc, in its fracking activities in Slovenia, has violated the OECD Guidelines for Multinational Enterprises by creating environmental and health hazards, operating without due diligence, engaging poorly with stakeholders, and conducting improper lobbying activities.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2019	Pending	<i>Canada Federal Court of Appeal</i>	Point (NCP) for the OECD Guidelines – Complaint against Ascent Resources plc concerning environmental and health hazards of their hydraulic fracturing activities in Slovenia, improper involvement in local political activities in Slovenia and disregard for stakeholders’ concerns in Slovenia <i>Adkin-Kaya v. Attorney General</i>	Youth petitioners	Challenging the government’s decision to issue a certificate finding that the adverse environmental effects of the Trans Mountain Expansion project –

2019	Granted(2020)	<i>Canada Court of Appeal of Alberta</i>	<i>In the Matter of the Greenhouse Gas Pollution Pricing Act (Alberta)</i>	Canadian province (Alberta)	a fossil fuel pipeline expansion – were justified on the basis that the decision failed to consider the massive greenhouse gas emissions associated with the project and its impacts on the Charter rights of the youth petitioners. The plaintiff province challenged the Canadian federal government’s act establishing carbon pricing on the basis that it overstepped its constitutional authority, in violation of the province’s rights under the Canadian Constitution.
	Reversed(2021)	<i>Supreme Court of Canada</i>			
2019	Dismissed(2021)	<i>UN Committee on the Rights of the Child (defendants: Argentina, Brazil, France, Germany and Turkey)</i>	<i>Sacchi v. Argentina</i>	16 children from Argentina, Brazil, France, Germany, Turkey, India, Nigeria, Palau, South Africa, Sweden, the Marshall Islands, Tunisia, and USA	Alleging insufficient cuts to greenhouse gas emissions and a failure to use available tools to protect children from carbon pollution by the world’s major emitters. Based on the rights under the CRC, including the rights to non-discrimination, prioritization of the best interests of the child, culture, life, and health, and the principle of intergenerational justice.
2019	Dismissed (2019)	<i>Canada Court of Appeal of Saskatchewan</i>	<i>In the Matter of the Greenhouse Gas Pollution Pricing Act (Saskatchewan)</i>	Canadian province (Saskatchewan)	The plaintiff province challenged the Canadian federal government’s act establishing carbon pricing on the basis that it overstepped its constitutional authority, in particular because it concerns property and civil rights or other matters of exclusive provincial concern.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
	Affirmed(2021)	<i>Supreme Court of Canada</i>			
2019	Granted(2021)	<i>France Council of State (Conseil d'Etat)</i>	<i>Commune de Grande-Synthe v. France</i>	Municipality of Grande-Synthe	Challenging the French government's failure to take further action to reduce greenhouse gas emissions, based on the rights to life and private life.
2019	Dismissed	<i>European Union EU General Court (defendant: EU) (2020)</i>	<i>EU Biomass Plaintiffs v. European Union</i>	Individuals and NGOs from Estonia, Ireland, France, Romania, Slovakia & US	Challenging the treatment of forest biomass as a renewable fuel in the European Union's 2018 revised Renewable Energy Directive. Based on the rights to property, health, private and family life.
2019	Appeal dismissed Granted	<i>European Court of Justice(2021) Mexico Supreme Court</i>	Ruling on Modification to Ethanol Fuel Rule [610/2019]		Challenging the government's increase in the permissible maximum ethanol fuel content, based on the rights to a healthy environment, life, health, food, and water.
2019	Granted(2021)	<i>Netherlands Hague District Court</i>	<i>Milieudefensie et al. v. Royal Dutch Shell plc.</i>	NGOs and class of 170,000+ citizens	Alleging a private oil company failed to take adequate action to curb contributions to climate change in violation of their duty of care and human rights obligations under national and international law. Based on the rights to life, private life, family life, home, and correspondence.

2019	Dismissed	<i>France Nanterre High Court of Justice(2020)</i>	<i>Friends of the Earth v. Total</i>	14 French municipalities; NGOs (Friends of the Earth France, Survie; AFIEGO; CRED; NAPE/ Friends of the Earth Uganda; NAVODA)	Suit over an oil project in Uganda and Tanzania, alleging that Total failed to properly assess the risks to the environment and to human rights as required by law.
2019	Pending	<i>France Nanterre High Court of Justice</i>	<i>Notre Affaire à Tous v. Total</i>	French NGOs & French local governments	Alleging that a French oil company failed to adequately report climate risks and their human rights impacts associated with its activities and take action to mitigate those risks in line with the goals of the Paris Agreement.
2019	Dismissed	<i>Canada Federal Court of Canada(2020)</i>	<i>La Rose v. Her Majesty the Queen</i>	15 Canadian youth; NGOs (David Suzuki Foundation, CELL, OCT)	Demanding that the government prepare a plan for reducing GHG emissions; alleging that the Canadian government's policies contribute to high emissions that infringe the plaintiffs' rights to life, liberty, security, and equal protection.
2019	Pending	<i>Court of Appeals Peru Superior Court of Lima</i>	<i>Álvarez v. Peru</i>	7 children	Seeking a judgment by the court to require net zero deforestation of the Amazon by year 2025 because of the environmental and climate consequences of the government's failure to adequately halt deforestation, based on the rights to dignity, life, health, water, conservation of biological diversity, sustainable use of natural resources, best interests of the child, solidarity and intergenerational justice.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2019	Pending	<i>UN Human Rights Committee (defendant: Australia)</i>	Petition of Torres Strait Islanders to the United Nations Human Rights Committee Alleging Violations Stemming from Australia's Inaction on Climate Change	Eight Torres Strait Islanders	Whether Australia violated the human rights of low-lying islanders through its failure to act on climate change, based on the rights to culture and life and the right to be free from arbitrary interference with privacy, family, and home.
2019	Granted	<i>South Africa High Court(2020)</i>	<i>Philippi Horticultural Area Food & Farming Campaign, et al. v. MEC for Local Government, Environmental Affairs and Development Planning: Western Cape, et al.</i>	Voluntary association and adult individuals	Challenging an administrative decision allowing an urban development that would threaten a local aquifer, thereby amplifying climate harms. Based on the rights to healthy environment, water, and food.
2019	Dismissed	<i>Mexico District Court in Administrative MattersFirst Circuit of the Federal Judiciary(December 2019)</i>	<i>Jóvenes v. Gobierno de México</i> ["Youth v. Mexico"]	Fifteen young people	Arguing that the Mexican government must comply with the terms of the General Law on Climate Change and issue regulations and policies pursuant thereto in order to adequately implement the law. Moreover, Mexico cannot comply with its international obligations

	Appeal Granted; Remanded to District Court	<i>7th Collegiate Circuit Court in Administrative Matters</i> (February 2020)		
	Pending	<i>District Court in Administrative Matters First Circuit of the Federal Judiciary Canada</i>		
2019	Pending	<i>Superior Court of Justice</i>	<i>Mathur et al. v. Her Majesty the Queen in Right of Ontario</i>	Seven youth

under the UNFCCC and the Paris Agreements without issuing policies and regulations implementing the General Law on Climate Change. The plaintiffs also argue that the government’s failure to implement the law jeopardizes their human rights and, therefore, the government has obligations under the Mexican Constitution to adequately implement climate change policies and regulations and mitigate Mexico’s contribution to climate change.

Alleging that Ontario's repeal of the Climate Change Act and its 2030 GHG reduction target of 30% below 2005 levels constitute an abdication of its responsibility to address climate change and a violation of the Charter rights to life, liberty, and security of the person, and equal protection under the law.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2019	Dismissed	<i>Luxembourg Luxembourg Administrative Tribunal</i>	<i>Greenpeace Luxembourg v. Minister of Social Security</i>	Greenpeace Luxembourg	Challenging the Minister of Social Security's alleged failure to respond to Greenpeace's request for information on how, inter alia, Luxembourg's Compensation Fund, a pension fund, aligned itself with the objectives of the Paris Agreement.
2019	Pending	<i>United States California Superior Court</i>	<i>The Two Hundred v. Office of Planning and Research</i>	Association of civil rights leaders and two individuals	Challenging amendments to regulations implementing the California Environmental Quality Act, which use housing to address climate change, on the basis that they worsen the housing crisis and disparately harm minority communities in California – in violation of the California Constitution and the US Constitution – including civil rights protected under them – and other applicable laws.
2019	Granted	<i>European Union</i>	<i>ClientEarth v. European Investment Bank</i>	ClientEarth	Alleging that the European Investment Bank's decision to deny ClientEarth's request for internal review of EIB's decision to finance a biomass power generation plant in Spain violated the Aarhus Convention and applicable EU regulations.

2020	Pending	<i>United Nations(10 Special Rapporteurs) (defendant: U.S.)</i>	Rights of Indigenous People in Addressing Climate-Forced Displacement	Five US Indian tribes; NGO (Alaska Institute for Justice)	Alleging the US government has failed to address climate-caused displacement, based on the rights to self-determination, life, health, housing, water, sanitation, a healthy environment, and food.
2020	Dismissed (2020)	<i>Canada Federal Court</i>	<i>Lho'imggin et al. v. Her Majesty the Queen</i>	Two native chiefs (Wet'suwet'en)	Challenging the Canadian government to adhere to its emissions reduction targets under the Paris Agreement, based on the rights to life, liberty, security of the person, and equal protection for future generations.
	Pending	<i>Federal Court of Appeal</i>			
2020	Dismissed	<i>Austria Constitutional Court</i>	<i>Zoubek et al. v. Austria</i>	NGO (Greenpeace) and class of 8,000 citizens	Challenging two laws that give tax credits for air travel but not rail transportation, arguing that GHGs pose a threat to the rights to life and liberty.
2020	Pending	<i>Argentina Supreme Court of Argentina</i>	<i>Asociación Civil por la Justicia Ambiental v. Province of Entre Ríos, et al.</i>	NGOs and a class of children	Alleging that the government's failure to protect the ecologically sensitive Paraná Delta violates international human rights and climate law as well as the Paraná Delta's own rights.
2020	Pending	<i>South Korea Constitutional Court</i>	<i>Kim Yujin et al. v. South Korea</i>	19 child members of the Korea Youth Climate Action Group	Arguing that the South Korean government's current GHG emissions targets are unconstitutional as they fail to protect guaranteed rights to life, health, pursuit of happiness, and the environment.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2020	Pending	<i>Australia Queensland Land Court</i>	<i>Youth Verdict v. Waratah Coal</i>	Environmental NGO Youth Verdict	Arguing that the proposed coal mine infringes upon the plaintiff's human rights – including their rights to life, the rights of children, and the right to culture as guaranteed under the Human Rights Act – by contributing to climate change.
2020	Granted	<i>Germany Federal Constitutional Court (2021)</i>	<i>Neubauer v. Germany</i>	Teenagers & young adults	Arguing that Germany's Federal Climate Protection Act is legally insufficient and, as such, violates their constitutionally-guaranteed human rights, including the right to human dignity and the right to life and physical integrity.
2020	Pending	<i>United States Montana District Court</i>	<i>Held v. Montana</i>	Sixteen youth	Asserting that the Montana state government violated the constitutional rights of youth citizens by enacting energy policies that allow substantial greenhouse gas emissions and lead to dangerous carbon dioxide concentrations, based on the public trust doctrine; the rights to life, liberty, and property; and equal protection.

2020	Pending	<i>Brazil Supreme Federal Court</i>	<i>Partido Socialista Brasileiro (PSB) v. Federal Union</i> [“Climate Fund Case”]	Four Brazilian political parties	Challenging the Brazilian federal government’s failure to sufficiently administer and implement the Climate Fund, in violation of Brazilian law and the government’s duty to protect the environment (derived from the precautionary principle and the Brazilian Constitution).
2020	Pending	<i>Brazil Supreme Federal Court</i>	<i>Partido Socialismo e Liberdade (PSOL) v. Federal Union</i> [“Amazon Fund Case”]	Four Brazilian political parties	Alleging that the Brazilian federal government has failed to implement the Amazon Fund in violation of Brazilian law and the government’s duty to protect the environment (derived from the precautionary principle and the Brazilian Constitution).
2020	Pending	<i>Brazil 7th Federal Environmental & Agrarian Court of the Judiciary Section of Amazonas</i>	<i>Instituto Socioambiental v. IBAMA</i>	Three NGOs	Alleging that the federal environmental agency’s decision to allow the export of native timber with diminished government oversight violates federal law as well as constitutional rights, given the ecological importance of the Amazon and the climate harms that stem from the Amazon’s destruction.
2020	Pending	<i>Brazil Federal District Court of Curitiba</i>	<i>Institute of Amazon Studies v. Brazil</i>	Institute of Amazon Studies	Alleging that Brazil’s failure to control deforestation in the Amazon and implement appropriate deforestation control policy violates, inter alia, constitutional and human rights.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2020	Pending	<i>Brazil Supreme Federal Court</i>	<i>PSB et al. v. Brazil</i>	Seven political parties in Brazil	Alleging that the government's failure to implement its national deforestation policy (PPCDAm) violates fundamental constitutional rights as a result of deforestation's contribution to climate change. Also specifically alleging the violation of Indigenous and traditional communities' rights and the rights of future generations.
2020	Pending	<i>European Union European Court of Human Rights</i>	<i>Youth for Climate Justice v. Austria et al.</i>	Six youth from Portugal	Alleging that 33 Member States of the EU have violated human rights by failing to take sufficient action on climate change, based on the rights to life, privacy, and freedom from discrimination.
2020	Pending	<i>Spain Supreme Court</i>	<i>Greenpeace et al. v. Spain</i>	Greenpeace, Oxfam, & Ecologists for Action	Challenging the Spanish government's failure to take sufficient action to mitigate greenhouse gas emissions and address climate change in line with its commitments under the Paris Agreement.
2020	Pending	<i>Uganda High Court at Mbale</i>	<i>Bududa Landslide Victims v. Uganda</i>	Victims of Bududa landslides (represented by BNB Advocates)	Arguing that the Ugandan government's failure to address known landslide risks (climate change increases landslide risks) violates the plaintiffs' rights to life, property, and a healthy environment.

2020	Pending	<i>United Kingdom High Court of Justice</i>	<i>Young People v. United Kingdom</i>	Plan B Earth & three young British citizens	Alleging that the government's contributions to and failure to address the climate emergency amounts to a violation of the government's legal duties to the planet, young people, communities, the right to family life, and obligations under the Paris Agreement and international law. Seeking an order requiring the government to develop and implement an Emergency Plan consistent with its legal obligations.
2020	Pending	<i>Ecuador Orellana Provincial Court of Justice</i>	<i>Worani Indigenous Community v. PetroOriental SA</i>	Federation for Human Rights; Acción Ecológica; Union of People Affected by Chevron-Texaco; members of the Worani indigenous people	Alleging that the climate pollution produced from PetroOriental's oil extraction and the subsequent use of that oil constitutes a continuing and persistent violation of human rights and the rights of nature.
2020	Granted Appealed(2020)	<i>Mexico Mexico City District Court in Administrative Matters First Circuit Collegiate Tribunal</i>	<i>Greenpeace Mexico v. Ministry of Energy (on the National Electric System Policies)</i>	Greenpeace Mexico	Alleging that two federal energy sector policies violates human rights by fossil fuels at the expense of renewables and therefore contributing to climate change.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2020	Pending	<i>Mexico Mexico City District Court in Administrative Matters</i>	<i>Greenpeace Mexico v. Ministry of Energy (on the Energy Sector Program)</i>	Greenpeace Mexico	Alleging that the Energy Sector Program for 2020–2024 violates, inter alia, the right to a healthy environment and the right to access renewable energy-based electricity by promoting the use of fossil fuels at the expense of renewable energy and GHG emissions reductions.
2020	Pending	<i>France</i>	<i>European Center for Constitutional and Human Rights (ECCHR) and Proyecto de Derechos Económicos, Sociales y Culturales (ProDESC) v. Electricité de France (EDF)</i>	NGOs	Arguing that French energy company Electricité de France (EDF) violated its obligations of corporate due diligence when it failed to adequately consult with the indigenous Zapotec community of Unión Hidalgo before constructing a large-scale wind farm on their land.
2020	Granted	<i>Ecuador Sucumbíos Provincial Court of Justice</i>	<i>Moncayo et al. v. PetroAmazonas, Ministry of Energy and Non-Renewable Natural Resources, and Ministry of the Environment</i>	9 children	Alleging that the government's practice of gas flaring contributes to climate change and violates constitutionally protected rights to health and a healthy environment and the rights of nature and environmental principles, such as sustainable development and the state's obligation to adopt policies and measures to prevent negative environmental impacts.

2020	Pending	<i>South Korea South Korean Constitutional Court</i>	“South Korean Biomass Case”	Solar cooperatives, solar cooperative members, citizens	Alleging that the South Korean government’s treatment of biomass as renewable energy and its subsidization of biomass-derived energy violates citizens’ constitutional rights by, inter alia, increasing pollution and climate harms.
2020	Pending	<i>United Kingdom High Court of Justice</i>	<i>Friends of the Earth v. UK Export Finance</i>	Friends of the Earth England, Wales, & Northern Ireland	Alleging that the UK’s decision to finance liquified natural gas developments in Mozambique was unreasonable given, inter alia, its obligations under the Paris Agreement and the associated climate, biodiversity, and human rights impacts.
2020	Pending	<i>United States U.S. District Court of Maine</i>	<i>Sierra Club v. US Army Corps of Engineers</i>	Sierra Club, Natural Resources Council of Maine, Appalachian Mountain Club	Alleging that the Army Corps of Engineers failed to comply with US domestic environmental and administrative law when it proposed an electrical transmission project that would cut across ecologically sensitive areas; the project would also use energy derived from Canadian “megadams” that present climate change, environmental justice, and human rights issues.
2020	Dismissed(2021)	<i>Australia Federal Court of Australia</i>	<i>Sharma v. Minister for the Environment</i>	Eight Australian children	Alleging that the Minister of the Environment’s approval of the new Whitehaven coal mine is likely to impose serious harms on the plaintiffs through its contribution to greenhouse gas emissions, which constitutes a breach of the Minister’s duty to exercise reasonable care to not cause the plaintiffs harm.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2020	Pending	<i>New Zealand High Court of New Zealand, Auckland Registry</i>	<i>Smith v. Fonterra Co-operative Group Ltd.</i>	Indigenous man	Alleging that the defendants – who are corporations that either release greenhouse gases into the atmosphere or sell products that release greenhouse gases when burned, including dairy farms, a power stations, and a steel mill – are responsible for public nuisance, negligence, and breach of an inchoate duty as a result of their actions.
2020	Pending	<i>Brazil Court of Justice of the State of São Paulo</i>	<i>Leonel Ramos v. São Paulo</i>	2 individuals (members of Parents for Future)	Filing an autonomous production of evidence suit on the basis that the projects implementing a government program that finances the manufacturing of automotive vehicles do not reduce greenhouse gas emissions as stated in a state decree and do not help make socioeconomic development compatible with the climate system. This, in turn, contributes to / doesn't help stem constitutional rights violations – including, e.g., the rights to health, dignity, respect, and freedom from negligence and discrimination – experienced by children and adolescents as a result of climate change (and future violations).

2020	Pending	<i>Brazil 7th Federal Environmental and Agrarian Court</i>	<i>Ministério Público Federal v. IBAMA</i>	Federal prosecutor	Seeking an injunction requiring the federal government – through certain departments and agencies – to implement command and control actions to control the perpetrators of illegal deforestation in at least ten main hot spots of deforestation in the Amazon, based in part on growing evidence of the torts and health harms (which impact rights) associated with this deforestation.
2020	Dismissed	<i>The Netherlands Hague District Court</i>	<i>Greenpeace Netherlands v. Ministry of Finance</i>	Environmental NGO	Arguing that the government’s Covid-19 bailout of airline KLM violated the government’s duty of care to prevent dangerous climate change, which derived from international and domestic climate law as well as the European Convention on Human Rights.
2021	Pending	<i>Brazil 14th Federal Civil Court of São Paulo</i>	<i>Youth v. Minister of Environment & Others</i>	Six youth	Alleging that the emissions reductions target that the Brazilian government recently set violates its obligations under the National Policy on Climate Change, the Paris Agreement, and Article 225 (right to an ecologically balanced environment) of the Brazilian Constitution.

(continued)

TABLE 1.1 (continued)

Filing Date	Status	Country Court	Case Name	Plaintiff	Issue & Alleged HR Violations
2021	Pending	<i>France Saint-Etienne Court</i>	<i>Envol Vert v. Casino</i>	Environmental NGOs from France, Colombia and Brazil	Arguing that the Casino Group (supermarket company) must take all necessary measures to exclude beef tied to deforestation and the grabbing of Indigenous territories in its supply chains in Colombia, Brazil, and elsewhere in order to comply with the French law on the duty of vigilance.
2021	Pending	<i>Guyana Constitutional Court of Guyana</i>	<i>Guyanese Citizens v. Guyana</i>	Two Guyanese citizens	Alleging that the government's approval of licenses for oil exploration violates the government's constitutional duty to protect the plaintiffs' right to a healthy environment as well as the right to a healthy environment of future generations.
2021	Pending	<i>Italy Civil Court of Rome</i>	<i>Italian citizens v. Italy</i> ["Giudizio Universale" or "Last Judgment"]	200 individuals (adults & minors) and 24 NGOs	Alleging that the Italian government's failure to take sufficient action to reduce greenhouse gas emissions violates the fundamental rights of the plaintiffs guaranteed under international law and the Italian constitution.
2021	Pending	<i>Poland Polish Regional Courts</i>	<i>Stasiak v. Poland</i>	Five Polish citizens	Alleging that the Polish government's failure to take adequate action to reduce greenhouse gas emissions violates the plaintiffs' rights to life, health, privacy, family life, and a safe climate.

2021	Pending	<i>West Africa ECOWAS Court of Justice</i>	<i>HEDA Resource Centre v. Nigeria</i>	Registered Trustees of the HEDA Resource Centre	Alleging that the Nigerian government's failure to stop gas flaring by oil companies in Nigeria violates Nigerians' human rights – particularly their rights to life, human dignity, health, and a general satisfactory environment – as well as domestic environmental law.
2021	Pending	<i>Europe European Court of Human Rights</i>	<i>M. Mex v. Austria</i>	Austrian citizen with multiple sclerosis (MS) and Uhthoff's syndrome	Alleging that the Austrian government's failure to pass measures to adequately reduce greenhouse gas emissions violates the plaintiff's right to private and family life through the severe impacts that climate-induced increased temperatures and heatwaves has on him. Also alleging violations of the right to a fair hearing and the right to an effective remedy.

The Social and Political Life of Climate Change Litigation

Mobilizing the Law to Address the Climate Crisis

LISA VANHALA

2.1 INTRODUCTION

The chapters in this volume vividly illustrate the recent growth in the number and range of climate change cases globally. They also showcase the inherent complexity and contingencies of these types of cases in terms of their potential legal and political impacts. Some lawsuits – like the *Urgenda* case in the Netherlands – have achieved landmark judicial decisions, shaped government policy, received extensive coverage in the media, and inspired litigants in other countries. Other cases, for example, the *Juliana v. United States* case brought by youth plaintiffs, show the limits of some courts' willingness to assign legal responsibility to governments for the harms caused by greenhouse gases. Some of these lawsuits are examples of strategic climate litigation, as discussed in the chapter by Ben Batros and Tessa Khan in this volume.¹ Others would fall into what Catalina Vallejo and Siri Gloppen refer to in their chapter as 'low-profile climate litigation' or what Kim Bouwer refers to as 'unsexy' climate litigation.² Paralleling this emergence and expansion of different varieties of climate litigation is a burgeoning interest among scholars and practitioners in learning lessons from these cases.³

In this chapter, I contribute to this evaluative endeavour by turning from the legal to the socio-legal to offer a different lens through which to consider the phenomenon of climate change litigation. By drawing on theoretical

¹ See the chapter written by Ben Batros and Tessa Khan in this volume (Chapter 3).

² See Catalina Vallejo and Siri Gloppen's chapter in this volume (Chapter 4); Kim Bouwer, 'The Unsexy Future of Climate Change Litigation' (2018) 30 *Journal of Environmental Law* 483.

³ There has been a huge growth in scholarly interest in climate change litigation. See Joana Setzer and Lisa C. Vanhala, 'Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance' (2019) 10 *WIREs Climate Change* e580.

approaches in the study of legal mobilization, this chapter sheds light on some of the social and political dynamics of climate change litigation that can often be overlooked in existing analyses. I suggest that situating climate change litigation in its social and political context is useful in gaining a more holistic understanding of what is at stake when individuals and groups turn to the courts as part of their efforts to address the climate crisis. Drawing on the contributions to this volume, this chapter (1) shows how legal mobilization theory can be helpful to practitioners and scholars interested in understanding, explaining, and assessing climate change litigation in practice and (2) highlights some of the ways in which studying climate change litigation can shape our conceptual and empirical understandings of the processes of legal mobilization more generally.

2.2 BRINGING A LEGAL MOBILIZATION LENS TO CLIMATE CHANGE LITIGATION

Scholars interested in legal mobilization seek to understand litigation in its social and political context. Frances Zemans offered one of the most succinct definitions of the term in noting that ‘the law is . . . mobilized when a desire or a want is translated into a demand as an assertion of rights’.⁴ This view of litigation tends to understand the process of mobilizing the law as an act of participation in political and governance systems. It also shifts attention away from the purely legal to the actors engaging with the law (including non-official legal actors).⁵ A legal mobilization perspective also problematizes how we understand ‘success’ when it comes to litigation: it takes as its starting point a broad conceptualization of what success might entail. Another advantage of bringing a legal mobilization lens to the subject of climate change litigation is that it tends to overcome the selection bias that is often inherent when lawyers and legal scholars discuss and analyse climate change litigation. This selection bias manifests in two ways: first, as a disproportionate focus on landmark and/or successful cases and a tendency to overlook cases that are unsuccessful. Cases may fail to result in groundbreaking legal outcomes and/or may entrench a counterproductive policy or set of practices and/or can catalyse a backlash from judges, political institutions, or the public. A second way in which this selection bias manifests is that cases that are settled out of court or

⁴ Frances Zemans, ‘Legal Mobilization: The Neglected Role of the Law in the Political System’ (1983) 77 *American Political Science Review* 690.

⁵ See Michael McCann, ‘Litigation and Legal Mobilization’, in Keith E. Whittington et al. (eds.), *The Oxford Handbook of Law and Politics* (Oxford: Oxford University Press, 2008).

the legal cases that ‘fail to launch’ (for a variety of different reasons) are also often ignored in existing analyses of climate change litigation. And yet, these cases (or ‘non-cases’) matter when we want to draw broader lessons about whether litigation is an effective, efficient, and legitimate way of addressing the climate crisis. Bringing a legal mobilization perspective shows that existing research on climate change litigation tends to overlook important questions: who is mobilizing the law to address the climate crisis, why, and with what consequences? Who is not turning to the courts, and what drives this quiescence?

2.3 WHAT EXPLAINS THE TURN TO THE COURTS?

Broadly conceived, there are three main strands of theoretical arguments accounting for the turn to the courts in the legal mobilization literature: (1) arguments that focus on institutional and structural incentives and disincentives to mobilize the law; (2) accounts of how group dynamics shape collective mobilization efforts; and (3) approaches that focus on the micro-politics of disputing behaviour and the turn to law.⁶ These are considered here in light of the phenomenon of climate change litigation and the contributions to this volume.

The first group of theories focus on incentives and constraints to the mobilization of law within the legal and political landscape. One of the oldest theoretical approaches within this intellectual camp focuses on the idea that those who are politically disadvantaged – that is, cannot achieve their aims through the political process – are more likely to turn to the courts. This approach was developed to account for the turn to litigation by the civil rights movement in the twentieth century when disenfranchised African Americans were unable to achieve progress in their quest for equality through political channels.

Approaches that focus on the way in which legal opportunities are structured by legal systems have been useful in complementing these arguments that tended to focus on political dynamics but overlooked the systems that shape access to justice. The growing literature on what has come to be known as ‘legal opportunity structures’ has explored how they shape the emergence and nature of mobilization on some issues and in some jurisdictions (and also how they have been shaped by mobilization efforts).⁷ Ellen Ann Andersen, in

⁶ See *ibid.*

⁷ See, e.g., Chris Hilson, ‘New Social Movements: The Role of Legal Opportunity’ (2002) 9 *Journal of European Public Policy* 238; see also Lisa Vanhala, ‘Legal Opportunity Structures

her book on gay rights litigation, argues that legal opportunity structures include the legal stock (that is, the body of law that can be drawn upon by potential litigants); procedural regulations, such as rules on standing and costs; and the presence of receptive judges. She persuasively shows how opportunity structures influence the origins, progress, and outcomes of litigation.⁸

This literature raises interesting ways of thinking about the potential to effectively use law to address the climate crisis across different jurisdictions. In terms of climate change litigation, early research on the phenomenon largely debunked the idea that there is a straightforward relationship between a legislative gap in climate change governance and a gap-filling role played by courts.⁹ However, there is growing evidence to suggest that understanding legal opportunity structures can be useful for those working on and studying climate change litigation. Understanding the contextual conditions under which litigation happens (or doesn't) can help to account for patterns of climate change litigation. In turn, studying climate change litigation can help advance the literature on legal opportunity structures by highlighting factors that are less relevant in other substantive areas of law. Several of the contributions to this volume illustrate the potential for these multidirectional insights. For example, Julia Mello Neiva and Gabriel Antonio Silveira Mantelli consider the wider institutional and political context within which Brazilian climate litigation unfolds. They find that, despite the weakening of the institutional environmental protection framework, delays in the judicial system, and threats to human rights defenders, climate litigation is becoming increasingly important in Brazil. They suggest that the judiciary is now playing a role in climate governance along with the executive and legislative branches.¹⁰ The chapter by Arpitha Kodiveri on climate change litigation in India explores the specific strains of environmentalism that the courts in India have engaged

and the Paradox of Legal Mobilization by the Environmental Movement in the UK' (2012) 46 *Law & Society Review* 523; see also Lisa Vanhala, 'Is Legal Mobilization for the Birds? Legal Opportunity Structures and Environmental Nongovernmental Organizations in the United Kingdom, France, Finland, and Italy' (2018) 51 *Comparative Political Studies* 380; see also Lisa Vanhala, 'Shaping the Structure of Legal Opportunities: Environmental NGOs Bringing International Environmental Procedural Rights Back Home' (2018) 40 *Law & Policy* 110; see also Bruce M. Wilson and Juan Carlos Rodríguez Cordero, 'Legal Opportunity Structures and Social Movements: The Effects of Institutional Change on Costa Rican Politics' (2006) 39 *Comparative Political Studies* 325.

⁸ See Ellen Ann Andersen, *Out of the Closets and into the Courts: Legal Opportunity Structure and Gay Rights Litigation* (Ann Arbor: University of Michigan Press, 2009).

⁹ See Lisa Vanhala, 'The Comparative Politics of Courts and Climate Change' (2013) 22 *Environmental Politics* 447.

¹⁰ See Julia Mello Neiva and Gabriel Antonio Silveira Mantelli's chapter in this volume (Chapter 19).

with and the chapter by Waqqas Ahmad Mir explores the role of different pieces of legislation in Pakistan in shaping climate change litigation there.¹¹ Pooven Moodley explores similar issues in his chapter on climate change litigation in Africa.¹² Jolene Lin and Jacqueline Peel's chapter also engages with the notion that legal stock shapes the mode of litigation that is pursued. They suggest, building on recent research, that the high percentage of rights-based climate cases in the Global South is due at least in part to the fact that many of the national constitutions of Global South jurisdictions contain environmental rights and/or the right to life has been interpreted to include the right to live in a healthy and clean environment.¹³ Juan Auz's chapter implicitly draws attention to an understudied facet of legal opportunity structures: the nature of potential remedies and the transnational political dynamics associated with specific remedies. He highlights the political and legal complexities around the question of remedies in Global South states given the tensions between what is demanded by global climate justice norms (i.e., the idea that those who contributed least to global greenhouse gas emissions should not bear the costs and harms of climate change), on one hand, and practical solutions to promote effective mitigation and adaptation efforts at the domestic level in Global South states, on the other.

The contributions to this volume also show that we cannot limit a legal opportunity structure analysis to one level of governance: increasingly, regional courts and international bodies are being targeted in efforts to mobilize the law. For example, Jolene Lin and Jacqueline Peel (Chapter 9) highlight the potentially complementary role of regional courts in their discussion of the 2017 Advisory Opinion of the Inter-American Court of Human Rights on Human Rights and the Environment, emphasizing the linkages between human rights and environmental protection. The chapter by Ashfaq Khalfan (Chapter 8) engages with the practice of the UN Committee on Economic, Social and Cultural Rights to begin to address the question of how much an individual state has to do to reduce emissions within its jurisdiction. The chapter by Sophie Marjanac and Sam Hunter Jones (Chapter 7) also illustrates how international compliance bodies complement domestic legal opportunity structures by shifting attention to a legal advocacy effort in an

¹¹ See Arpitha Kodiveri's chapter in this volume (Chapter 20); see also Waqqas Ahmad Mir's chapter in this volume (Chapter 22).

¹² See Pooven Moodley's chapter in this volume (Chapter 21).

¹³ See Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' (2019) 113 *American Journal of International Law* 679; see also Joana Setzer and Lisa Benjamin, 'Climate Litigation in the Global South: Constraints and Innovations' (2020) 9 *Transnational Environmental Law* 77.

international human rights forum. They take an in-depth look at the communication by a group of Torres Strait Islanders to the United Nations Human Rights Committee under the Optional Protocol to the International Covenant on Civil and Political Rights. In their chapter which brings lessons from strategic human rights litigation to the issue of climate litigation, Ben Batros and Tessa Khan (Chapter 3) bring many of the ideas associated with opportunity structure approaches into a more practical form. The authors develop a useful set of questions that can support practitioners in analyzing the social, political, and legal contexts within which cases are being considered to identify the role that litigation can and should play in broader theories of change.

Shifting away from the structural level, a second group of theories pays attention to variables at the group level to account for the turn to the courts. Much high-profile climate litigation is brought or supported by organized groups such as civil society organizations or NGOs. The chapter by Jolene Lin and Jacqueline Peel suggests that this is as true for the emerging climate change litigation docket in the Global South as it is in the Global North.¹⁴ The literature on legal mobilization suggests that the characteristics of these groups can shape the trajectory of litigation and its wider impacts. Scholars have emphasized different features. For example, those working from a resource mobilization perspective tend to focus on the range of resources groups bring to bear in legal cases. An influential essay by Marc Galanter argues that in litigation ‘the haves come out ahead’ and suggests that a lack of resources and an inability to be a ‘repeat player’ in the courts can limit the possibilities of achieving change through law.¹⁵ Charles Epp’s groundbreaking book also underscores the importance of what he calls ‘support structures’ – that is, organizations, lawyers, and funding – in underpinning the expansion of rights and use of the courts.¹⁶ Recent research on the role of lawyers as ‘strategy entrepreneurs’ in the environmental movement also broadens our understanding of the role of resources beyond just the financial in shaping organizational decisions to turn to the courts.¹⁷

Questions about the role and types of resources required for successful climate litigation are plentiful. There are interesting, unexplored questions on the role funders play in climate change litigation, including those

¹⁴ See Jolene Lin and Jacqueline Peel’s chapter in this volume (Chapter 9).

¹⁵ Marc Galanter, ‘Why the “Haves” Come Out Ahead: Speculations on the Limits of Legal Change’ (1974) 9 *Law & Society Review* 95.

¹⁶ See Charles R. Epp, *The Rights Revolution: Lawyers, Activists, and Supreme Courts in Comparative Perspective* (Chicago: University of Chicago Press, 1998).

¹⁷ See Vanhala, ‘Is legal mobilization for the birds?’.

advocating for action on greenhouse gas emissions or pushing for adaptation measures as well as those advocating against. For example, researchers have found that legal strategies have emerged as one part of a coordinated set of strategies to thwart large-scale misinformation campaigns on climate change.¹⁸ Jolene Lin and Jacqueline Peel, in their chapter highlighting the different modes of climate litigation in the Global South (Chapter 9), identify where and how foundation funding can matter in shaping climate litigation. But there is room for further research on the sources and implications of different models of funding for climate change litigation.

Studying climate change litigation also broadens how we conceptualize ‘resources’ in a way that can productively inform legal mobilization theory. For example, recent research has shown how climate science can shape the emergence, trajectory, and/or outcomes of climate litigation.¹⁹ Insights from Science and Technology Studies, led by the work of Sheila Jasanoff, suggest that the types and degree of certainty provided by scientific evidence, the scientific knowledge and capacity of the judiciary, and the standards of evidence required to form convincing causal, legal arguments can all matter in climate change litigation.²⁰ Science can play an important role as a spark for the transformation of disputes through growing scientific certainty or as part of a commitment to embedding the precautionary principle in governance processes, including judicial governance. Scientific ideas can also become relevant through the incorporation of experts into climate cases and through the involvement of science-based organizations as part of the ‘support structure’ for climate change litigation. In their chapter, Michael Burger, Jessica Wentz, and Daniel Metzger show how the various branches of climate change attribution science are being drawn upon in human rights cases to frame government obligations to mitigate and adapt to climate change.²¹ Richard Heede’s chapter also highlights the science-litigation connection by exploring how the science of attributing source emissions has contributed to efforts to hold major carbon producers to account through climate lawsuits

¹⁸ See Justin Farrell et al., ‘Evidence-based strategies to combat scientific misinformation’ (2019) 9 *Nature Climate Change* 191–195.

¹⁹ See Lisa Vanhala, ‘Coproducing the Endangered Polar Bear: Science, Climate Change, and Legal Mobilization’ (2020) 42 *Law & Policy* 105.

²⁰ See Sheila Jasanoff, *Science at the Bar: Law, Science and Technology in America* (Cambridge, MA: Harvard University Press, 1997); see also Sheila Jasanoff, ‘The Idiom of Co-production’, in Sheila Jasanoff (ed.), *States of Knowledge: The Co-Production of Science and Social Order* (London: Routledge, 2004), pp. 1–18; see also Sheila Jasanoff, ‘A New Climate for Society?’ (2010) 27 *Theory, Culture and Society* 233.

²¹ See Michael Burger, Jessica Wentz, and Daniel Metzger’s chapter in this volume (Chapter 11).

and human rights investigations.²² Joana Setzer and Michelle Jonker-Argueta's chapters explore lawsuits against the carbon majors in different ways: Setzer presents an empirical picture of the volume and impacts of these cases whereas Jonker-Argueta's chapter explores the process of a 'supply-side case' through a detailed examination of the *People v. Arctic Oil* case in Norway.²³ Reinhold Gallmetzer persuasively argues in his chapter that there is unexploited potential for NGOs and private citizens to generate, access, verify, and disseminate information that can bring more and stronger cases before judicial authorities.²⁴ Kelly Matheson's chapter on the case for climate visuals in the courtroom exemplifies this by demonstrating how and why visual evidence of climate change impacts can be effective in climate change litigation.²⁵

Legal mobilization research has shown how dimensions other than resources and legal opportunities also matter in shaping when and how a group might turn to litigation. My previous research exploring the disability rights movement's turn to litigation over time underscored the important role that ideas and identities can play in pushing a group to court. I found that there is a relationship between the notion of becoming a 'rights-holder' and the likelihood of seeing the courts as an appropriate venue within which to pursue social change objectives.²⁶ This work also found that divisions of labour among organizations regarding the use of specific tactics began to shape the organizational field within a broader movement. Identities have also become an important facet of some climate change cases but have generally not been a focus of analysis. Think, for example, of the importance of having youth plaintiffs in *Juliana* and the *Amazon Future Generations* case in Colombia and the inter-generational justice frames that were at the forefront of these cases. In 2016, a group of women senior citizens, known as the KlimaSeniorinnen, filed suit against the Swiss government, alleging that the government had failed to uphold its obligations under the Swiss Constitution and the European Convention on Human Rights by not steering Switzerland onto an emissions reduction trajectory consistent with the goal of keeping global temperatures below two degrees Celsius above pre-industrial levels. The women's petition noted that their demographic is especially vulnerable to the heat waves expected to result from climate change. The case was

²² See Richard Heede's chapter in this volume (Chapter 12).

²³ See Setzer's chapter in this volume (Chapter 10); see also Jonker-Argueta's chapter in this volume (Chapter 17).

²⁴ See Reinhold Gallmetzer's chapter in this volume (Chapter 13).

²⁵ See Kelly Matheson's chapter in this volume (Chapter 14).

²⁶ See Lisa Vanhala, *Making Rights a Reality?: Disability Rights Activists and Legal Mobilization* (New York: Cambridge University Press, 2010).

ultimately dismissed and denied appeal in the national courts and (at the time of writing) the group has pursued the case in the European Court of Human Rights. The affirmation or denial of identities through court cases and litigation-linked advocacy activity can have profound impacts on whether litigation is a tool of empowerment or oppression for litigants and associated grassroots communities. James Goldston's chapter explores the interconnections between climate litigation and equality and outlines how an equality lens can shape climate litigation decision-making at a number of levels and stages. Taking note of the disproportionate impacts of climate change on the marginalized and disadvantaged can help inform where and why climate litigation should be supported and why it is important for litigation efforts to be rooted within the communities on whose behalf litigation is brought.²⁷

Finally, approaches accounting for the turn to courts concerned with the individual level have tended to focus on both the pre-litigation stage of the mobilization of law, with attention being paid to the conditions under which grievances are articulated in legal terms, as well as on legal disputing behaviour. This builds on a long history in the sociology of law and draws on the legacy of Felstiner et al.'s 'naming, blaming and claiming' framework, which demonstrated that a great deal of the process of mobilizing the law concerns dynamics distant from the courtroom.²⁸ Their framework expresses the ways in which harmful experiences are – or are not – perceived (naming), do or do not become grievances (blaming), and ultimately transform into disputes or not (claiming).

This framework can be useful in understanding a number of different facets of climate change litigation. It can show how the problem of climate change becomes recognized by certain individuals and communities (and not others) and how this is then translated into legal grievances.²⁹ The chapter by Laura Gyte, Violeta Barrera, and Lucy Singer on the role of narratives and framing in litigation and beyond and the degree of investment required to undertake this narrative work in a co-productive way also suggests there is an important role for NGOs and funders to play in translating the key messages of climate cases.³⁰ This perspective is also useful in understanding how and why the climate change problem is increasingly linked with other issues, particularly human rights and equality concerns, in litigation efforts. Finally, this

²⁷ See James A. Goldston's chapter in this volume (Chapter 5).

²⁸ William L. F. Felstiner et al., 'The Emergence and Transformation of Disputes: Naming, Blaming, Claiming ...' (1980) 15 *Law and Society Review* 631.

²⁹ See Chris Hilson, 'Climate Change Litigation in the UK: An Explanatory Approach (or Bringing Grievance Back In)' (2010) *Climate Change: La Risposta del Diritto* 421.

³⁰ See Laura Gyte, Violeta Barrera and Lucy Singer's chapter in this volume (Chapter 15).

framework also shows why some litigants might want to pursue what Jolene Lin and Jacqueline Peel refer to as 'stealthy climate litigation'.³¹ That is, the desire to advance cautiously and under the radar 'by packaging climate change issues with less controversial claims' or with claims that might be perceived as an important policy issue in the jurisdiction.³² They point out that this tactic can be effective in diluting the political potency of climate change as an issue and evading the political question doctrine (or non-judiciability doctrine), arguments that are often raised in opposition in climate change cases.

2.4 CONCLUSION

The long-standing literature on legal mobilization can be instructive in helping to identify the factors that shape the levels and forms of climate change legal mobilization and to understand the broader socio-political implications of the way in which these cases emerge and progress (or not) and then ultimately have an impact (or not). Scholars going back to the 1950s have studied the groups that have mobilized the law and their successes and failures, from the civil rights movement to the campaign for marriage equality. Their theoretical approaches and findings can be instructive for those wanting to understand how, when, and where to intervene with the use of legal approaches to address the climate crisis. At the same time, learning from climate change litigation campaigns can help to inform the development of legal mobilization theory. What is clear is that a next stage in socio-legal research on climate change litigation involves subjecting claims about the impact of climate litigation to empirical scrutiny to identify the successes, unintended outcomes, and spillover effects of climate change legal cases (including those that are settled or fail to take off).³³

The answers to questions about who mobilizes the law to address the climate crisis, why, and with what effect matter for at least three important reasons. First, to understand and evaluate the effectiveness of climate change litigation, it is important to know the strategic imperatives driving a case and the way in which a legal case might fit into an organization's broader tactical repertoire and the broader political and legal context. The long-standing

³¹ See Jolene Lin and Jacqueline Peel's chapter in this volume (Chapter 9).

³² *Ibid.*

³³ An example of research in this vein at the vanguard is Sébastien Jodoin et al., 'Realizing the Right to Be Cold? Framing Processes and Outcomes Associated with the Inuit Petition on Human Rights and Global Warming' (2020) 54 *Law & Society Review* 168.

literature on legal mobilization has helped us to understand that even losses in court can be incredibly productive if a case raises awareness of an issue, changes the way the media covers a topic, and/or sparks or builds on other forms of mobilization such as campaigning, grassroots mobilization, and legislative change. Second, addressing these questions can help us understand why climate change and environmental legislation is enforced in some jurisdictions and not others and why it is used to address some types of problems and not others. Where enforcement of climate change statutes is largely left to third parties, these questions are all the more significant because judicial governance will be determined by the cases brought before the courts. Finally, it is also crucial to consider the democratic and social legitimacy of these cases: whose voices are heard in courts, and whose are excluded? How accountable are some of the collective actors bringing these cases and is this the best use of their resources in tackling the climate crisis? What implications does this form of mobilization have for democratic governance? Historically, critiques of legal mobilization come from both the right and the left. Those on the right decry the ‘anti-democratic’ nature of the phenomenon of ‘regulation through litigation’ and use the language of ‘activist judiciaries’. Critics on the left tend to focus on the ways in which the legal system can be seen as a ‘small-c’ conservative force that embeds and upholds structural and social inequalities and that meaningful justice – including climate justice – is not going to be achieved through the courts. These normative concerns are worth bearing in mind both for practitioners in the way they make decisions about whether, how, and where to litigate and for researchers in deciding how to empirically evaluate the difference that climate change litigation is making (or not) in broader campaigns for a sustainable transition.

PART II

Legal Strategy in Rights-Based Climate Litigation

3

Thinking Strategically about Climate Litigation

BEN BATROS AND TESSA KHAN

3.1 INTRODUCTION

Efforts to drive action on climate change are increasingly turning to courts. While litigation involving climate change is nothing new, an increasing number of cases are being filed and there has been a recent surge of cases that have long-term strategic ambitions. Interestingly, an increasing number of such cases use the norms and frames of human rights, as shown by César Rodríguez-Garavito in his chapter in this volume (Chapter 1). The use of litigation to advance strategic goals on climate change mirrors a long history of human rights practitioners using litigation to achieve ambitious policy change. While climate litigators recognize the relevance of substantive human rights arguments to climate change, they have paid limited attention to how the human rights community has used litigation.

This is a missed opportunity. The human rights community has spent decades debating the role of strategic litigation in effecting lasting change, reflecting on the role of strategic litigation and its relationship with other forms of advocacy and activism, and identifying how to minimize the risks of litigation and maximize its impact. Climate litigators have the opportunity to use and build upon human rights advocates' hard-won lessons on how to use litigation most effectively and strategically when facing problems with deep social, economic, and political roots.

In line with the purposes of this collective volume, this chapter outlines those links. It identifies the emergence of the next generation of climate litigation involving cases with strategic ambitions; it outlines the debates on strategic litigation within the human rights community; and it considers how the lessons from those debates apply to climate litigation. Drawing on the lessons from other fields that have significant experience in strategic litigation does not imply that there is a single correct approach or answer that all should

follow. Nor does identifying the costs and risks of litigation mean that climate activists should stop litigating. To the contrary, there is significant potential for strategic litigation to support climate action. And a careful look shows that some climate litigators have already adopted and extended best practices in areas where many human rights litigators lag. The chapter does, however, serve as a call to ensure that each decision on whether and how to litigate considers all of the relevant factors and that climate litigators consistently maximize the impact of limited time and resources by conducting litigation as effectively, efficiently, and strategically as possible.

3.2 THE EVOLUTION OF CLIMATE LITIGATION

The scale of global climate change litigation has been well-documented,¹ including recent tallies of almost 2,000 climate change cases worldwide.² However, these headline numbers can obscure the diversity of legal actions that are included under the climate litigation banner.³ These claims:

- involve a broad range of parties, with cases being brought by individuals, NGOs, governments (typically sub-national), and corporations and primarily against corporations and governments, (with a few cases against NGOs and individuals);⁴
- rely on a diverse range of legal principles, including tort, constitutional, administrative, environmental, human rights, corporations, securities, and consumer protection laws;
- challenge a wide range of acts, policies, and practices, including: perceived failures by governments and corporations to sufficiently mitigate greenhouse gas emissions; failure to adapt to climate change; failure to

¹ See, e.g., ‘Global Trends in Climate Change Legislation and Litigation: 2021 Snapshot’ (2021) Grantham Research Institute on Climate Change and the Environment; see also ‘The Status of Climate Change Litigation: A Global Review’ (2017) United Nations Environment Programme.

² As of 15 April 2022, the Climate Change Litigation database by the Sabin Center for Climate Change Law lists a total of 1,957 cases (1,400 US cases and 557 non-US cases. See ‘About’, Sabin Center Climate Change Litigation Databases, <<http://climatecasechart.com/about/>>). See also ‘Global Trends in Climate Change Legislation and Litigation: 2021 Snapshot’, above note 1, p. 5 (documenting ‘1,841 ongoing or concluded cases of climate change litigation from around the world, as of May 2021’).

³ For example, two leading climate litigation databases include in their collection ‘cases brought before administrative, judicial and other investigatory bodies that raise issues of law or fact regarding the science of climate change and climate change mitigation and adaptation efforts’. ‘Status of Climate Change Litigation’, above note 1, p. 8.

⁴ See, e.g., Climate Change Litigation Databases, Sabin Center for Climate Change Law, <<http://climatecasechart.com/>>.

accurately manage, report, or disclose the risks associated with climate change; ‘anti-regulatory’ challenges against policies intended to facilitate the transition towards clean energy; and actions against those protesting climate change.

This diversity is not surprising. Climate change – its causes and effects – necessarily implicate a wide range of actors and social, political, and economic relationships. The range of climate claims also reflects the growing diversity and polycentricity of climate change governance and action.⁵

That said, certain trends in climate litigation can be identified. While many early efforts focused on challenging a particular fossil fuel-intensive project or harmful regulation, there has been a recent growth in ‘strategic cases’, which aim to produce ambitious and systemic outcomes. The profile of these cases has grown in the wake of the Urgenda Foundation’s successful claim against the Dutch government for its failure to sufficiently reduce emissions and the endorsement of this landmark judgment by appellate courts;⁶ a successful constitutional claim by Colombian youth plaintiffs for the protection of the Amazon;⁷ the *Juliana* case brought on behalf of twenty-one young people in the United States;⁸ Ashgar Leghari’s case against the Pakistani government;⁹ and, while not strictly a judicial decision, the findings of the Philippines’ Human Rights Commissions following its investigation into the legal responsibility of forty-seven so-called ‘carbon majors’ for the human rights impacts of climate change.¹⁰ Other potentially ‘strategic’ cases include those directly targeted at corporations responsible for their role in the climate crisis, like the suite of litigation against the so-called carbon major fossil fuel companies

⁵ Joana Setzer and Lisa Vanhala, ‘Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance’ 10 *WIREs Climate Change*, pp. 9–11; See also Hari M. Osofsky, ‘Scales of Law: Rethinking Climate Change Governance,’ PhD Dissertation, University of Oregon (2013).

⁶ See Rb. Hague, 24 June 2015, HAZA 13-1396, 2015 (Urgenda Foundation/Netherlands). An English translation of the decision of the Supreme Court delivered on 20 December 2019 is available at: <<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:HR:2019:2007>>.

⁷ See Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala de Casación Civil, abril 5, 2018, M.P.: L.A. Tolosa Villabona, Expediente 11001-22-03-000-2018-00319-01 (Colom.).

⁸ For materials relating *Juliana v. United States*, including court filings, see ‘*Juliana v. United States*,’ Our Children’s Trust, <<https://www.ourchildrenstrust.org/juliana-v-us>>.

⁹ See *Leghari v. Pakistan* (W.P. No. 25501/2015), Lahore High Court Green Bench, Order of 4 September 2015, available at: <<https://affaire-climat.be/fr/the-case>>.

¹⁰ Philippines Commission on Human Rights, National Inquiry on Climate Change, Report (2022) <<https://chr.gov.ph/wp-content/uploads/2022/05/CHRP-NICC-Report-2022.pdf>>.

seeking contributions for the costs imposed by climate change¹¹ and the litigation that led the Hague District Court to order that Shell reduce its global carbon emissions by 45% by 2030.¹²

These cases, sometimes hailed as ‘new wave’ or ‘next generation’ cases, currently comprise a small portion of climate litigation.¹³ However, the momentum behind these lawsuits can be expected to grow. On one hand, our understanding of the threat, and of the urgency of action, is growing. More people are experiencing the effects of climate change in their daily lives, whether through increasingly intense and frequent wildfires, tropical storms, heatwaves, droughts, flooding, or impacts on fisheries and agriculture. There is growing awareness that we are increasingly at risk of triggering tipping points that cause abrupt and irreversible changes in the climate system and critical ecosystems, including ‘runaway’ climate change. Key scientific reports have become part of the mainstream understanding of the implications of further warming.¹⁴ And research is increasingly able to quantify not only past contributions to climate change but also the contribution of climate change to specific extreme weather events and associated damage.¹⁵

This public awareness that climate change may cause irreversible effects in our lifetime is growing just as public faith in a political response to climate change is dwindling. Reports of the ‘emissions gap’ and ‘production gap’

¹¹ For example, see lawsuits filed by US cities and counties against oil and gas companies. See Dana Drugmand, ‘Climate Liability Suits by San Francisco and Oakland Receive a Flood of Support’, *Climate Liability News*, 27 March 2019. Additionally, there is the lawsuit brought by Peruvian Farmer Saúl Luciano Lliuya against the German energy utility RWE. See ‘The “Huarez” Case at a Glance’, Germanwatch, <<https://germanwatch.org/en/huaraz>>. The inquiry currently being undertaken by the Philippines’ Commission on Human Rights into the responsibility of the so-called ‘carbon majors’ for the human rights impacts of climate change is another example. See ‘Carbon Majors’, Republic of Philippines Commission on Human Rights, <<http://chr.gov.ph/tag/carbon-majors/>>.

¹² *Milieudefensie and others v Royal Dutch Shell*, The Hague District Court, HA ZA 19-379, 26 May 2021 <<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5337>> (ECLI:NL:RBDHA:2021:5337).

¹³ See, e.g., Jacqueline Peel et al., ‘Shaping the “Next Generation” of Climate Change Litigation in Australia’ (2018) 41 *Melbourne University Law Review* 793; see also Kim Bouwer, ‘The Unsexy Future of Climate Change Litigation’ (2018) 30 *Journal of Environmental Law* 483.

¹⁴ See, e.g., ‘Special Report on Global Warming of 1.5°C (SR15)’ (2018) Intergovernmental Panel on Climate Change (IPCC).

¹⁵ For more on the legal implications of the emerging science of extreme weather event attribution, see Sophie Marjanac and Lindene Patton, ‘Extreme Weather Event Attribution Science and Climate Change Litigation: An Essential Step in the Causal Chain?’ (2018) 36 *Journal of Energy & Natural Resources Law* 265; see also Geetanjali Ganguly et al., ‘If at First You Don’t Succeed: Suing Corporations for Climate Change’ (2018) 38 *Oxford Journal of Legal Studies* 841.

continue to grow.¹⁶ The combination of historical inaction in the 1990s and 2000s and high-profile political setbacks in key jurisdictions in the latter part of the 2010s (such as the elections in Brazil, Australia, and the United States) has led many to question the willingness of governments to adequately address climate change in practice. The repeated failure of the UNFCCC Conference of Parties to agree on rules required to implement the Paris Agreement has also contributed to growing disillusionment with the multilateral processes that have been entrusted to address climate change.

The resulting dissonance between the urgency that people feel (and that scientists urge) for climate action and the declining confidence in political and corporate decision-making will increasingly push legal action (and other forms of popular mobilization) to the forefront of our climate response.

3.3 LINKS BETWEEN CLIMATE LITIGATION, HUMAN RIGHTS, AND STRATEGIC LITIGATION

Like other climate claims, the ‘next generation’ cases have been anchored in a broad range of laws and legal principles. However, there has been a recent shift to consider climate change in human rights terms. Philip Alston, the UN Special Rapporteur on extreme poverty and human rights, released a report in June 2019 arguing that ‘climate change threatens the future of human rights . . . [and] represents an emergency without precedent and requires bold and creative thinking from the human rights community’.¹⁷ Later that year, the UN High Commission for Human Rights Michelle Bachelet stated that ‘the world has never seen a threat to human rights of this scope’.¹⁸

There have been moves by the human rights and climate communities to bridge this gap, notably with the three-year inquiry by the Philippines’ Human Rights Commission into how climate change is affecting the human rights of Filipinos,¹⁹ the appointment of the first UN Special Rapporteur on the promotion

¹⁶ The ‘emissions gap’ is a term used by the UN Environment Programme to describe the difference between the greenhouse gas emission levels consistent with having a likely chance (> 66 per cent) of limiting the mean global temperature rise to below 2°C/1.5°C in 2100 above pre-industrial levels and the global effect of the current pledges made by governments to reduce greenhouse gas emissions.

¹⁷ ‘Climate Change and Poverty’, Report of the Special Rapporteur on extreme poverty and human rights, UN Doc. A/HRC/41/39, 25 June 2019, ¶61.

¹⁸ Human Rights Council, ‘Opening statement by UN High Commissioner for Human Rights Michelle Bachelet’, UN OHCHR, 9 September 2019, <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24956&LangID=E>>.

¹⁹ See ‘About’, Republic of the Philippines Commission on Human Rights, above note 10. Commissioner Robert Eugenio Cardiz announced his conclusions in December 2019; see Isabella Kaminski, ‘Carbon Majors Can Be Held Liable for Human Rights Violations,

and protection of human rights in the context of climate change, and multiple complaints filed with UN human rights treaty bodies²⁰ and the European Court of Human Rights asserting violations from climate change.²¹ Domestic climate litigators have also begun to incorporate human rights arguments into their cases,²² with human rights featuring in key strategic climate litigation judgments from the Dutch Supreme Court and Court of Appeal, the Berlin Administrative Court, and the Colombian Supreme Court.²³ This trend is likely to continue, as claims linking climate change and human rights become more viable as a result of the increasingly rich body of jurisprudence, commentary, and high-level recognition of these connections and the corresponding obligations of state and non-state actors.²⁴

Philippines Commission Rules', *Climate Liability News*, 2 December 2019, <<https://www.climateabilitynews.org/2019/12/09/philippines-human-rights-climate-change-2/>>.

²⁰ One has been brought against Australia before the Human Rights Committee (see, e.g., Client Earth, 'Climate Threatened Torres Strait Islanders Bring Human Rights Claim against Australia', Client Earth, 12 May 2019, <<https://www.clientearth.org/press/climate-threatened-torres-strait-islanders-bring-human-rights-claim-against-australia/>>); the other has been brought before the Committee on the Rights of the Child against Argentina, Brazil, France, Germany, and Turkey (see, e.g., '16 Young People File UN Human Rights Complaint On Climate Change', Hausfeld, 23 September 2019, <https://www.hausfeld.com/news-press/16-young-people-file-un-human-rights-complaint-on-climate-change?lang_id=1>).

²¹ See e.g. the pending cases of Duarte Agostinho and others v. Portugal and others; Verein KlimaSeniorinnen Schweiz and Others v. Switzerland.

²² See 'Global Trends in Climate Litigation: 2018 Snapshot' (2018) Grantham Research Institute on Climate Change and the Environment, pp. 1, 7–8 ('Headline issues . . . More climate-related human rights cases are emerging').

²³ See 'Climate Change and Future Generations Lawsuit in Colombia: Key Excerpts from Supreme Court's Decision', *Dejusticia*, 13 April 2018, <<https://www.dejusticia.org/en/climate-change-and-future-generations-lawsuit-in-colombia-key-excerpts-from-the-supreme-courts-decision/>>.

²⁴ See, e.g., 'States' Human Rights Obligations in the Context of Climate Change' (2019) *GI-ESCR and CIEL*, <<https://www.gi-escr.org/publications/states-human-rights-obligations-in-the-context-of-climate-change-2019-update>>; see also *Environment and Human Rights (State Obligations in Relation to the Environment in the Context of the Protection and Guarantee of the Rights to Life and to Personal Integrity – Interpretation and Scope of Articles 4(1) and 5(1) in Relation to Articles 1(1) and 2 of the American Convention on Human Rights)*, Advisory Opinion no OC-23/18, Inter-Am. Ct. H. R. (ser. A) No. 23 (15 November 2017); see also Human Rights Council Res. 35/20, Human Rights and Climate Change, UN Doc. A/HRC/RES/35/20, 22 June 2017; see also Human Rights Council Resolution 26/27, Human Rights and Climate Change, UN Doc. A/HRC/RES/26/27 (15 July 2014); see also Human Rights Council Res. 18/22, Human Rights and Climate Change, UN Doc. A/HRC/RES/18/22 (17 October 2011); see also 'Open Letter from Special Procedures Mandate-holders of the Human Rights Council to the State Parties to the UN Framework Convention on Climate Change on the occasion of the meeting of the Ad Hoc Working Group on the Durban Platform for Enhanced Action in Bonn (20–25 October 2014)', OHCHR, 17 October 2014, <https://www.ohchr.org/Documents/HRBodies/SP/SP_To_UNFCCC.pdf>; see also 'Climate Change and Human Rights' (2015) United Nations Environment Programme, <<https://www.unenvironment.org/resources/report/climate-change-and-human-rights>>; see also See Hof Hague, 9 October 2018, HA ZA 13-1396, 2018 (Urgenda Foundation/Netherlands); see also *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016); see also *Leghari v. Pakistan*, above note 9.

In parallel, there has been a growing body of literature considering the prospects and lessons of climate litigation as a tool of governance, regulatory reform, and action.²⁵ However, despite the increasing attention paid to the strategic issues raised by the use of litigation in climate action and the expanding role of substantive human rights claims in climate cases,²⁶ drawing on the lessons of how human rights advocates have used strategic litigation is not yet mainstream practice. That is not to deny the long history of strategic litigation by the environmental movement,²⁷ whereby activists have turned to courts as part of multi-pronged campaigns and to democratize environmental policymaking and which has also been the subject of significant scholarly attention.²⁸ But the breadth of common ground shared by climate and human rights activists in challenging broad policy frameworks and corporate practices has not yet been explored.

²⁵ See, e.g., Setzer and Vanhala, 'Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance', above note 5; see also Jacqueline Peel and Hari Osofsky, 'Litigation as a Climate Regulatory Tool' in Christina Voigt (ed.), *International Judicial Practice on the Environment: Questions of Legitimacy* (Cambridge: Cambridge University Press, 2019), pp. 311–36; see also Ganguly et al., 'If at First You Don't Succeed: Suing Corporations for Climate Change,' above note 14; Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' (2019) 113 *American Journal of International Law* 679; see also Joana Setzer and Lisa Benjamin, 'Climate Litigation in the Global South: Constraints and Innovations' (2020) 9 *Transnational Environmental Law* 77; see also Sabrina McCormick et al., 'Strategies in and Outcomes of Climate Change Litigation in the United States' (2018) 8 *Nature Climate Change* 829; see also Bouwer, 'The Unsexy Future of Climate Change Litigation', 483–506; see also Joana Setzer and Rebecca Byrnes, 'Global Trends in Climate Change Litigation: 2019 Snapshot' (2019) Grantham Research Institute on Climate Change; see also 'The Status of Climate Change Litigation: A Global Review' (2017) UN Environment Programme.

²⁶ See, e.g., John Knox, 'Bringing Human Rights to Bear on Climate Change' (2019) 9 *Climate Law* 165; see also Stephen Humphreys (ed.) *Human Rights and Climate Change* (Cambridge: Cambridge University Press, 2010); see also Sumudu Atapattu, *Human Rights Approaches to Climate Change: Challenges and Opportunities* (Oxfordshire: Routledge, 2016); see also 'Climate Change and Human Rights' (2015) UN Environment Programme.

²⁷ In 1988, the executive director of the Sierra Club Legal Defense Fund said that 'litigation is the most important thing the environmental movement has done over the past fifteen years'. On the use of litigation by the environmental movement in the United Kingdom, see, e.g., Lisa Vanhala, 'Legal Opportunity Structures and the Paradox of Legal Mobilisation by the Environmental Movement in the UK' (2012) 46 *Law and Society Review* 523.

²⁸ See, e.g., Lisa Vanhala, 'Is Legal Mobilisation for the Birds? Legal Opportunity Structures and Environmental Nongovernmental Organisations in the United Kingdom, France, Finland, and Italy' (2018) 51 *Comparative Political Studies* 380; see also William Burns and Hari Osofsky (eds.), *Adjudicating Climate Change* (Cambridge: Cambridge University Press, 2009). Note that the Aarhus Convention has played an important role in institutionalizing access to justice on environmental grounds in Europe.

3.4 THE DEBATES OVER STRATEGIC LITIGATION OF HUMAN RIGHTS

3.4.1 *What Do We Mean by 'Strategic Litigation'?*

There is no single or broadly agreed definition of 'strategic litigation'.²⁹ Do we categorize a case as strategic based on its goals or the way in which it is litigated? Are the goals, motivations, or methods that matter those of the lawyer or client? Must a case be seen strategically from the outset or can strategic potential be identified and acted upon later?

This is not the place to engage, let alone resolve, all of these questions. For our purposes, a case has strategic ambition where it seeks to achieve broader change beyond the direct interests of the plaintiffs in the case or the remedies sought by them – typically changes to policy, social norms, or corporate behaviour. A case is litigated strategically when it is not seen in isolation (with the judgment as the solution or an end in itself) but rather as one step in a bigger effort to achieve the ultimate goal.³⁰ This contrasts with the perspective of many lawyers who see their case as the whole game. According to the latter view, a judgment in their favour is a win; game over.

There are plenty of cases that have strategic ambition but are not litigated strategically.³¹ A few may even have achieved strategic change. But cases that

²⁹ The disagreements over how to define its parameters gives a sense of the depth of the debates in the human rights community over its role. These debates extend to the terminology: how does 'strategic litigation' relate to other concepts such as 'impact litigation' or 'public interest litigation'? Is it an alternative label for the same thing? Is one a subset of the other? Or are they distinct concepts?

³⁰ This perspective aligns with definitions such as 'strategic litigation is a method that can bring about significant changes in the law, practice or public awareness via taking carefully-selected cases to court. The clients involved in strategic litigation have been victims of human rights abuses that are suffered by many other people. In this way, strategic litigation focuses on an individual case in order to bring about social change'. 'Strategic Litigation', Mental Disability Access Centre, <http://mdac.org/en/what-we-do/strategic_litigation>. See also 'Guide to Strategic Litigation', Public Law Project, ¶1, <https://publiclawproject.org.uk/wp-content/uploads/data/resources/153/40108-Guide-to-Strategic-Litigation-linked-final_1_8_2016.pdf>. 'Litigation that is "strategic" is rooted in a conscious process of working through advocacy objectives and the means to accomplish them, of which litigation is often but one. Ideally, such a process involves lawyers and many other actors, considers the political and social context within which litigation takes place, takes a long view, and deploys the full range of tools available.' 'Strategic Litigation Impacts: Insights from Global Experience' (2018) Open Society Justice Initiative, 8–9.

³¹ Conversely, the strategic approach to litigation can occasionally be used in cases that are tightly and deeply personal to one plaintiff in their focus. One example is Jared Genser, at Freedom Now and later Perseus Strategies, who uses a very strategic combination of political pressure,

have strategic ambition are more likely to achieve their goals if the cases are viewed and litigated strategically, and if this approach is taken from the earliest stages of planning the case.³²

3.4.2 History and Debates

Strategic litigation has a long history in the human and civil rights communities. Many date its contemporary use to the NAACP Legal Defense Fund's litigation of school segregation, including the 1954 *Brown v. Board of Education* ruling by the US Supreme Court.³³ But it has a longer history, arguably going back to anti-slavery litigation in the United Kingdom in the late 1700s.³⁴ And while it has long been prominent in the United States, recent decades have seen a much wider application. The European Court of Human Rights helped to generate a strong interest in strategic litigation in the European human rights community,³⁵ and the human rights courts and commissions established by the African Union and Organization of American States have spurred similar growth in those regions.³⁶ Strategic litigation has also become a prominent feature of human rights work in national jurisdictions with strong constitutional protections of human rights, in particular economic and social rights, in South Asia (especially India and

high-level advocacy, media, and litigation, in particular before the UN Working Group on Arbitrary Detention, to seek the release of individual detainees (often political prisoners).

³² 'It's also very important that the litigation be tied into a wider effort to press for reforms and social change. A case in and of itself that's not connected to a broader advocacy campaign is unlikely to succeed in a significant way.' Susan Hansen, *Atlantic Insights: Strategic Litigation* (New York: Atlantic Philanthropies: 2018), p. 12.

³³ See *Brown v. Board of Education of Topeka*, 347 U.S. 483 (1954).

³⁴ See 'Guide to Strategic Litigation,' Public Law Project, above note 28, ¶¶ 7–8.

³⁵ See, e.g., Michael Goldhaber, *A People's History of the European Court of Human Rights* (New Brunswick: Rutgers University Press, 2007). The existence of the ECtHR arguably encouraged US lawyers and civil society organizations to consciously transfer lessons from civil rights litigation to European jurisdictions. The landmark ECtHR case of *DH v. Czech Republic*, finding that streaming Roma children into 'special' schools for the mentally handicapped, was based on the principles established fifty years earlier in *Brown*. The scope for strategic rights litigation in Europe was further expanded when the Court of Justice of the European Union was granted jurisdiction to assess compatibility of EU acts with the Charter of Fundamental Rights.

³⁶ In Africa, this was also the case in the sub-regional courts, especially the ECOWAS Community Court of Justice, which has seen leading anti-slavery cases of the modern era, like *Mani v. Niger*. See Helen Duffy, *Strategic Human Rights Litigation: Understanding and Maximising Impact* (New York: Bloomsbury, 2018), ch. 5.

Pakistan), sub-Saharan Africa (e.g., South Africa and Kenya), and Latin America.³⁷

That said, law is not the only means of achieving social change, and litigation is not the only way to use law.³⁸ The role of litigation in achieving social change has been contested for decades, with some dismissing courts as a ‘hollow hope’ for rights advocates as early as 1991.³⁹ Sometimes these critiques characterized the role of courts and litigation in realizing rights or achieving change as ‘anti-democratic, wresting powers from elected representatives and their procedures’, or ‘elitist’, as it disempowers local communities by placing control in the hands of ‘the lawyers’ and diverts scarce resources and attention from more authentic initiatives and solutions.⁴⁰ Others criticize litigation as ineffective, pointing to the poor record of implementation and the list of ‘landmark’ cases that made little change on the ground and arguing that the narrow and formalistic frame of litigation and judicial orders is inadequate to address deeply complex problems.

Fortunately, in recent decades, human rights lawyers have taken the critiques of strategic litigation as a tool for social change seriously. The resulting debates have generated a substantial and nuanced body of literature that recognizes the challenges and limitations, as well as the potential, of this tool; identifies issues that those engaged in strategic litigation should be aware of; and draws out a number of principles that are likely to enhance the effectiveness of strategic litigation (or minimize its risks).

This chapter does not pretend to distil everything the human rights community has learned about strategic litigation. Entire books⁴¹ and multivolume report series⁴² have been written on that topic, and the conclusions are still

³⁷ See, e.g., the discussions in Helen Duffy, above note 34.

³⁸ See, e.g., ‘Many Roads to Justice’ (2000) Ford Foundation, <<https://www.fordfoundation.org/work/learning/research-reports/many-roads-to-justice/>>.

³⁹ See Gerald Rosenberg, *The Hollow Hope: Can Courts Bring about Social Change?*, 2nd ed. (Chicago: University of Chicago Press, 2008).

⁴⁰ Duffy, *Strategic Human Rights Litigation*, above note 34, p. 4.

⁴¹ Most recently, *ibid.* See also Aryeh Neier, *Only Judgment: The Limits of Strategic Litigation in Social Change* (Baltimore: International Debate Education Association, 1982); see also Charles R. Epp, *The Rights Revolution* (Chicago: University of Chicago Press, 1998); see also Charles Epp, *Making Rights Real* (Chicago: University of Chicago, 2010); see also Stuart Scheingold, *The Politics of Rights: Lawyers, Public Policy, and Political Change*, 2nd ed. (Ann Arbor: University of Michigan, 2004); see also Austin Sarat and Stuart Scheingold (eds.), *Cause Lawyers and Social Movements* (Stanford: Stanford University Press, 2006). See further resources listed in ‘Strategic Litigation Impacts: Insights from Global Experience,’ above note 28, Appendix C.

⁴² See, e.g., the series of reports on ‘Strategic Litigation Impacts’ by the Open Society Justice Initiative (‘Roma School Desegregation’ [March 2016]; ‘Equal Access to Quality Education’

being debated. Rather, it outlines a handful of examples to illustrate the relevance of the discussion taking place in the human rights community to the next generation of climate litigation.

3.5 APPLYING LESSONS LEARNED TO CLIMATE LITIGATION

Many of the principles drawn from strategic human rights litigation can inform the way that climate litigators and other advocates approach the ‘next generation’ of climate cases. Both kinds of litigation tackle complex social, economic, and political problems. Both look to courts as a venue to equalize power imbalances and assert the interests of individuals, communities, or the broader public against powerful entrenched corporate and political forces. And both can seek to reframe our understanding of a problem, highlighting the costs inflicted by a status quo and the importance of building solidarity and a shared sense of responsibility for creating change.

However, these principles do not amount to a ‘one size fits all’ approach to using litigation to achieve social change or to maximizing its impact. Highly prescriptive approaches to litigation are of limited value: the optimal approach will vary depending on the social, political, and legal context and on the nature of the issue to be addressed; and may need to adapt as the context and the campaign evolves. But a number of key lessons or principles emerge from the debates, which may inform the use of litigation for strategic objectives.

Context Matters

One early lesson of strategic human rights litigation is that the context in which one is litigating – social, political, and legal – has an enormous impact on the role that litigation can and should play in a strategy for change, and on what type of litigation has the greatest potential.

[March 2017]; ‘Indigenous Peoples’ Land Rights’ [April 2017]; ‘Torture in Custody’ [November 2017]; ‘Insights from Global Experience’ [October 2018]) and the multiple reflection reports from Atlantic Philanthropies (see, e.g., Brian Kearney-Grieve, ‘Public Interest Litigation: Summary of a Meeting of Organisations from Northern Ireland, the Republic of Ireland, South Africa and the United States’ [2011] Atlantic Philanthropies; see also Steven Budlender et al., ‘Public interest litigation and social change in South Africa: Strategies, tactics and lessons’ [2014] Atlantic Philanthropies; see also Ursula Kilkelly et al., ‘Using the Law to Secure Social Change on the Island of Ireland’ [2015] Atlantic Philanthropies; see also Susan Hansen, *Atlantic Insights: Strategic Litigation* [Atlantic Philanthropies, 2018]).

The *social context* can include whether the litigator is addressing a problem that the public is already aware of, or whether the litigator is trying to draw public attention to a new issue. Is the society fragmented or unified? Is this an issue where the bulk of the population is suffering at the hands of an elite, or where the litigator is trying to secure the right of a minority? And what previous attempts have been made to address this issue?

The *political context* can include the nature of the government, whether there is any effective opposition (whether political or social), how important this issue is to the government. But it also includes whether the courts are independent of the government, and see themselves as a protector of the population, or whether they see themselves as protecting the government or elite interests. This may differ depending on the level of the court: in some systems, the most senior courts can be the most independent; in others, the local-level courts have the greatest independence because their decisions attract less attention.

The *legal context* includes the substantive laws that exist within the given jurisdiction and that the litigator might be able to use (including what treaties a country has ratified and what status they have domestically). But it also includes the legal culture of the system in which the litigator is operating. Are the courts typically creative and activist, or are they conservative in their decisions? Do the courts pay attention to international or comparative law sources, or are they parochial? If the issue that the litigator is litigating raises technical or scientific issues (as climate litigation often does), are the judges comfortable with such evidence? Does the litigator need to educate or socialize the judges on the issues and the types of evidence, and how open are the judges to this? How do the judges view public campaigning around a case: is it more likely to be viewed as a positive demonstration of what decision may be acceptable to the population, or a negative attempt to improperly influence the judicial process?

3.5.1 *Identifying the Role of the Case in a Bigger Plan for Change*

Many of these principles flow from the basic recognition that problems with deep structural roots – like climate change – cannot simply be litigated away.⁴³

⁴³ Indeed, the unrealistic belief that courts will provide a neat ‘solution’ is the real target of some critiques of litigation – attacking not true strategic litigation but those lawyers for whom ‘the courts can be regarded with almost religious reverence: solutions are sought, as if from on high, before the ultimate arbiters of truth and right, whose job it is to apply the law without fear or

Strategic litigation is therefore about much more than obtaining a judgment in a case. Despite what lawyers often assume, a case alone is not the solution, and the judgment is not the end. Fundamentally, strategic litigation is a larger process in which any given case is one tool to be used towards the ultimate objective of securing lasting change.

This ‘larger process for change’ is what some organizations would call their ‘theory of change’. Strategic litigation recognizes that litigation is neither a substitute for a theory of change, nor is litigation in itself a theory of change. Instead, litigation must be developed and conducted as one part of a broader plan for how advocates will achieve the desired change. That theory of change (and the role that litigation will contribute to it) requires just as much attention and rigour from strategic litigators as the strength of their legal arguments and the merits of their case.

At one level, this requires additional work by those considering bringing a strategic climate case. Recognizing that a case is one part of a broader process of change requires a rigorous assessment of each case that goes beyond the chances of winning the case on its own terms. It requires litigators to articulate what they seek to achieve by litigating this case: their ultimate goal and the contribution this case will make to that goal, particularly in the context of other efforts to create change. Clarity at the outset regarding the impacts one is aiming for, how the case will generate those, and how they will be used towards broader change is crucial for both maximizing impact and for testing assumptions about the value (and risks) of a case.⁴⁴

Recognizing that a case is one part of a broader effort for change can also bring real benefits. Assessing the role that each case will play can open up creative possibilities; it frees advocates to use a case to achieve a wide variety of impacts in support of their strategy for change, rather than trying to make every case a ‘solution’ to the problem. The most important contribution of a case might not be a win in the courtroom – it might be obtaining information through the discovery process, forcing the defendants to take a formal position on public record, or getting specific factual or legal findings from the court even if the plaintiffs do not ultimately ‘win’ the case. Strategic litigation recognizes that different stages of litigating a case each have the potential to contribute to change – developing the case, the initial moment of filing, the

favor and to “resolve” the problem’. Duffy, *Strategic Human Rights Litigation*, above note 34, p. 4.

⁴⁴ Assessing impacts raises its own challenges. See, e.g., Setzer and Vanhala, ‘Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance’, above note 5, p. 12; see also Duffy, *Strategic Human Rights Litigation*, above note 34, pp. 37–48.

conduct of the trial, the delivery of the judgment, and the implementation of any remedies ordered. But it takes planning on how to use each of these moments.

Seeing the case as part of a broader campaign is also not a one-way relationship. Yes, strategic litigation requires thinking rigorously about how any given case can advance a broader campaign for change. But it also recognizes that the broader campaign for change can benefit the case. Conducting a case alongside other advocacy and activism may mean using litigation to reinforce or empower other legal and campaign initiatives – alliances between cases with young plaintiffs and the global youth movement for climate action are an obvious example.

But just as often, the litigation may rely on other advocacy. It can create the social or political conditions for a favourable decision. For example, public debates can socialize judges on an issue, and media coverage and campaigning can provide political cover for judges to make creative or courageous decisions. And planning a campaign that extends after the judgment can maintain the pressure for implementation of a favourable decision or for reforms following a loss. The principle that litigation should not displace other efforts often works to the advantage of the litigator, as well as the broader goals.

In some respects, climate litigators are advanced in this aspect of strategic litigation. Supporters of the ‘next generation’ of climate cases have identified a range of benefits – aside from any legal order sought – including: public affirmation of the scientific consensus regarding various aspects of climate change, rebuttal of misinformation, effective communication of otherwise remote-seeming harms of climate change via stories of claimants, the creation of new narratives of government and corporate responsibility for climate change, and the mobilization of the broader climate movement.⁴⁵ Supporters also claim that such cases can have broader political and economic ripple effects, like encouraging actors not directly involved in the litigation to change their behaviour. For example, such cases may prompt government policymakers or negotiators to support more ambitious targets, or prompt corporations to pledge to reduce emissions or support a carbon price.

But given the broad range of public activism and political advocacy to address climate change, it remains critical to examine rigorously how a given

⁴⁵ See, e.g., Setzer and Vanhala, ‘Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance’, above note 5; see also Grace Nosek, ‘Climate Change Litigation and Narrative: How to Use Litigation to Tell Compelling Climate Stories’ LLM Thesis, University of British Columbia (2017).

case will support this. Some cases appear to seek an iconic legal victory without any real plan for how such a victory is integrated into a broader theory of change. As climate litigation efforts proliferate, with more cases taken by lawyers and claimants who may not have established ties to the wider climate movement, these risks grow. And even where supporters of ambitious climate litigation do identify a range of ways that their case may contribute to the broader climate movement, there may be room in some cases for additional examination of how the case will achieve this impact and whether a case is the best way to do that. For example:

- If the goal is to publicly affirm the scientific consensus, is that scientific consensus in serious dispute in the given country?
- If the goal is the communication of otherwise remote-sounding harms, that will influence the choice of plaintiff and the framing of the claims. But have the litigators developed the communications and media strategy that will be required to accompany the case, or have formed partnerships with other groups that can do this?
- If the goal is mobilization of a new constituency to support climate action, who are the litigators aiming to mobilize? What has been tried to mobilize this constituency in the past, and why did that not work? What is their view of and relationship with this case, how will the litigators use this case to mobilize them, and why is a court case the most effective way to do so?
- If court cases are being used to push an actor to move, are the litigators (or their allies) also opening the door for them to walk through?
- Will litigation produce the results that the litigators want within the needed timeframe? Some activists turn to litigation because of the urgency of the crisis and out of frustration from delays in political action. But while litigators can control when a case is filed, if they are relying on the judgment then litigation can be a long process, especially if there are appeals.

3.5.2 Challenges of Implementation

To some extent, the question of implementation is just one example of how the case is intended to contribute to lasting change. Not every strategic case defines 'success' in terms of the judgment itself. But the judgment is often an important part of the impact sought from a case. If so, it is necessary to plan for *how to implement the decision* (what is required in the days, months, and years after the judgment) if a legal victory is not to be a hollow one.

Strategic human rights litigation is full of cautionary tales of judgments that were won on paper but that failed to change the situation on the ground. *Brown v. Board of Education* was a huge victory, and it established a vital legal precedent. But after initially decreasing de facto segregation in schools, unequal education has increased in recent decades.⁴⁶ Landmark South African cases such as *Grootboom* and the *Mud Schools* case⁴⁷ likewise produced impressive judgments establishing important principles, but they did not solve the problems associated with housing and education in impoverished communities.

This planning starts with the remedies requested. Lawyers always have to think about what a court has the formal power to order (and what it is likely to order based on its past practice). But strategic litigators need to give additional thought to exactly what they need to get from the judgment:

- *The substance matters*: will the remedies being requested from the court actually address the underlying problem and its causes if implemented? In the human rights context, years of cases challenging ethnic profiling by police requested diversity training as a remedy. But later studies showed that isolated diversity training sessions had no impact on police behaviour.
- *The formal details matter too*: often the chances of a judgment being implemented can be improved by the way that the remedies are defined. Care must be taken to craft remedies so that responsibility for implementation is clear and the extent of implementation can be monitored. For example, if the case is against the government, which department will be responsible for implementing the judgment?

But no matter how carefully the remedies are crafted, there will frequently be resistance to implementing them. This is especially the case when those remedies require major changes in corporate or governmental policy and behaviour (as opposed to ceasing a specific action). Studies of the implementation of human rights judgments show that while defendants will usually pay compensation when ordered by a court, this does not necessarily lead to a change in policy or practice. And judgments that order significant changes in policy or practice directly, or accountability for past violations, are far more

⁴⁶ See Gary Orfield and Erica Frankenberg, 'Brown at 60: Great Progress, a Long Retreat and an Uncertain Future', UCLA Civil Rights Project, 15 May 2014; see also Alvin Chang, 'The Data Proves That School Segregation Is Getting Worse', *Vox*, 5 March 2018.

⁴⁷ See *Republic of South Africa v. Grootboom* 2001 (1) SA 46 (CC); see also *Centre for Child Law v. Eastern Cape Province* 2010 (ECB) case no 504/10.

challenging to implement.⁴⁸ So if litigators are asking for damages but are really aiming to change behaviour or policy moving forward, they need to closely consider and articulate how one will lead to the other.

Such challenges of implementation, political will, and resource allocation will be common in strategic climate litigation. If litigators see the judgment as the end of their case, there is a risk that they will overlook this. And though climate litigators have developed a wide portfolio of strategic cases in a short period of time, they have yet to achieve more than a limited number of favourable judgments to date. As a result, many climate litigators have not yet been confronted with the challenges of implementing strategic judgments. For example, if a case aims to increase the ambition of government mitigation policy, it is worth considering how to create a broad base of support that will give the government the additional cover or pressure it needs to undertake ambitious reform. And it is also worth considering strategies for countering the probable backlash or resistance to implementation from various interests or constituencies.⁴⁹

While the challenges of implementation may be new to the climate litigation movement at this point, there are examples that suggest some climate litigators are already ahead of their human rights counterparts. Urgenda's strategy for implementation following its successful case against the Dutch government is one such example. Building on the broad public support that Urgenda developed for the case, it worked with 750 organizations and businesses to develop and publish fifty measures, known as the '50-point plan', that the government could feasibly implement to meet the terms of the court's emissions reduction order. The Dutch parliament subsequently adopted several motions demanding greater transparency from the government regarding its plans to meet the court's order. The case, and the court judgment, pushed the government to move, and the broader advocacy showed them a pathway forward.

3.5.3 *Evaluating Risks*

While strategic litigation can be a powerful tool, the experience of human rights advocates shows that it carries risks. There will often be risks in

⁴⁸ See, e.g., 'From Judgment to Justice: Implementing International and Regional Human Rights Decisions' (2010) Open Society Justice Initiative, 15–16, <<https://www.justiceinitiative.org/publications/judgment-justice-implementing-international-and-regional-human-rights-decisions>>.

⁴⁹ Consider, e.g., the political and social fallout of the Inter-American Court of Human Rights' advisory opinion on gender equality and same-sex marriage that was requested by the government of Costa Rica.

challenging powerful state or corporate interests, and litigation is not alone in posing risks of retribution to individuals or communities. But strategic litigation carries additional risks. Some – such as the risk that litigation will backfire or entrench bad law – can be managed by carefully considering the likely response of opponents and the courts. But excessive focus on litigation also can disempower or limit other initiatives, and it can prioritize those parts of the problem that can be brought before a court over the real underlying causes.

Litigating the wrong case, at the wrong time, before the wrong forum, or making overly ambitious claims, can lead to real setbacks. Losing a case can entrench the problem that the litigation was trying to solve: it can establish bad legal precedent or legally validate the very activities being challenged; it can place other efforts to litigate in more cautious or incremental ways at risk; it can undermine the credibility of evidence or allies; and it could create a narrative that the defendants were right, even if the case was only lost on a technical or procedural point. Any of these may inhibit efforts to achieve change, whether by future litigation or by other strategies.

For example, the loss before the European Court of Human Rights in *SAS v. France* provided judicial endorsement of the French ban on public face veils (the niqab),⁵⁰ which undermined the impact of a challenge before the UN Human Rights Committee (a more favourable venue that ultimately gave a positive decision)⁵¹ and imposed additional barriers to any domestic challenges to the ban. An attempt to prosecute Aung San Suu Kyi in Australia, despite her immunity as sitting Minister for Foreign Affairs, led the Australian High Court to prohibit private prosecutions for war crimes, crimes against humanity, and genocide⁵² before any cases against lower-profile defendants could establish a practice of such prosecutions and show how they could work and why they were important. And while many see *Brown v. Board of Education* as a victory, it was the result of decades of work to undo the damage caused by an earlier failed case that enshrined ‘separate but equal’ into law for over fifty years.⁵³

To mitigate these risks, it is always important to carefully and critically consider the likely responses of both the opponent and the courts. It is

⁵⁰ *SAS v. France*, ECHR, Application no. 43835/11, Grand Chamber Judgment of 1 July 2014.

⁵¹ The UN Human Rights Committee ultimately did rule that bans on the niqab violated the right to manifest religious belief. See *Hebbadj v. France*, UNHRC, Views of 17 October 2018, CCPR/C/123/D/2807/2016; see also *Yaker v. France*, UNHRC, Views of 7 December 2018, CCPR/C/123/D/2747/2016.

⁵² See Arraf, ‘High Court of Australia Closes Door on Private Prosecutions in *Taylor v. Attorney-General*,’ *Opinio Juris*, 14 February 2020, <<https://opiniojuris.org/2020/02/14/high-court-of-australia-closes-door-on-private-prosecutions-in-taylor-v-attorney-general/>>.

⁵³ See *Plessy v. Ferguson*, 163 U.S. 537 (1896).

important to consider how other parties will view and respond to the arguments. Are the opponents likely to fight in court, try to stop the case from reaching the courts, or try to undermine the plaintiffs' credibility in public debate? And it is important to be realistic about how judges will receive the arguments; rights-oriented lawyers may take for granted views on why international law matters that are not shared by domestic judges.

Risks are not limited to cases that lose. In recent years, human rights advocates have lost public support in some states where they have been portrayed as representing the interests only of minorities while ignoring the concerns of majority populations (for example, those posed by austerity and social and economic inequality). The reality is that climate change will affect everyone. But climate litigators might want to consider whether the ways in which they select, develop, and frame cases could leave them open to similar attacks. And the mere fact of choosing litigation has costs: litigation to set the parameters of the debate, or mobilize behind a common set of asks, can lock allies into a fixed position and may reduce room for negotiation or other action. Even cases that result in successful judgments can produce adverse consequences – a judgment that steps too far outside the political or social mainstream may undermine judicial authority. There have even been instances where this has led to a court being stripped of its jurisdiction, as happened with the Southern African Development Community Tribunal.⁵⁴

These risks do not mean one should never litigate; but that those risks should be critically and rigorously assessed and weighed against the projected value of a case. There sometimes are good reasons for lawyers to take ambitious cases to pursue strategic change, even when the prospects of success are somewhat uncertain (the authors have well over a decade of experience in strategic human rights and climate litigation, with both wins and losses to our names). But it is important to take such cases on a systematic and considered basis, conscious of the risks, limits, and potential of litigation, and to identify, develop, and pursue cases in a way that maximizes the chances of true (rather than superficial) success.

3.6 CONCLUSION

The number and range of climate cases, in particular those with strategic ambitions, are increasing. And they are likely to continue to do so in the coming years as the effects of climate change are felt more directly by more

⁵⁴ See Laurie Nathan, 'The Disbanding of the SADC Tribunal: A Cautionary Tale' (2013) 35 *Human Rights Quarterly* 870.

people, and as more cases gain the attention of the public, lawyers, and civil society, we can expect more cases to be brought by a growing number of litigants. This should be welcomed, and it can be constructive. But it makes the lessons from the strategic human rights litigation community particularly valuable in this moment. Some of the examples outlined above – the importance of embedding a case in a broader theory of change or the risk of a premature or flawed case undermining other cases or strategies for change – will become increasingly relevant with the likely growth, diversification, and fragmentation of the climate litigation community. And new cases will bring new challenges, some of which may be familiar to strategic human rights litigation (for example, the ethical issues that can arise when litigating for broad strategic aims but in the name of vulnerable communities or individuals whose interests may not be perfectly aligned with those of the strategic litigators).

There is an undeniable urgency to climate action. Climate litigators feel this urgency and sometimes emphasize that there is no time to waste. But this call to prompt action also means that there is no time to repeat the mistakes of the past or to miss an opportunity to maximize the impact of successes. The experience and debates of human rights activists on how and when to use litigation strategically and how to maximize the chances of leveraging a case for systemic change are a rich source for climate litigators to draw upon.

The Quest for Butterfly Climate Adjudication

CATALINA VALLEJO PIEDRAHÍTA AND SIRI GLOPPEN

4.1 INTRODUCTION

This chapter argues that low-profile climate litigation, such as routine administrative law cases, have significant transformative potential and should receive more attention. High-profile climate litigation, such as structural constitutional claims, tort-based cases against the fossil fuel industry, and public international law cases, raise awareness and are highly relevant to advancing legal climate protection. However, around the world, routine climate-relevant claims have had unexpected positive impacts, and we argue that advancing such cases in a coordinated manner could create a “butterfly effect.” In most cases, courts do not hand down spectacular, precedent-breaking decisions or treat climate change like an exceptional legal problem. Instead, they adapt existing legal frameworks to make them workable for climate-related issues. We argue that this normalization or routinization of climate adjudication broadens its reach and impact and is less prone to backlash and vulnerabilities than more spectacular cases, and, as a result, their potential should be further studied and tested.

4.2 CLIMATE LITIGATION: A TYPOLOGY

According to the chaos theory metaphor, the minuscule motion of a butterfly’s wings can trigger a tornado half a world away. The term “butterfly effect” stems from Edward Lorenz’s meteorological studies in the 1960s, which found that the details of a tornado, such as its exact time of formation and trajectory, was influenced by minor changes in the climate system several weeks earlier. Lorenz saw the effect when observing runs of his weather model, noticing that a small change in the initial weather conditions created a significantly

different outcome.¹ Analogously, Catharine MacKinnon, in her book *Butterfly Politics*, argues that seemingly insignificant actions, through collective recursion, can intervene in unstable systems to produce systemic change and that the right, seemingly minor interventions in the legal realm can have a butterfly effect that generates major social and cultural transformations.²

In a similar way, we argue that the bottom-up climate change regime created by the Paris Agreement³ has a potential to generate “butterfly climate adjudication” by injecting climate relevant reasoning into courts’ routine decisions. Simple adaptations of domestic legal frameworks and cross-application of precedents within and across countries could affect the global atmosphere, one legal case at a time, by triggering aggregate effects.

The growing body of literature analyzing climate change litigation and its effects on climate governance provides insights into its potentials, problems, and limitations, including how interest groups use climate litigation strategically and its effects on regulatory responses and individual and corporate behavior.⁴ But few studies have concentrated on assessing developments in

¹ See Edward N. Lorenz, “Deterministic Nonperiodic Flow” (1963) 20 *Journal of the Atmospheric Sciences* 130; see also Edward N. Lorenz, “The Predictability of Hydrodynamic Flow” (1963) 25 *Transactions of the New York Academy of Sciences* 409.

² See Catherine A. MacKinnon, *Butterfly Politics* (Cambridge, MA: Harvard University Press, 2017).

³ See Paris Agreement to the United Nations Framework Convention on Climate Change, Paris, December 12, 2015, TIAS No. 16-1104.

⁴ See, e.g., Jacqueline Peel, “Issues in Climate Change Litigation” (2011) 5 *Carbon & Climate Law Review* 15; see also Hari M. Osofsky, “The Geography of Climate Change Litigation: Implications for Transnational Regulatory Governance” (2005) 83 *Washington University Law Quarterly* 1789; see also Hari M. Osofsky, “Local Approaches to Transnational Corporate Responsibility: Mapping the Role of Subnational Climate Change Litigation” (2007) 20 *Global Business & Development Law Journal* 143; see also Hari M. Osofsky, “Is Climate Change ‘International’? Litigation’s Diagonal Regulatory Role” (2009) 49 *Virginia Journal of International Law* 2008; see also Hari M. Osofsky, “The Continuing Importance of Climate Change Litigation” (2010) 1 *Climate Law* 3; see also Hari M. Osofsky, “The Geography of Solving Global Environmental Problems: Reflections on Polycentric Efforts to Address Climate Change” (2013) 58 *New York Law School Law Review* 777; see also Jacqueline Peel and Hari M. Osofsky, “Litigation’s Regulatory Pathways and the Administrative State: Lessons from U.S. and Australian Climate Change Governance” (2013) 25 *Georgetown International Environmental Law Review* 207; see also Jacqueline Peel and Hari M. Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge: Cambridge University Press, 2015); see also Brian J. Preston, “The Role of Courts in Relation to Adaptation to Climate Change” in Tim Bonyhady et al. (eds.), *Adaptation to Climate Change: Law and Policy* (Alexandria: The Federation Press, 2010); see also Brian Preston, “Climate Change Litigation (Part 1)” (2011) 5 *Carbon & Climate Law Review* 3; see also Brian Preston, “Climate Change Litigation (Part 2)” (2011) 5 *Carbon & Climate Law Review* 244; see also Brian Preston, “The Contribution of the Courts in Tackling Climate Change” (2016) 28 *Journal of Environmental Law* 11; see also David Markell and J. B. Ruhl, “An Empirical Assessment of

the case law itself, which is explored in this chapter, with a focus on low-profile climate litigation against governments before domestic courts.

Climate cases are diverse. They differ with regard to actors, interests, claims, bodies of law used to support the claims, and the types of court involved. We distinguish five main types: (i) civil law (tort) cases, seeking compensation from fossil-fuel corporations for climate-related damages; (ii) criminal law cases against companies; (iii) administrative law cases, seeking regulation and accountability for climate change mitigation or adaptation; (iv) constitutional law claims brought before domestic courts, and (v) public international law cases, typically demanding protection for communities most vulnerable to climate-related harms.⁵

In civil law cases, plaintiffs use nuisance or negligence doctrines to claim that emitters of greenhouse gases are required to repair harms caused by their emissions. Petitioners direct these claims mainly toward fossil fuel corporations. Petitions include requests for compensation for harms to the environment and court orders for corporations to reduce emissions. Paradigmatic cases include *Kivalina v. Exxon et al.*,⁶ which focused on the climate-related

Climate Change in the Courts: A New Jurisprudence Or Business As Usual? (2012) 64 *Florida Law Review* 15; see also Roger Cox, *Revolution Justified* (Mastricht: Planet Prosperity Foundation, 2012); see also Roger Cox, "The Liability of European States for Climate Change" (2014) 9 *Journal of Planning and Environment Law* 961; see also Roger Cox, "A Climate Change Litigation Precedent: *Urgenda Foundation v the State of the Netherlands*" (2015) *Center for International Governance Innovation* no. 79, <https://www.cigionline.org/sites/default/files/cigi_paper_79.pdf>; see also Meredith Wilensky, "Climate Change in the Courts: An Assessment of Non-U.S. Climate Litigation" (2015) 26 *Duke Environmental Law & Policy Forum* 131; see also Jolene Lin, "Climate Change and the Courts" (2012) 32 *Legal Studies* 35; see also Joana Setzer and Lisa Benjamin, "Climate Litigation in the Global South: Constraints and Innovations" (2019) 9 *Transnational Environmental Law* 77; see also Jacqueline Peel and Jolene Lin, "Transnational Climate Litigation: The Contribution of the Global South" (2019) 113 *American Journal of International Law* 679; see also César Rodríguez-Garavito, "Human Rights: The Global South's Route to Climate Litigation" (2020) 114 *AJIL Unbound* 40; see also Nicole Rogers, "Climate Change Litigation and the Awfulness of Lawfulness" (2013) 38 *Alternative Law Journal* 20; see also Kim Bouwer, "The Unsexy Future of Climate Change Litigation" (2018) 30 *Journal of Environmental Law* 483. <<https://doi.org/10.1093/jel/eqy017>>; see also David Estrin, "Limiting Dangerous Climate Change: The Critical Role of Citizen Suits and Domestic Courts Despite the Paris Agreement" (2016) *Center for International Governance Innovation*, no. 101, <https://www.cigionline.org/sites/default/files/paper_no.101.pdf>.

⁵ This expands on the typology developed in Vallejo and Gløppen. See Catalina Vallejo and Siri Gløppen, "Red-Green Lawfare? Climate Change Narratives in Courtrooms," in Jackie Dugard et al. (eds.), *Climate Talk: Tights, Poverty and Justice* (Capetown: Juta Law, 2013). For other typologies, see Navraj Singh Ghaleigh, "'Six Honest Serving-Men': Climate Change Litigation as Legal Mobilization and the Utility of Typologies" (2010) 1 *Climate Law* 31; and Markell and Ruhl, "An Empirical Assessment of Climate Change in the Courts", above note 4.

⁶ See 663 F. Supp. 2d 863 (N.D. Cal. 2008).

displacement of the Alaska Native village of Kivalina, and *Comer v. Murphy Oil*,⁷ brought by landowners in the United States (Mississippi) claiming that oil and coal companies' emissions contributed to climate change, which in turn caused the sea-level rise that added to the intensity of Hurricane Katrina. Tort cases have been dismissed for posing non-judiciable, political questions and for difficulties linking alleged harms to particular corporations' emissions. New data tracking methods for the anthropogenic emissions of specific producers could yield different results.⁸ For more on these emission attribution methods, see Richard Heede's chapter in this volume (Chapter 12). For more on climate litigation against major fossil fuel corporations, see Joana Setzer's chapter in this volume (Chapter 10).

In criminal and corporate liability law cases, American citizens and state attorneys have filed claims of fraud and conspiracy against fossil fuel companies for creating a false scientific debate about climate change to mislead public opinion and investors.⁹ Just as tobacco companies were accused of hiding documents proving that tobacco is harmful, fossil fuel and energy companies are being accused of conspiring to deny climate change despite having evidence to the contrary.¹⁰ Charges of securities fraud are used to pressure companies to disclose to investors the risks they face as governments try to limit greenhouse gas emissions. Climate protection through criminal law potentially includes utilizing existing domestic law crimes against the environment; domestic crimes that could be created to protect elements of the climate system; and international criminal law, such as the possible penalization of "ecocide" as suggested by Polly Higgins et al.¹¹ or "postericide" as suggested by Catriona McKinnon.¹²

In administrative law cases, plaintiffs claim that governments are obliged to take – or not take – actions to mitigate or adapt to climate change according to domestic and/or international commitments. In Section 4.3, we zoom in on these cases, based on our previous study¹³ and expand it to include

⁷ See 585 F.3d 855 (5th Cir. 2009).

⁸ See Justin Gundlach, "Can Fossil Fuel Companies Be Held Liable for Climate Change?," Climate Law Blog: Sabin Center for Climate Change Law October 25, 2017.

⁹ See Nicholas Kusnetz, "Exxon's Climate Fraud Trial Opens to a Packed New York Courtroom," Inside Climate News, October 23, 2019.

¹⁰ See Richard Frank, "Kivalina and the Courts: Justice for America's First Climate Refugees?," UCLA Law-Legal Planet, November 28, 2011.

¹¹ See Polly Higgins et al., "Protecting the Planet: A Proposal for a Law of Ecocide" (2013) 59 *Crime, Law and Social Change* 251.

¹² See Catriona McKinnon, "Endangering Humanity: An International Crime?" (2017) 47 *Canadian Journal of Philosophy* 395.

¹³ See Vallejo and Gloppen, "Red-Green Lawfare?," above note 5.

constitutional law claims being brought in various countries, where citizens seek to hold their governments accountable for constitutional rights violations stemming from inadequate climate regulations in areas such as forest conservation and the licensing of carbon-intensive projects.¹⁴

The last category is public international law cases. Petitions are filed before international courts and treaty bodies regarding the adverse effects of climate change on, for example, Indigenous peoples; communities with limited adaptation capacity, like the inhabitants of small island states or those who are especially vulnerable to the effects of climate change due to poverty or geographical location; and sites considered part of the world's heritage. The dominant argument is that governments and corporations most responsible for global emissions have an obligation to shift to more sustainable practices and to assist communities in other countries suffering climate-related harms of no fault of their own, particularly those lacking the means to adapt. So far, no international court or treaty body has ruled in favor of communities claiming special vulnerability to climate change.

Climate litigation thus incorporates diverse and innovative ways of building legal arguments to protect the global climate system. "Bold" climate change decisions, creating extraordinary new precedent and establishing groundbreaking statutory or constitutional case law, are of great importance but often are difficult and risky for individual judges to make and for tribunals to agree upon – and are more likely to be overturned by higher courts.¹⁵ The more novel the judicial interpretation or case law, the greater the risk of legislative backlash. Implementation of rulings is also more difficult when the gap

¹⁴ Examples of high-profile constitutional cases include *Future Generations v. Ministry of the Environment and Others*, where youth plaintiffs in Colombia sued several national and local government bodies and corporations to enforce their rights to a healthy environment, life, health, food, and water. The case was decided in favor of the plaintiffs. See "Future Generations v. Ministry of the Environment and Others," Sabin Center for Climate Change Law. In Norway, Greenpeace Nordic and Nature and Youth Norway sued the Norwegian Ministry of Petroleum and Energy in 2016 for violating the Norwegian constitution by issuing a block of oil and gas licenses for deep-sea extraction in the arctic Barents Sea. The plaintiffs claimed that the licenses were inconsistent with the prevention of a global temperature rise of less than two degrees Celsius. The petition sought a declaration of the state's violation of the right to a healthy environment (including a stable climate) for present and future generations enshrined in the Norwegian Constitution Article 112. The case was decided in favor of the defendants in the first and second instance and by the Norwegian Supreme Court. See "Greenpeace Nordic Ass'n v. Ministry of Petroleum and Energy," Sabin Center for Climate Change Law.

¹⁵ See Peel and Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy*, above note 4.

between the decision and the status quo is large.¹⁶ These risks are particularly high when dealing with complex and politicized climate policy issues and are a reason why climate litigation should not only aim for exceptional rulings. Notwithstanding the importance of climate cases based in private law, criminal law, constitutional law, and international law, we nonetheless zoom in on administrative law claims as a strategy to build legal capacity to protect the climate system. These discrete and rather unspectacular cases get less media and scholarly attention but have achieved more favorable rulings. In Section 4.3, we explore the potential of existing case law to trigger a “butterfly effect” in climate adjudication. Section 4.4 discusses possible ways of unfolding that potential, as well as some vulnerabilities.

4.3 ADMINISTRATIVE LITIGATION IN SEARCH OF A BUTTERFLY EFFECT

Scholars have argued that climate change cases often fail because they are solved as ordinary environmental cases with no distinctive climate jurisprudence developed to address the unique characteristics of climate change.¹⁷ In our former study, we found this critique to be valid with regard to tort law cases against the fossil fuel industry, while cases against governments display limited, but meaningful, jurisprudential developments that serve to unblock climate governance and improve consideration of climate impacts in project planning and public financing decisions.¹⁸ Hence, the importance of climate adjudication does not (only) depend on the development of distinctive climate jurisprudence.

When exploring climate cases within the administrative and constitutional law categories, we have found that most cases against governments have been decided in favor of climate protection. This does not necessarily mean that extractive projects are halted or that global emissions of greenhouse gases decrease, but it indicates a significant role for adjudication in bringing climate concerns to bear on planning and risk assessment procedures.¹⁹

Existing case law is concentrated in the United States and Australia, followed by New Zealand and the United Kingdom. Most cases challenge

¹⁶ See Gerald Rosenberg, “Courting Disaster: Looking for Change in All the Wrong Places” (2005) 54 *Drake Law Review* 795.

¹⁷ See Wilensky, “Climate Change in the Courts,” above note 4; see also Markell and Ruhl, “An Empirical Assessment of Climate Change in the Courts,” above note 4.

¹⁸ See Vallejo and Gloppen, “Red-Green Lawfare?,” above note 5.

¹⁹ Peel and Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy*, above note 4.

licenses granted by local planning authorities for extractive and carbon-intensive projects, like coal mines and coal power plants that are central to the economy of these countries. Licenses are challenged for not sufficiently considering global atmospheric harms in environmental impact assessments (EIAs). There has also been successful climate litigation challenging extractive projects in Global South countries like Colombia and South Africa.²⁰ Although petroleum is at the core of the climate change problem, few cases have challenged governments over oil extraction permits or related harms and all have been decided against the plaintiffs.²¹ Cases challenging permits for renewable energy projects – often citing other negative environmental impacts, like noise, damage to landscapes, or harms to birds and other wildlife – present mixed outcomes from a climate perspective. Litigation aiming to unblock the administrative inertia impeding the implementation of climate policies has succeeded in India and Pakistan and in Europe in the famous *Urgenda* case, which cited international law and human rights law in

²⁰ In Decision C-035/16, the Constitutional Court of Colombia struck down provisions of Law 1450 of 2011 and of Law 1753 of 2015 regarding mining permits in paramo ecosystems. The court noted the lack of regulatory protection, as well as the fragility of paramos, their role in providing around 70 percent of Colombia's drinking water, and their capacity to capture CO₂ from the atmosphere, which is ten times greater than that of a comparably sized tropical rainforest. See "Decision C-035/16 of February 8, 2016," Sabin Center for Climate Change Law. In the South African case *EarthLife Africa Johannesburg v. Minister of Environmental Affairs and others*, based on the principles of sustainable development, the court argued that in the EIA of a coal mine, emissions from the extracted and exported coal (Scope 3 or indirect emissions) are relevant. Absence of indirect emissions in the EIA nullifies the license granted. See "EarthLife Africa Johannesburg v. Minister of Environmental Affairs and Others," Sabin Center for Climate Change Law. Recent South African cases use similar arguments.

²¹ In addition to the aforementioned Norwegian case, in *Gbemre v. Shell Nigeria et al.* (FHC/B/CS/53/05), the Nigerian government and Shell were sued for rights violations against the Iwherekan community resulting from gas flaring in oil extraction sites operated by Shell Petroleum. The Nigerian Federal Court ruled that oil companies must stop flaring gas in the Niger Delta and argued that the practice of gas flaring violated the fundamental rights to life and dignity provided in the Constitution of Nigeria and the African Charter on Human and Peoples Rights. The case very briefly mentioned how gas flaring also generates large amounts of CO₂, which contributes to climate change. The decision did not deliberate upon the effects of gas flaring on climate change. In the Canadian case *Pembina Institute for Appropriate Development, et al. v. Attorney General of Canada and Imperial Oil* ([2008] FC 302), non-profit organizations challenged a federal government panel's approval of the oil sands mine connected to the Kearl Tar Sands Project. The Federal Court of Canada found legal errors in the environmental assessment, on the basis that it had failed to seriously consider the climate change impacts of the project. See "Pembina Institute for Appropriate Development and Others v. Attorney General of Canada and Imperial Oil," Sabin Center for Climate Change Law.

a tort-based claim to force the Dutch government to create stronger mitigation targets – triggering a wave of human rights–based mitigation claims.²²

Administrative climate litigation impacts climate governance in the United States and Australia through the National Environmental Policy Act (NEPA) and land use planning litigation, respectively.²³ The first administrative case in Australia was brought to court in 1994 by Greenpeace.²⁴ Still using the language of “global warming,” it challenged a state council decision to grant development consent to a coal power station, claiming it would harm the global atmosphere and impact the climate system. Greenpeace alleged that the energy to be produced by the plant was not needed for domestic consumption, and thus its atmospheric harms were not justifiable. The case was dismissed. The alleged harms were considered speculative, and economic development and jobs were the priority.

Two decades later, NGOs in Austria and the United Kingdom challenged permits granted for the expansion of the Vienna and Stansted (London) airports based on their projected contributions to greenhouse gas emissions.²⁵ These cases were also dismissed. Despite acknowledging international emissions reduction commitments, economic growth and jobs were prioritized. In contrast, in February 2020, a similar case concerning the expansion of London’s Heathrow Airport²⁶ was decided in favor of the petitioners, by the UK Court of Appeal, based on the United Kingdom’s pledges pursuant to the Paris Agreement. The ruling was, however, overturned by the Supreme Court on December 16, 2020, on the grounds, among others, that the formal ratification of the Paris Agreement did not mean that it (yet) constituted “government policy.”²⁷ Plan B Earth announced that it will appeal the judgment to the European Court of Human Rights.²⁸

²² On the wave of human rights–based cases see, e.g., Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 4; see also Rodríguez-Garavito, “Human Rights: The Global South’s Route to Climate Litigation,” above note 4; see also Annalisa Savaresi and Juan Auz, “Climate Change Litigation and Human Rights: Pushing the Boundaries” (2019) 9 *Climate Law* 244.

²³ See Peel and Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy*, above note 4.

²⁴ See “Greenpeace Australia Ltd v. Redbank Power Co.,” Sabin Center for Climate Change Law.

²⁵ See “In re Vienna-Schwechat Airport Expansion,” Sabin Center for Climate Change Law; see also “Barbone and Ross (on behalf of Stop Stansted Expansion) v. Secretary of State for Transport,” Sabin Center for Climate Change Law.

²⁶ See “Plan B Earth and Others v. Secretary of State for Transport,” Sabin Center for Climate Change Law.

²⁷ See *R (on the application of Friends of the Earth Ltd and others) (Respondents) v. Heathrow Airport Ltd (Appellant)* [2020] UKSC 52.

²⁸ See Mark Clarke and Gwen Wackwitz, “Supreme Court overturns block on Heathrow’s expansion,” White & Case, January 25, 2021.

When asked to align environmental and economic considerations in decisions concerning extraction and development projects, the jurisprudence tends to favor economic considerations without rigorous examination of the principles of sustainable development, norms that are part of the global regulatory regime on climate change, or relevant soft law such as the Oslo Principles on Global Climate Change (2015).²⁹ The jurisprudence on sustainable development and the application of the precautionary principle still need more elaboration in order to effectively influence decision-making in the administrative state.

The potential of routine climate cases could be enhanced through the inclusion in more countries of climate arguments in relevant administrative litigation, such as project licensing, and by exploiting synergies with more traditional environmental litigation, such as that on local air pollution. Routine administrative law cases are important to triggering a butterfly effect on climate change. They do not rely only on visionary and brave judges and, importantly, can integrate climate change concerns into the everyday fabric of the law and ordinary legal education.

A key challenge has been the portrayal of climate change as an abstract and intangible problem, located in distant lands and the far future. This is changing, though, as the scientific and legal capacity to understand and attribute responsibility have developed. In many administrative court cases, climate change is now discussed as a matter of the here and now, with precise claims regarding what the government should do – including how projects' estimated greenhouse gas emissions should be counted and considered in the impact assessments that inform licensing.

The overall aim of court cases filed against governments is to make governments' international declarations and domestic constitutional and legal commitments matter in everyday climate-relevant administrative decisions – including land use, development policy, urban planning, and incentives for the energy sector (renewable and non-renewable). Table 4.1 distinguishes some currents or themes key to the climate change debate within administrative law cases, which build traction and legal capacity for climate protection within the administrative state by transforming climate change from abstract

²⁹ One exception is *Bulga Milbrodale Progress Association Inc. v. Minister for Planning and Infrastructure and Warkworth Mining Limited*, [2013] NSWLEC 48 (Australia), concerning a mining project that would expand a coal mine into designated “non-disturbance areas” and extend the mining permit for ten years. The court overturned the approval due, among other reasons, to reduced biodiversity. In assessing biodiversity concerns, the court considered vulnerability to climate change. See “Bulga Milbrodale Progress Association Inc. v. Minister for Planning and Infrastructure and Warkworth Mining Limited,” Sabin Center for Climate Change Law.

TABLE 4.1 *Climate currents in administrative litigation*

Administrative law climate litigation currents	Cases
Role of states in protecting forests and carbon capture ecosystems	<ul style="list-style-type: none"> ● <i>Decision C-035/16</i> (Colombia) ● <i>In re Court on its own motion v. state of Himachal Pradesh and others</i> (India)
Decarbonizing transport	<ul style="list-style-type: none"> ● <i>Barbone and Ross (on behalf of Stop Stansted Expansion) v. Secretary of State for Transport</i> (UK) ● <i>In re Vienna-Schwechat Airport Expansion</i> (Austria) ● <i>Clean Train Coalition Inc. v. Metrolinx</i> (Canada) ● <i>Plan B Earth and Others v. Secretary of State for Transport</i> (UK)
Adequacy of national emission reduction targets	<ul style="list-style-type: none"> ● <i>Urgenda Foundation v. Kingdom of the Netherlands</i> ● <i>Environment-People-Law v. Ministry of Environmental Protection</i> (Ukraine)
Fairness of market incentives for the renewable energy industry	<ul style="list-style-type: none"> ● <i>Phosphate Resources Ltd v. The Commonwealth</i> (Australia) ● <i>Syncrude Canada Ltd. v. Attorney General</i> (Canada) ● <i>Motor Vehicle Industry Association Incorporated v. Minister of Transport</i> (New Zealand)
Licensing of renewable energy projects	<ul style="list-style-type: none"> ● <i>Pugh v. Secretary of State for Communities and Local Government</i> (England) ● <i>North Cote Farms Ltd v. Secretary of State for Communities and Local Government</i> (England) ● <i>in the Matter of an Application by Brian Quinn and Michael Quinn</i> (Northern Ireland) ● <i>Meridian Energy Ltd. v. Wellington City Council</i> (New Zealand) ● <i>Lark Energy Ltd v. Secretary of State for Communities</i> (UK)
Licensing of new fossil fuel extraction projects	<ul style="list-style-type: none"> ● <i>EarthLife Africa Johannesburg v. Minister of Environmental Affairs and Others</i> (South Africa)

 Administrative law climate litigation
 currents

Cases

Protection of water resources for climate resilience	<ul style="list-style-type: none"> ● <i>West Coast ENT Inc. v. Buller Coal Ltd</i> (New Zealand) ● <i>Greenpeace New Zealand v. Northland Regional Council</i> ● <i>Peter Gray & Naomi Hodgson v. Macquarie Generation</i> (Australia) ● <i>Xstrata Coal Queensland Pty Ltd and Others v. Friends of the Earth – Brisbane and Others</i> (Australia) ● <i>Greenpeace Australia Ltd v. Redbank Power Co.</i> (Australia)
Publicity of information on fossil fuel investment	<ul style="list-style-type: none"> ● <i>Alanvale Pty Ltd v. Southern Rural Water Authority</i> (Australia) ● <i>Paul v. Goulburn Murray Water Corporation and Others</i> (Australia) ● <i>David Kettle Consulting v. Gosford City Council</i> (Australia) ● <i>Decision C-035/16</i> (Colombia)
States' role in providing climate-related refugee protection	<ul style="list-style-type: none"> ● <i>Ioane Teitiota v. the Chief Executive of the Ministry of Business, Innovation and Employment</i> (New Zealand)

and complex discourse to issues suitable for adjudication. Some cases reflecting each current are also listed. Some are high-profile cases, while others are routine cases that could set off a butterfly effect.

Climate-related litigation often involves administrative due process claims. At their core, these court cases discuss the duty of governments to take precautionary measures to avoid the excessive accumulation of greenhouse gases in the atmosphere and to protect citizens from the negative impacts of those already accumulated.

We suggest that by accommodating existing legal norms and doctrine to make them workable for climate change, some courts have managed to create important precedents from which an “unspectacular” but distinct climate jurisprudence is evolving. The courts seem receptive to the argument that discrete, local, bottom-up solutions are important, so taking incremental steps

is appropriate.³⁰ That the jurisprudence is diverse, uneven, and produced in different legal systems is no reason to overlook its contributions to tackling the collective action problem that is climate change.

By settling the debate on the validity of climate science in public decision-making, courts have managed to establish climate change as a collective action problem that requires regulatory interventions. A number of courts have contributed important precedents to the evolving climate jurisprudence that could be used by other courts confronted with similar cases and inserted into routine administrative adjudication. Some of these precedents are presented in Table 4.2.

In some high-profile cases, judges also go for traditional legal doctrines rather than new or precedent-breaking ones. Although *Massachusetts v. EPA* and *Urgenda v. the Netherlands* are “spectacular” cases, they were decided in favor of climate protection with a modest adaptation of existing legal notions. In *Massachusetts v. EPA*, the notion of “air pollutant” in US law was extended to encompass global atmospheric pollution. In *Urgenda*, the “duty of care” was extended to include governmental responsibility for adequate climate mitigation policy. *Future Generations v. Colombia* used existing human rights duties to adjudicate governmental responsibility for adequate mitigation policy. It became “spectacular jurisprudence” with the unsolicited declaration of the legal personhood of the Colombian Amazon. Yet the rights of nature had already been recognized in Colombia and elsewhere.

In sum, we suggest that the most radical contribution of courts to climate governance has been making policy challenges tangible and routine in nature. If cited and used across countries, unspectacular precedents have the potential to infuse broad areas of law and intervene in unstable climate governance systems in ways that – hopefully – positively affect the global atmosphere. Litigants should aim for butterfly judgments, seeking to incrementally improve the global climate system. But as with the butterfly effect for meteorological predictions, it will be impossible for future analysts to trace atmospheric changes to any particular court case.

Although the developments discussed here are important, climate jurisprudence still has a long way to go, not least with respect to the design of remedies and implementation-monitoring mechanisms and the expansion of arguments regarding sustainable development and the precautionary principle.

³⁰ See Peel and Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy*, above note 4.

TABLE 4.2 *Important precedents in administrative and constitutional climate cases*

Precedent	Court and Case
Greenhouse gases are air pollutants and thus subject to state regulation	<ul style="list-style-type: none"> ● US Supreme Court in <i>Massachusetts v. EPA</i>
Climate change risks are a mandatory consideration in EIAs of new carbon-intensive projects	<ul style="list-style-type: none"> ● Several US courts in NEPA litigation ● Several Australian courts in EIA litigation ● High Court of South Africa in <i>Earthlife Africa Johannesburg v. Minister of Environmental Affairs and Others</i>; ● UK Court of Appeal in <i>Plan B Earth and Others v. Secretary of State for Transport</i>
Climate adaptation should be a consideration in planning for new development projects	<ul style="list-style-type: none"> ● Several Australian courts specializing in environmental and planning matters ● Colombian Constitutional Court in <i>Decision C-035/16</i> ● India's National Green Tribunal in <i>Court on its own motion v. state of Himachal Pradesh and others</i>
There is a governmental duty of care for climate change in relation to human rights	<ul style="list-style-type: none"> ● The Hague District Court in <i>Urgenda Foundation v. Kingdom of the Netherlands</i>
There is a governmental obligation to mitigate climate change (halt deforestation) in order to protect human rights and the rights of nature	<ul style="list-style-type: none"> ● Supreme Court of Justice of Colombia in <i>Future Generations v. Colombia</i>
State incentives for renewable energy projects are a legitimate policy objective	<ul style="list-style-type: none"> ● Federal Court of Australia in <i>Phosphate Resources Ltd. v. the Commonwealth</i> ● Canadian Federal Court of Appeal in <i>Syncrude Canada Ltd. v. Attorney General of Canada</i>

4.4 CONCLUDING REFLECTIONS: POTENTIAL, VULNERABILITIES, AND WAYS FORWARD

Since the early 1990s, when the first climate claims were brought to court, jurisprudence has developed, ranging from the rejection of climate claims for

being too speculative to the use of reports from the Intergovernmental Panel on Climate Change (IPCC) as solid legal proof.³¹ This jurisprudence has nudged governments into making better-informed decisions on a variety of issues, including fuel efficiency standards, greenhouse gas emissions from coal power plants, the licensing of new extractive projects, airport expansions, housing projects along coastlines affected by sea level rise, the use of water sources for industrial processes when climate resilience is at stake, and market incentives for renewable energy projects.

By settling the debate on climate science and confirming that all mitigation contributions matter, courts have managed to bring climate change to the here and now. Courts have established climate change as a collective action problem that requires regulatory interventions and have managed to adapt existing legal frameworks to accommodate and mainstream climate change into routine decision-making processes. By doing so, they are creating legal capacity³² within the administrative state to deal with climate risks and disproving arguments that climate change is too abstract and speculative for courts to handle.³³

In this chapter, we have shown that important climate protection precedents have been created by courts around the world, thereby helping the administrative state to untie some knots related to the super wicked nature of climate change.³⁴ Judiciaries are finding ways to establish, case by case, the type of legal problem climate change is: a human rights problem, a global atmospheric pollution problem, a problem concerning the adequate assessment of the impacts of carbon-intensive projects, a sustainable development problem, a biodiversity protection problem, a problem of justice for future generations and other species, and a problem of market incentives for renewables.

³¹ See Julia Olson et al., “Judges Can Save Us from Climate Change, and They’ve Already Started – Our Children’s Trust,” Our Children’s Trust, July 6, 2015.

³² See Elizabeth Fisher and Eloise Scotford, “Climate Change Adjudication: The Need to Foster Legal Capacity: An Editorial Comment” (2016) 28 *Journal of Environmental Law* 1.

³³ See Laurence H. Tribe et al., “Too Hot for Courts to Handle: Fuel Temperatures, Global Warming, and the Political Question Doctrine” (2010) Washington Legal Foundation: Critical Legal Issues Working Papers Series no. 19.

³⁴ See Louis J. Kotzé and Alexander R. Paterson (eds.) *The Role of the Judiciary in Environmental Governance: Comparative Perspectives* (Alphen aan den Rijn: Kluwer Law International, 2009); see also Richard J. Lazarus, “Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future” (2009) 94 *Cornell Law Review* 1153; see also Peel and Osofsky, “Litigation’s Regulatory Pathways and the Administrative State: Lessons from U.S. and Australian Climate Change Governance,” above note 4.

However, experimentalist, deliberative, and dialogical modes of adjudication are still uncommon in climate jurisprudence,³⁵ and remedies and monitoring mechanisms are only exceptionally included or explained in climate court rulings. A normativist approach dominates, focusing on rights declarations. There are still few signs of democratic experimentalism and the participatory implementation of solutions that could foster more cooperative relationships among branches of power, which is needed to address the complexities of the climate problem.³⁶

International treaties are important in unclogging climate action and understanding the domestic legal currents into which they can be channeled permits the development of long-lasting legal responses.³⁷ Courts' routinization of climate-relevant claims expands the existing legal frameworks that judges are most comfortable using. Thus, courts have created space within existing laws to mainstream climate change into adjudicative practice.³⁸ This is a desirable outcome. The more climate litigation permeates everyday law, the more traction it has in the legal system. Exploring ways of scaling up and coordinating cases to reach a butterfly effect in climate litigation across jurisdictions should thus be part of a research agenda for climate protection advocates and researchers.

³⁵ See Rodríguez-Garavito on Empowered Participatory Jurisprudence, a type of bounded democratic experimentalism whereby courts act as catalysts of collective and iterative processes of collective problem solving. César Rodríguez-Garavito, "Empowered Participatory Jurisprudence," in Katharine G. Young (ed.), *The Future of Economic and Social Rights* (Cambridge: Cambridge University Press, 2019), pp. 233–58. On compliance with socioeconomic rights rulings, see Malcolm Langford, "Socioeconomic Rights," in Reidar Maliks and Johan Karlsson Schaffer, *Moral and Political Conceptions of Human Rights: Implications for Theory and Practice* (Cambridge: Cambridge University Press, 2017).

³⁶ See Lazarus, "Super Wicked Problems and Climate Change," above note 34; see also Kelly Levin et al., "Overcoming the Tragedy of Super Wicked Problems: Constraining Our Future Selves to Ameliorate Global Climate Change" (2020) 45 *Policy Sciences* 123.

³⁷ See Elizabeth Fisher, Eloise Scotford, and Emily Barritt, "Why Understanding the Legally Disruptive Nature of Climate Change Matters" (2015), <<https://blog.oup.com/2015/04/legally-disruptive-nature-of-climate-change/>>.

³⁸ See Fisher and Scotford, "Climate Change Adjudication," above note 32.

Climate Litigation through an Equality Lens

JAMES A. GOLDSTON

If the coronavirus pandemic has taught us anything, it is that, when it comes to the natural world, political borders are irrelevant. And like the pandemic, climate change threatens everyone. We all share a common interest in preserving the well-being of our planet. But the changing climate does not affect us in the same ways, at the same pace, or to the same degree. This is because of where we live but also due to our respective levels of wealth and income, our physical and mental disabilities, even the color of our skin. Owners of gated private homes on the Florida Keys are threatened by rising seas – but the nature of their concern, and what can and will be done to address it, contrast powerfully with the situation of the residents of downtown Miami, let alone the Pacific island of Vanuatu.

How do we account for the changing climate's profoundly differential impacts, while at the same time marshaling a world-wide coalition capable of addressing them? How do we appeal to what unites us, while at the same time persuading those with more responsibility, and more resources, to bear a greater burden of the costs of mitigation and adaptation than others? We can't address climate change without contending with issues of difference and inequality. Given that, and assuming that litigation is one of many essential paths to change, what kinds of legal action are most likely to get us where we need to go? And what does climate litigation viewed through the lens of equality look like?

5.1 CLIMATE CHANGE IMPOSES DISPROPORTIONATE IMPACTS

Climate change imposes differential impacts on the marginalized and disadvantaged. As the Inter-Governmental Panel on Climate Change (IPCC) has made clear, “the impacts of warming up to and beyond 1.5°C, and some potential impacts of mitigation actions required to limit warming to 1.5°C, fall

disproportionately on the poor and vulnerable.”¹ More specifically, “populations at disproportionately higher risk of adverse consequences with global warming of 1.5°C and beyond include disadvantaged and vulnerable populations, some indigenous peoples, and local communities dependent on agricultural or coastal livelihoods.”²

Compared with wealthier communities, poor and marginalized people are more exposed to adverse climate events, more likely to suffer harm from such events, and less able to recover from those harms.³

The poor are more exposed to climate risks because of their location and their work. Worldwide, exposure to drought is more prevalent in rural areas, where a larger proportion of the population lives in poverty, compared with urban areas. One study found that 43 percent of people in rural areas were regularly exposed to drought compared with 32 percent in urban settings.⁴ In cities, people living in less vegetated areas face a 5 percent higher risk of heat death.⁵ People who work predominantly outside – in low-paid agricultural or construction jobs – are more exposed to the effects of rising temperatures than more highly skilled and highly paid workers. In the United States (primarily Latinx) immigrant non-citizen workers are three times more likely to die from heat exposure than American citizens, and when accounting for age, the risk is more than twenty times higher.⁶

It’s not only that the poor are more exposed to climate risks; even where all communities face an identical climate event, they are more susceptible to harm. For example, low-income households in Honduras reported considerably higher asset loss (31 percent) resulting from Hurricane Mitch than did the non-poor households (11 percent), even in areas where the former had comparatively less exposure to the hurricane.⁷ While climate-induced fires torch the homes of rich and poor alike, poorer families are more likely to live in densely packed communities, characterized by little or no observance of

¹ “Global Warming of 1.5°C” (2019) IPCC 31.

² Ibid. at 9.

³ See S. Nazrul Islam and John Winkel, “Climate Change and Social Inequality” (2017) UN DESA Working Paper 152 at 4.

⁴ See *ibid.* at 16.

⁵ See Leah H. Schinasi et al., “Modification of the Association between High Ambient Temperature and Health by Urban Microclimate Indicators: A Systematic Review and Meta-analysis” (2018) 161 *Environmental Research* 168.

⁶ See Carolyn Crist, “Immigrant workers in US have tripled risk for heat-related death,” Reuters, November 14, 2017, <<https://www.reuters.com/article/us-temperature-immigrants-casualties/immigrant-workers-in-u-s-have-tripled-risk-for-heat-related-death-idUSKBN1DE2G3>>.

⁷ See Nazrul Islam and Winkel, “Climate Change and Social Inequality,” above note 3, at 15.

building codes and limited physical separation between residential and industrial activity.

The ability to move out of harm's way is also largely dependent on economic means. Where wealthy families can load up cars and trailers with treasured belongings, the poor typically have no choice but to escape with what they can carry or remain to protect their possessions at great personal risk. During disasters, early warnings and evacuation instructions may also be inaccessible to marginalized communities because of low literacy rates or language barriers.

Even well-intended but inadequately designed adaptation infrastructure can end up exacerbating the vulnerability of those with fewer economic resources. In Bangladesh, the construction of the Greater Dhaka Western Embankment, intended to protect the capital from catastrophic flooding, worsened the impact of seasonal floods on surrounding rural areas, adding salinity to soil, reducing harvest, and increasing rural to urban migration. Some efforts to lessen vulnerability to climate risks – through the construction of sea walls, landscaped berms, or other adaptation infrastructure – may spark a cycle of “green gentrification,” whereby rising real estate values force lower-income communities into denser and more vulnerable tracts of land with greater exposure to climate effects.⁸

Finally, poorer and even some middle-class communities are less able to recover from climate-caused damage compared with wealthy communities. A comparison of the effects of two recent fires in northern California shows this disparity in recovery time. Residents affected by the 2017 fires in North Bay (including Sonoma County, where some of the world's most expensive grapes are cultivated in over 400 vineyards), had completed the removal of debris in little over four months. In contrast, it took nearly a year to finish disposing of debris following the 2015 fire in the Valley, where the poverty rate was twice as high and insurance coverage was less comprehensive. In addition, better-resourced North Bay residents mobilized their political power to pressure insurance companies to make payouts without itemized inventories, whereas 80 percent of Valley residents were required to itemize lost items before receiving insurance funds, leading to only 32 percent of residents receiving payouts.⁹ Among wealthy

⁸ See Adam Rogers, “Cities Fighting Climate Woes Hasten ‘Green Gentrification,’” *Wired*, February 20, 2020, <<https://www.wired.com/story/cities-fighting-climate-woes-hasten-green-gentrification/>>.

⁹ See Sara Viner, “California’s Fires Hit Rich and Poor Communities. Guess Which Ones Are Recovering Faster,” *Mother Jones*, May 20, 2019, <<https://www.motherjones.com/environment/2019/05/californias-fires-hit-rich-and-poor-communities-guess-which-ones-are-recovering-faster/>>.

communities in southern California, private firefighting services have emerged as a critical response tool that is available only to those with the ability to pay for it.¹⁰

Even within the same city, wealthier communities often benefit more from so-called “neutral” policies that in fact generate differential impacts. New York City’s post-Hurricane Sandy plan to build a large U-shaped barrier running for ten miles along the coastline of southern Manhattan is an example of a response to climate change that seems to help everyone but in fact may not address the specific needs of the most vulnerable:

“In many places building a barrier is enough,” says Stanley Fritz from the Harlem-based environmental justice organization WE-ACT. “Take south Manhattan and the Financial District. Those communities are affluent and powerful enough to receive protection – and they are getting it. For others in our city, dealing with climate change is not just about infrastructure but social policies. It’s not just about preventing the worst but finding long-term solutions to the issues that disproportionately put these communities at risk,” including poor infrastructure and a lack of adequate transportation, housing and basic public services.¹¹

Women are disproportionately affected by climate change as a result of the underlying social and economic barriers they confront more generally:

In countries where gender inequality is more severe, death rates for women in climate-related disasters – like hurricanes, floods, tsunamis – are shockingly high. The reason could be as simple as women not being taught to swim. But there’s also the fact that women in more unequal societies don’t tend to move about in public spaces, which means they won’t hear early warnings, and social expectations to stay in the house unless chaperoned means women don’t get out fast enough. According to the United Nations Development Program (UNDP), women accounted for 61% of fatalities caused by Cyclone Nargis in Myanmar in 2008, 70–80% in the 2004 Indian Ocean tsunami, and 91% in the 1991 cyclone in Bangladesh. Even if women survive the event itself, the aftermath is just as perilous. When Hurricane Katrina hit New Orleans in 2005, 80% of those left behind in the Lower Ninth Ward after the storm were women. More women than men

¹⁰ See Tanza Loudonback, “People Are Outraged Kim and Kanye Reportedly Hired Private Firefighters to Protect Their \$60 Million Mansion from the California Wildfires – but It’s Not That Uncommon,” *Business Insider*, November 15, 2018, <<https://www.businessinsider.com/california-wildfires-private-firefighters-insurance-2018-11>>.

¹¹ Samuel Gilbert, “Remaking New York City in the Wake of Climate Change,” *Al Jazeera*, March 24, 2016, <<https://www.govtech.com/em/disaster/Remaking-New-York-City-in-the-wake-of-climate-change.html>>.

were living below the poverty line, fewer women had cars, and women were more likely to have dependents, such as children and elderly or sick relatives – all of which impaired their ability to leave the affected area Women are also impacted by the more ‘everyday’ effects of rising global temperatures. Rising humidity and more frequent flooding means more mosquito-borne diseases, which women are exposed to as water-collectors. Drought means food shortages, which means increased workload for women as food producers – plus women and girls are more likely than men and boys to go without food when there’s not enough to go round.¹²

Race and color are other vectors through which climate change generates differential outcomes. The Global South, which is suffering some of the worst impacts from climate change, has on the whole the fewest resources to address it. Laura Pulido writes that “when we look at who will pay the greatest cost [for climate change], in terms of their lives, livelihoods, and well-being, it is overwhelmingly . . . the ‘darker nations’ The rich, industrialized countries, which are disproportionately white, will escape with vastly fewer deaths.”¹³

But even within wealthy countries, climate justice is often racial justice. “The spatial distribution of risk, vulnerability and death follows along pre-existing lines of racial inequality. In the United States . . . the urban poor, which are overwhelmingly nonwhite, will die at the highest rates because of a lack of air conditioning.”¹⁴ The impacts of climate change are magnified by numerous public policy choices that have imposed a range of environmental injustices. The disproportionate location of fossil fuel plants in communities of color increases asthma and other health risks that are worsened by climate change.¹⁵ Throughout the United States, air pollution is “disproportionately caused by consumption of goods and services mainly by the non-Hispanic white majority, but disproportionately inhaled by black and Hispanic minorities.”¹⁶ As Robert Bullard, professor of urban planning and environmental policy at Texas Southern University and a pioneer in the field of

¹² Regie Genie, “Why Climate Change Is a Gender Equality Issue”, Climate Justice, June 3, 2018, <<https://www.climatejustice.ch/why-climate-change-is-a-gender-equality-issue/>>.

¹³ Laura Pulido, “Racism and the Anthropocene,” in Gregg Mitman et al. (eds.), *The Remains of the Anthropocene* (Chicago: University of Chicago Press, 2018), p. 118.

¹⁴ *Ibid.* at 18.

¹⁵ See Karen Savage, “Newest Climate Liability Suits: Climate Justice Is Racial Justice,” The Climate Docket, June 30, 2020, <<https://www.climatedocket.com/2020/06/30/climate-liability-lawsuits-racial-justice/>>

¹⁶ Christopher W. Tessum et al., “Inequity in Consumption of Goods and Services Adds to Racial–Ethnic Disparities in Air Pollution Exposure” (2019) 116 *Proceedings of the National Academy of Sciences* 6001.

environmental justice, has observed, “It’s violence when you have all this pollution pumped into a neighborhood, and people are choking.”¹⁷

As a result of historically rooted patterns of urban housing segregation, many African Americans living in urban heat islands with little tree canopy are more susceptible to the temperature increases that climate change is already producing. Owing to disparities in access to, and quality of, health care, black women who live in such isolated areas of intense heat are at higher risk of giving birth to premature, underweight, or stillborn babies than white women.¹⁸

Recovery in the aftermath of a climate disaster is also affected by the differential vulnerabilities of distinct racial communities. Confronted with slow or inadequate recovery efforts in their neighborhoods, African Americans were less likely than white residents to return to New Orleans following Hurricane Katrina. The city’s Lower Ninth Ward, where 98 percent of residents were African American, contrasted with nearby Lakeview, whose population was 94 percent white. Both suffered catastrophic flooding in the disaster. But a decade later, the Lower Ninth Ward had lost 68 percent of its population, whereas Lakeview was down only 16 percent.¹⁹

Government policies in the aftermath of Katrina – which former US Congressman Barney Frank condemned as “ethnic cleansing through inaction”²⁰ – played a role in the disparate reconstruction efforts. As a result, “New Orleans no longer has a public hospital, though prior to Katrina, it was home to the nation’s oldest one The largest housing recovery program in U.S. history, ‘Road Home,’ was created in the months after Katrina. But money was disbursed based on the appraised value of a home rather than the cost of rebuilding, even though a home in a white community was typically appraised at a far higher price than the same house in a black community.”²¹

In addition to poverty, gender, and race, another dimension along which the effects of climate change fall is political power. Countries in the Global South, who have contributed least to the problem, are on the whole likely to

¹⁷ James Bruggers, “Louisville’s ‘Black Lives Matter’ Demonstrations Continue a Long Quest for Environmental Justice”, Inside Climate News, June 21, 2020, <<https://insideclimatenews.org/news/20062020/louisville-kentucky-black-lives-matter-rubbertown-environmental-justice>>.

¹⁸ See Savage, “Newest Climate Liability Suits,” above note 15.

¹⁹ Based on 2000 US Census data.

²⁰ Gary Rivlin, “White New Orleans Has Recovered from Hurricane Katrina. Black New Orleans Has Not”, Talk Poverty, August 29, 2016, <<https://talkpoverty.org/2016/08/29/white-new-orleans-recovered-hurricane-katrina-black-new-orleans-not/>>.

²¹ Ibid.

suffer the worst consequences, largely because, at least until now, they have lacked the political capacity to force more equitable burden sharing. But political power is not just a determinant of global climate inequality; it also imposes disparate climate change impacts on individual countries. The observations of a Palestinian environmental rights activist are telling:

For Palestinians, climate change is not just a natural phenomenon, but a political one. Israel's regime of occupation and apartheid, which denies us the right to manage our land and resources, exacerbates the climate crisis Palestinians face, making us more vulnerable to climate-related events. The most extreme example is the Gaza Strip, where two million Palestinians live in an open-air prison under Israeli occupation and siege. The UN projected that Gaza will be unlivable by 2020. Many say it already is. Gaza's acute shortage of potable water has been worsened, not only by climate change but also by Israel's restrictions on the entry of materials and fuel needed for wastewater treatment. As a result, sewage has infiltrated Gaza's aquifer and is flowing untreated into Gaza's coastal waters, damaging marine life and health. Ninety-seven percent of Gaza's scarce water is now unfit for human consumption and contaminated water causes 26 percent of all illnesses in Gaza, and is a leading cause of child deaths. In one of the countless tragic examples of the impacts, a five-year-old boy, Mohammed al-Sayis, who went to Gaza's beach with his family to escape the heat, died in 2017 after swimming in seawater contaminated by sewage.²²

The extent of politically determined climate outcomes in Palestine is extreme. But the inverse relationship of heightened climate change impacts to political power is evidenced, in different ways, from the vulnerable low-lying nations of the Pacific to Washington, DC.

5.2 PURSUING CLIMATE JUSTICE THROUGH AN EQUALITY LENS IS A CHOICE

Climate change is an objective fact. But its impacts vary greatly and depend significantly on factors that are a function of political choice. And so, it should not be a surprise that not everyone working to address climate change is also focused on addressing inequality. Some go so far as to argue that climate change is an existential crisis and thus everything else should be put on hold. First, they say, save the planet, then worry about racism, sexism, poverty, and other problems. In an interactive poll conducted in early 2020 on the UN

²² Abeer Butmeh, "Palestine Is a Climate Justice Issue", Al Jazeera, November 28, 2019, <<https://www.aljazeera.com/indepth/opinion/palestine-climate-justice-issue-191127102617054.html>>.

Sustainable Development Goals, *The Guardian* newspaper found that 51 percent of readers chose to save the planet ahead of all other priorities, compared with 16 percent who would end inequality above all.²³ An October 2019 survey of EU citizens by Eurobarometer found that fighting climate change was seen as the top priority for Europe, barely ahead of combating social inequalities.²⁴

Indeed, some of the most prolific climate philanthropists have been sharply criticized for failing to address inequality. Although in the midst of a brief presidential campaign he subsequently apologized, New York City's former mayor Michael Bloomberg was responsible for adopting and sustaining a policy of massive discriminatory stop and frisk practices that, during the 2000s, violated the constitutional rights of hundreds of thousands of young men of color.²⁵ In pledging ten billion dollars to fight climate change, alongside ambitious carbon targets for his Amazon company, Jeff Bezos declared: "It's going to take collective action from big companies, small companies, nation states, global organizations, and individuals."²⁶ Yet Amazon's fortune has been built on a same-day delivery model, an airline shipping business, and a vast cloud-computing venture whose clients include major fossil fuel companies. Its annual carbon footprint is equal to that of Norway. The company is facing criticism for a lack of diversity in its senior leadership team and for having allegedly fostered a hostile work environment for low-wage employees, many of them black and brown, in its warehouses.²⁷

More generally, private money often flows into climate initiatives that are only accessible to, or deliver benefits primarily for, the wealthy. Electric vehicles, efficient heating systems, home insulation, and improvement in solar technology largely benefit a small section of society whose resources already shield them from the worst effects of a changing climate. By contrast,

²³ See Gary Blight et al., "Climate, Inequality, Hunger: Which Global Problems Would You Fix First?", *The Guardian*, January 15, 2020, <<https://www.theguardian.com/global-development/ng-interactive/2020/jan/15/environment-inequality-hunger-which-global-problems-would-you-fix-first>>.

²⁴ See "Parlemeter 2019: Heeding the Call beyond the Vote: A Stronger Parliament to Listen to Citizens Voices" (2019) European Parliament, <<https://www.europarl.europa.eu/pdf/eurobarometre/2019/parlemeter-2019-heeding-the-call-beyond-the-vote/report/en-report.pdf>>.

²⁵ See Joseph Goldstein, "Judge Rejects New York's Stop and Frisk Policy," *New York Times*, August 13, 2013, <<https://www.nytimes.com/2013/08/13/nyregion/stop-and-frisk-practice-violated-rights-judge-rules.html>>.

²⁶ Daniella Silva, "Jeff Bezos Commits \$10 Billion to Combat Climate Change," NBC News, February 18, 2020, <<https://www.nbcnews.com/news/world/jeff-bezos-commits-10-billion-combat-climate-change-n1137761>>.

²⁷ See Karen Weise, "Amazon Workers Urge Bezos to Match His Words on Race With Actions," *New York Times*, June 24, 2020, <<https://www.nytimes.com/2020/06/24/technology/amazon-racial-inequality.html>>.

investments in mass transit systems, power transmission infrastructure to deliver clean energy to rural areas, or protecting and preserving global forests would help meet carbon reduction targets and benefit a more inclusive cross-section of humanity.

In respect of public financing, governments of richer countries in the Global North have long resisted demands from poorer nations for compensation commensurate with their historically disproportionate contributions to climate change.

5.3 THE RATIONALE FOR AN EQUALITY LENS

So, if pursuing climate justice – and, in particular, litigation – through an equality lens requires a deliberate choice, why take that path?

The most compelling reason is moral. It's precisely because those least culpable for climate change will suffer its most severe impacts – within cities and regions and across the globe – that an approach that takes account of that imbalance is essential.

But ethics don't always drive law and politics. Thankfully, applying an equality lens to climate litigation is not just the right thing to do; it's also more effective.

In the realm of politics, even the threat of equality-focused climate litigation can highlight, and help leaders correct for, the risks of imposing new taxes (for gasoline or other items) that disproportionately affect persons of modest incomes or of shutting down coal plants or palm plantations without considering the employment prospects for workers and farmers. In the absence of legal action, French President Macron's failure to consider the costs for workers of new fuel duties imposed in 2018 to fight climate change helped give rise to the nationwide "Yellow Vest" protest movement that eventually forced Macron into a politically humiliating U-turn.²⁸ Leveraging the possibility of litigation focused on unequal burdens can promote more politically sustainable climate-friendly policies.

An equality frame may also enhance the viability of climate litigation in the courtroom, easing some judges' understandable concerns about deciding what are sometimes termed "political questions."²⁹ Courts in countries around the

²⁸ Kim Willsher, "Macron Scraps Fuel Tax Rise in Face of Gilets Jaunes Protests," *The Guardian*, December 5, 2018, <<https://www.theguardian.com/world/2018/dec/05/france-wealth-tax-changes-gilets-jaunes-protests-president-macron>>.

²⁹ See *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020) (Case Summary).

world have built up substantial experience in adjudicating equality claims, and there is now a well-settled jurisprudence at national and international levels on which to rely. More fundamentally, as John Hart Ely and others have taught, courts considering claims on behalf of disfavored groups are acting, not to undermine but rather to buttress and reinforce democratic norms – by demanding attention be paid to those whose interests are often overlooked in a majoritarian political process.³⁰ By framing climate cases at least partly with an equality focus, litigants may help unelected judges overcome the common – and forceful – criticism that courts should step aside and let the elected branches address contentious political issues. There’s nothing wrong with ensuring that governments pay necessary, and sometimes special, attention to people with less power and fewer resources – those who are already bearing the brunt of climate change and will continue to do so. That’s justice.

And in the sphere of public discourse, an equality lens enables advocates to build a narrative about climate change that is less technical and more human. Equality litigation and related advocacy center the voices of the most marginalized – who, in the climate context, include agriculturalists, forest dwellers, smallholders, Indigenous persons, and people residing on or near coastlines. By underscoring the ways in which climate change is a reflection of unjust power relations, a focus on equality makes it more likely that policy will attend to climate change’s causes and help ensure that those most responsible bear the greatest costs of redress.

5.4 DRAWING ON THE LESSONS OF EQUALITY LITIGATION

Whether pursued on behalf of women, racial and ethnic minorities, persons with disabilities, gays and lesbians, transgender individuals, or others, equality litigation has broadened educational access, saved lives through the provision of essential medicines, and struck down arbitrary barriers to employment and economic opportunity. This rich history has generated insights of potential relevance to legal action on behalf of the climate.

Climate litigators might draw on the accumulated experience of equality litigation in marshaling detailed statistical evidence of systematic problems affecting large numbers of people over extended periods of time; defining the affirmative responsibilities of states to take affirmative measures to prevent, as well as to redress, certain kinds of harm; and crafting, monitoring, and enforcing collective remedies. Precisely because climate change affects some

³⁰ John Hart Ely, *Democracy and Distrust: A Theory of Judicial Review* (Cambridge, MA: Harvard University Press, 1981).

more negatively than others, climate justice advocates could usefully capitalize on the practiced ability of equality litigators to frame a problem and tell a story in ways designed to engender sympathy, solidarity, and support for persons who are most vulnerable, least heard, and most susceptible to “othering.”

Experience has shown that litigating against governments, though essential, is not sufficient to address inequality in many spheres of life. Private actors play a major role in fostering, and accentuating, climate change and its disproportionate impacts. Equality litigation offers doctrinal tools like “positive obligations” and “positive action,” as well as experience with direct action against corporate entities, which may be useful in highlighting, and helping articulate the contours of, the responsibility of private actors to address climate change.

Finally, an equality-focused climate legal strategy will have to learn from the mixed history of equality advocates in honestly reckoning with the risks and costs of litigation; marrying litigation with other tools of advocacy; ensuring that litigation is owned by, and rooted in the struggles of, the communities on whose behalf litigation is brought; planning early for the challenge of implementing any resulting judgment; and magnifying the beneficial effects of litigation other than final judicial victory.

As in other areas of law, just because litigation cannot achieve everything does not mean it cannot do much good. Particularly when more than a quarter century of intergovernmental negotiations have yielded such limited progress, it would be folly to discard any tool that offers a reasonable prospect of advancing the ball.

5.5 WHAT WOULD CLIMATE LITIGATION PURSUED THROUGH THE EQUALITY LENS LOOK LIKE?

To be sure, not all climate litigation should explicitly raise issues of equal treatment. The landmark December 2019 *Urgenda* judgment of the Dutch Supreme Court rightly underscored the Dutch government’s duty of care to all its citizens in reducing greenhouse gas emissions.³¹

But while some cases should advance the universal rights of everyone to a sustainable climate, others can call out the distinctive threats that climate change poses to vulnerable groups. Litigation has already been brought on behalf of children and youth, whose rights to life and a healthy environment were vindicated by the 2018 ruling of the Colombian Supreme Court of

³¹ See HR 20 December 2019, 41 NJ 2020, m.nt. J.S. (*Urgenda/Netherlands*) (Neth.).

Justice in a case brought by *Dejusticia*³² but were dismissed for lack of standing early in 2020 by a divided panel of the United States Ninth Circuit Court of Appeals in the *Juliana* litigation.³³ In the matter of *Teitiota v. New Zealand*, the United Nations Human Rights Committee recognized, for the first time, the interests of climate refugees – specifically, that forcibly returning a person to a place where their life would be at risk due to the adverse effects of climate change may violate the right to life under Article 6 of the International Covenant on Civil and Political Rights.³⁴

And legal action specifically targeting the disproportionate impacts of climate change is accelerating. In July 2020, as a series of racial justice protests following the police killing of George Floyd in Minneapolis rippled across the United States and the world, Minnesota’s attorney general underscored climate change’s disproportionate impacts for “people living in poverty and people of color” when launching a lawsuit against Exxon, three Koch Industries entities, and the American Petroleum Institute for allegedly deceiving the public about their product’s climate risks.³⁵ In a complaint filed the next day against four carbon majors for deception about the climate, Washington, DC’s attorney general echoed the emphasis on the “particularly severe impacts” of flooding, extreme weather, and heat waves on “low-income communities and communities of color.”³⁶ That same month, two large US energy companies – Dominion Energy and Duke Energy – pulled the plug on a major natural gas project – the proposed Atlantic Coast Pipeline – which would have delivered fracked gas from West Virginia to population centers in Virginia and North Carolina.³⁷ The project ultimately succumbed to economic hurdles and legal challenges to the proposed placement of a compressor station in Union Hill, Virginia, a “predominately African-American community that has deep ties to the lives of formerly enslaved people.”³⁸

³² See Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala de Casación Civil, abril 5, 2018, M.P.: L.A. Tolosa Villabona, Expediente 11001-22-03-000-2018-00319-01 (Colom.).

³³ See *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

³⁴ See Kate Lyons, “Climate Refugees Can’t Be Returned Home, Says Landmark UN Human Rights Ruling,” *The Guardian*, January 20, 2020, <<https://www.theguardian.com/world/2020/jan/20/climate-refugees-cant-be-returned-home-says-landmark-un-human-rights-ruling>>.

³⁵ See Savage, “Newest Climate Liability Suits,” above note 15.

³⁶ *Ibid.*

³⁷ See “Dominion Energy and Duke Energy Cancel the Atlantic Coast Pipeline,” PRNewswire, July 5, 2020, <<https://www.prnewswire.com/news-releases/dominion-energy-and-duke-energy-cancel-the-atlantic-coast-pipeline-301088177.html>>.

³⁸ Marianne Lavelle, “Climate Activists See ‘New Era’ After Three Major Oil and Gas Pipeline Defeats,” *Inside Climate News*, July 7, 2020, <<https://insideclimatenews.org/news/07072020/pipeline-climate-victories-dakota-access-keystone-xl-atlantic-coast>>.

It's not hard to imagine other legal complaints being pursued on behalf of communities of color victimized by municipal and state policies that overwhelmingly concentrate waste disposal facilities, trucking routes, high asphalt-to-greenery ratios, and other accelerators of climate change impacts in their communities. We will likely see further lawsuits by resource-poor residents of places from Bangladesh to Puerto Rico that are especially prone to flooding or face heightened danger from sea level rise and severe weather. An equality lens might also encourage litigation in defense of the protest rights of those who do not command the attention of political leaders or the mainstream media and instead must make their voices heard on the streets. And litigation with an equality focus might give force to the call for reparations that descendants of slaves in the Caribbean have been making from private and state actors for the role of sugar cane, and its slave-based model of production, in causing "deforestation for ranches and . . . plantations, [causing] the erosion and loss of fertility of our soils and the loss of valuable protective forestry."³⁹

As it evolves, climate litigation will rightly build on many other fields of jurisprudence. Some of it will succeed in the courtroom, while much of it may contribute to change in other ways. But as the movement for racial justice gathers force, an equality lens offers distinctive political, strategic, and jurisprudential advantages that should not be overlooked.

³⁹ "Caribbean Needs Climate Justice," *The Jamaica Gleaner*, February 27, 2020, <<http://web4.jamaica-gleaner.com/article/news/20200227/earth-today-caribbean-needs-climate-justice>>.

6

Two Reputed Allies

Reconciling Climate Justice and Litigation in the Global South

JUAN AUZ

6.1 INTRODUCTION

Imagine a Bolivian farmer whose livelihood depends on the continuing flow of a river, without which he cannot water his crops. Due to climate change, glaciers that used to feed local rivers are retreating, leading to a substantial reduction in water availability. After a couple of years, the farmer sees in the local newspaper that a fellow citizen, a concerned industrial farmer, won a constitutional lawsuit against the state of Bolivia for failing to meet its state duty to mitigate CO₂ emissions. The court ordered the state to stop producing natural gas as it pollutes the atmosphere and exacerbates the climate crisis. Suddenly, this first lawsuit creates a snowball effect, and people of all ages start to inundate the already cramped and overburdened domestic courts with similar lawsuits. These lawsuits offer a mosaic of legal arguments and are geographically diverse, demonstrating in stark terms how people's homes are almost uninhabitable due to the effects of the climate crisis.

As a result, the state decides to raise taxes, search for new sources of finance to secure public debt, and intensify mining activities to meet its increasing judicial obligations. Does this approach comport with the tenets of climate justice? Is it fair that a country that only marginally contributed to the climate crisis now has to shoulder it? What options, if any, do courts in developing countries have to provide remedies that also tackle climate justice issues?

This chapter will attempt to address these questions.

6.2 UNDERSTANDING CLIMATE LITIGATION IN THE GLOBAL SOUTH

As states' efforts to curb greenhouse gas (GHG) emissions continue to fall short relative to the reductions needed to avoid severe climate

risks,¹ different types of actors are increasingly filing lawsuits before international, regional, and domestic judicial bodies to induce the creation, transformation, and implementation of climate policies.² This area of litigation, which deals with “a wide range of claims with differing degrees of connection to climate change and related issues, such as energy transition, renewable energy use, adaptation policy or climate damage,” is often described as climate litigation.³

The Global South is increasingly the subject of burgeoning scholarly attention as scholars seek to understand the development of climate litigation. Recent studies have offered different approaches to understanding how judicial actors invoke, apply, and shape the law in the Global South.⁴ Jackie Peel and Jolene Lin’s chapter on modes of climate litigation in the Global South (Chapter 9), Arpitha Kodiveri’s chapter on Indian climate litigation (Chapter 20), and Waqqas Mir’s chapter on Pakistani climate litigation (Chapter 22) in this volume are such examples. This recent appetite for a more geographically expansive understanding of climate litigation is arguably a reaction to the relatively meagre number of articles discussing this phenomenon. Setzer and Vanhala’s paper – described as the “first to systematically review key literature on climate change litigation” – draws upon 130 articles written between the years 2000 and 2018 to conclude that only 5 percent of the selected papers have a specific focus on issues related to litigation in the Global South.⁵

¹ See “The Emissions Gap Report 2019” (2019) United Nations Environment Programme, <<https://www.unenvironment.org/resources/emissions-gap-report-2019>>.

² See Sandrine Maljean-Dubois, “Climate Change Litigation,” in *Max Planck Encyclopaedia of Public International Law* (Oxford: Public International Law, 2018).

³ Jacqueline Peel and Hari M. Osofsky, “Litigation as a Climate Regulatory Tool,” in Christina Voigt (ed.), *International Judicial Practice on the Environment* (Cambridge: Cambridge University Press, 2019), p. 314.

⁴ See Jacqueline Peel and Jolene Lin, “Transnational Climate Litigation: The Contribution of the Global South” (2019) 113 *American Journal of International Law* 679; see also Joana Setzer and Lisa Benjamin, “Climate Litigation in the Global South: Constraints and Innovations” (2019) *Transnational Environmental Law* 1; see also Joana Setzer and Lisa Benjamin, “Climate Change Litigation in the Global South: Filling in Gaps” (2020) 114 *AJIL Unbound* 56; see also César Rodríguez-Garavito, “Human Rights: The Global South’s Route to Climate Litigation” (2020) 114 *American Journal of International Law* 1; see also Hari M. Osofsky, “The Geography of Emerging Global South Climate Change Litigation” (2020) 114 *AJIL Unbound* 61; see also Juan Auz, “Global South Climate Litigation versus Climate Justice: Duty of International Cooperation as a Remedy?,” *Völkerrechtsblog*, April 28, 2020 <<https://voelkerrechtsblog.org/global-south-climate-litigation-versus-climate-justice-duty-of-international-cooperation-as-a-remedy/>>.

⁵ Joana Setzer and Lisa C. Vanhala, “Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance” (2019) 10 *Wiley Interdisciplinary Reviews: Climate Change* 1, 4.

In a commendable attempt to address this scholarly vacuum, Peel and Lin's article addresses the contributions of the Global South to transnational climate litigation by identifying common features within the "Global South's docket" of climate lawsuits.⁶ They found that, quite frequently, cases in the Global South place climate change issues at the "periphery" rather than at the center, a strategy that may be linked to the pursuit of more general environmental concerns that can tangentially embed climate change mitigation.⁷ They hypothesize that this approach is the result of the absence, embryonic stage, or lack of implementation of climate law frameworks, thereby pushing climate cases to draw on other laws that apply only indirectly to climate change.⁸

Another noticeable feature of climate cases in the Global South, according to the foregoing literature, is the consistent presence of constitutional and human rights arguments in both the petitions and the judicial decisions.⁹ This is the result of the significant number of countries in the Global South that have enabling constitutional arrangements for human rights protection and associated institutions to fulfill those rights.¹⁰ In that regard, these legal opportunity structures continue to be profoundly relevant for human rights victims, who have historically utilized them to advance their agendas through advocacy and litigation before domestic and regional human rights bodies.¹¹ Human rights and constitutional and environmental law will likely continue to play a role in a context where climate-induced impacts exacerbate existing vulnerabilities stemming from structural inequalities.¹²

Courts in countries such as Pakistan, Colombia, and South Africa have already yielded landmark decisions that elaborate on the contention that state¹³

⁶ Peel and Lin, "Transnational Climate Litigation: The Contribution of the Global South," above note 4, at 679.

⁷ See *ibid.*

⁸ See *ibid.*

⁹ See *ibid.* at 705.

¹⁰ See Setzer and Benjamin, "Climate Litigation in the Global South," above note 4, at 13.

¹¹ See *ibid.*

¹² See Christopher P. O. Reyer et al., "Climate Change Impacts in Latin America and the Caribbean and Their Implications for Development" (2017) 17 *Regional Environmental Change* 1601, 1613.

¹³ See *Ashgar Leghari v. Pakistan*, (2015) Lahore High Court W.P. No. 25501/2015; see also Paola Andrea Acosta Alvarado and Daniel Rivas-Ramírez, "A Milestone in Environmental and Future Generations' Rights Protection: Recent Legal Developments before the Colombian Supreme Court" (2018) 30 *Journal of Environmental Law* 519; see also Marjoné van der Bank and Jaco Karsten, "Climate Change and South Africa: A Critical Analysis of the *Earthlife Africa Johannesburg and Another v. Minister of Energy and Others* 65662/16 (2017) Case and the Drive for Concrete Climate Practices" (2020) 13 *Air, Soil and Water Research* 1.

failure to implement mitigation or adaptation policies sufficient to avoid or reduce climate-related harm violates fundamental rights enshrined in constitutions and international human rights treaties.¹⁴ More generally, climate litigation in the Global South tends to involve the implementation and enforcement of climate-related policies, combined with the application and enforcement of existing and well-established non-climate legislation and jurisprudence.¹⁵

In many of these cases, courts not only accepted the rights-based arguments of the plaintiffs, they also designed and provided remedies, including injunctions against the defendant state and specific measures aimed at ceasing or preventing the harm at issue.¹⁶ In cases in Colombia and Pakistan, the defendant states were compelled to create specialized boards, composed of government officials in liaison with civil society organizations, to enforce extant policies through specific action plans targeting climate change concerns.¹⁷

6.3 PROBLEMATIZING REMEDIES IN GLOBAL SOUTH CLIMATE CASES

Though Global South courts might appear to provide comprehensive, proportionate, and context-specific remedies in climate cases, these cases nevertheless reveal a tension between climate justice and litigation outcomes. In short, the problem is that when Global South litigators win cases based on human rights and constitutional law against defendant states, those states then need to offer remedies despite the fact that they did not engender nor substantially further the global climate crisis as major global GHG emitters.¹⁸ On the contrary, these states are disproportionately impacted by it.¹⁹ Moreover, these same countries often have saturated judicial systems, which often do not

¹⁴ See Annalisa Savaresi and Juan Auz, “Climate Change Litigation and Human Rights: Pushing the Boundaries” (2019) 9 *Climate Law* 244.

¹⁵ See Peel and Lin, “Transnational Climate Litigation,” above note 4, at 725.

¹⁶ See *Greenpeace et al v. Mexico* [2020] Juez Segundo de Distrito en Materia Administrativa Especializado en Competencia Económica, Radiodifusión y Telecomunicaciones 104/2020.

¹⁷ See Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala de Casación Civil, abril 5, 2018, M.P.: L.A. Tolosa Villabona, Expediente 11001-22-03-000-2018-00319-01 (Colom.); *Ashgar Leghari v. Federation of Pakistan*, above note 13.

¹⁸ See M. J. Mace and Roda Verheyen, “Loss, Damage and Responsibility after COP21: All Options Open for the Paris Agreement” (2016) 25 *Review of European, Comparative & International Environmental Law* 197, 212.

¹⁹ See Glenn Althor et al., “Global Mismatch between Greenhouse Gas Emissions and the Burden of Climate Change” (2016) 6 *Scientific Reports* 1.

possess the structural capabilities to implement ambitious and comprehensive climate-related remedies.²⁰

This remedy conundrum is likely to resurface before international and regional human rights bodies as well, when they decide their first climate case based on human rights law. Granting reparations for climate-related harms is a currently unresolved issue for these bodies, but one that soon might come to fruition. The surge of domestic climate cases and recent jurisprudential developments that address the linkages between environmental harm, climate change, and human rights are becoming parameters that international adjudicative bodies use to inform their decisions. This trend may not only clarify questions related to state responsibility for environmental damage amounting to wrongful acts under international human rights law,²¹ it may also raise questions about whether state responsibility should be calibrated when the defendant state has contributed the least to a multicausal source of harm, like a developing nation in the context of climate change.

The latest decisions by the UN Human Rights Committee are potential harbingers of the harmonization of international law and the calibration of state responsibility. In the *Teitiota v. New Zealand* case, the applicant did not convince the treaty body that climate change poses an “imminent” risk amounting to a “personal” violation of the right to life. However, the Committee did acknowledge for the first time in an individual complaint that “climate change constitutes extremely serious threats to the ability of both present and future generations to enjoy the right to life.”²² To reach its decision, the Committee cited relevant and similar claims from the Inter-American Court of Human Rights and the African Commission on Human and People’s Rights.²³ This case opened a window of opportunity for future victims of climate change from developing countries, whose chances of success in litigation against a developed country for failing to act on climate change are increasing.

In *Portillo Cáceres v. Paraguay*, the Committee stressed that states should address environmental pollution as one of the general conditions in society

²⁰ See Antonio Herman Benjamin and Nicholas Bryner, “Brazil,” in Emma Lees and Jorge E. Viñuales (eds.), *The Oxford Handbook of Comparative Environmental Law* (Oxford: Oxford University Press, 2019), p. 98.

²¹ See Margaretha Wewerinke-Singh, *State Responsibility, Climate Change and Human Rights under International Law* (Oxford: Hart, 2019), p. 88.

²² *Teitiota v. New Zealand*, Views adopted by the Committee under article 5(4) of the Optional Protocol, UN Human Rights Committee, Annex 2, at ¶14, UN Doc. CCPR/C/127/D/2728/2016 (2020).

²³ See *ibid.* ¶10.

that may give rise to threats to the right to life.²⁴ In that vein, the Committee deemed that states are responsible for the violation of the right to life if environmental harm is a “reasonably foreseeable threat” to the right. The Committee enumerated manifold instances in which this threat manifests, including river pollution and previous government reports recognizing the danger agrochemical fumigation poses to human health.²⁵ Ultimately, the Committee ordered full reparations for the victims, including adequate compensation and the prevention of similar violations in the future.²⁶ In contrast to *Teitiota*, this case did pass the “reasonably foreseeable threat” test because the evidence was overwhelming, which paves the way for applicants from developing countries to succeed in suing their own states before the Committee on climate change grounds if the test requirements are met.

Eventually, if a climate case follows the steps of *Portillo Cáceres v. Paraguay*, and it succeeds before an international human rights body, it will most likely follow the seminal *restitutio in integrum* standard set forth by the Inter-American Court of Human Rights in *Velasquez Rodríguez v. Honduras* for indemnification for pecuniary and non-pecuniary damages.²⁷ The conundrum with this is that these judicial and quasi-judicial bodies might order developing states like Paraguay, which contribute the least to climate change, to compensate victims, the cost of which will ultimately be borne by taxpayers – people who will also suffer the impacts of the climate crisis within the same state.

With this, I am not suggesting that the international community should exempt developing or vulnerable countries from their human rights duties; I am, however, urging consideration of some legitimate climate justice arguments and the problem they raise for remedies in the context of Global South climate litigation. The emerging scientific consensus in the late 1980s around the role of GHG emissions in altering the global climate system raised complex questions of responsibility and justice, including with regard to the huge variations in the contribution and vulnerability to climate change among and within nations. This, in turn, generated discussions on the mismatch

²⁴ See *Portillo Cáceres v. Paraguay*, Views adopted by the Committee under article 5(4) of the Optional Protocol, UN Human Rights Committee, ¶7.3, UN Doc. CCPR/C/126/D/2751/2016 (2019).

²⁵ See *ibid.* ¶7.5.

²⁶ See *ibid.* ¶9.

²⁷ See *Velasquez-Rodríguez v. Honduras*, Merits, Inter-Am. Ct. H.R. (ser. C) No. 04 (July 29, 1988).

between the modest contribution of developing countries to the crisis and the onerous burden of the impacts they must endure, therefore suggesting that industrialized countries are the polluters who must pay for the global environmental damage or at least support those who did not significantly benefit from a carbon-intensive economy.²⁸

In light of the above, remedies ordered by domestic courts and international human rights bodies might benefit from addressing the complex and multi-layered nature of the climate crisis and its accompanying questions of justice. Some hints of how these questions operate in practice can be found in the international climate regime, which captures a panoply of ethical principles that can shed light on the justice puzzle or at least serve as an orienting reference point. These ethical principles include, for example, the principle of “common but differentiated responsibility” (CBDR) and the values underpinning the inclusion of “loss and damage” mechanisms to compensate developing countries in the event of irreversible climate impacts.²⁹ All of these are potential instruments for Global South adjudicators to help them situate localized impacts within a multi-scalar chain of climate change responsibility.

Furthermore, it should be noted that, despite the role that litigation has played as a tool for political change, countries in the Global South are already reducing their heavy reliance on a fossil fuel economy and starting decarbonization programs as a way to reduce their GHG emissions and acquire new forms of energy sovereignty.³⁰ This suggests that these countries question their carbon-intensive mode of production because of the likelihood of stranded assets and the human rights and environmental impacts that local communities have historically endured.³¹ This situation may lead climate litigation to be reframed as a way to accelerate this pathway toward decarbonization while guaranteeing that the deployment of renewable energy projects respect human rights.

²⁸ See Philip Coventry and Chukwumerije Okereke, “Climate Change and Environmental Justice,” in Ryan Holifield et al. (eds.), *The Routledge Handbook of Environmental Justice* (Oxford: Routledge, 2017), p. 363.

²⁹ *Ibid.* at 369.

³⁰ See Inter-American Development Bank and Deep Decarbonization Pathways for Latin America and the Caribbean, “Getting to Net-Zero Emissions: Lessons from Latin America and the Caribbean” (2019) Inter-American Development Bank 14, 28.

³¹ See Kyra Bos and Joyeeta Gupta, “Stranded Assets and Stranded Resources: Implications for Climate Change Mitigation and Global Sustainable Development” (2019) 56 *Energy Research & Social Science* 1.

6.4 ADJUDICATIVE BODIES: ORDERING STATES TO ENGAGE IN INTERNATIONAL COOPERATION?

Those judicial and quasi-judicial bodies, at both the national and international level, that have to determine whether the violation of a right was sufficiently evident to generate responsibility need to engage in and apply interpretive methods aimed at promoting the effective application (*effet utile*) of the law.³² One of these interpretive methods involves looking at the law as a teleological undertaking, whereby judges can instill an updated meaning to a specific state duty by connecting the law's provisions and principles with the broader societal context and subsequent practice. This thus allows judges to cautiously fill in gaps in the normative realm.³³

In employing a teleological or purposive method of interpretation, domestic and human rights courts can reinvigorate states' international obligations to cooperate with each other as a way of ensuring non-repetition of harm.³⁴ Recognition that the main structural obstacle to compliance by developing countries with a potential climate-related judgment is the lack of expertise and resources – both financial and technical – serves as the main rationale for this approach. In other words, courts could anticipate a potential non-compliance scenario due to systemic barriers and thus resort to interpretive techniques to design context-specific remedies.

More concretely, courts could establish obligations requiring states to do their best to cooperate with other states or multilateral institutions to protect the rights of their citizens from climate-related harm.³⁵ Ultimately, the formulation of a remedy that integrates a duty to cooperate internationally, indirectly addresses climate justice. Indeed, the defendant state could be mandated to perform its best when it comes to finding international assistance and cooperation, particularly with those states that pollute the most or with financial institutions that might provide appropriate funding.

³² See Lucas Lixinski, "Treaty Interpretation by the Inter-American Court of Human Rights: Expansionism at the Service of the Unity of International Law" (2010) 21 *European Journal of International Law* 585, 589.

³³ See Odile Ammann, *Domestic Courts and the Interpretation of International Law: Methods and Reasoning Based on the Swiss Example* (Leiden: Brill Nijhoff, 2020).

³⁴ See Dinah Shelton, *Remedies in International Human Rights Law*, 3rd ed. (Oxford: Oxford University Press, 2015), p. 397.

³⁵ See Benoit Mayer, "Obligations of Conduct in the International Law on Climate Change: A Defence" (2018) 27 *Review of European, Comparative & International Environmental Law* 130, 140.

Article 1(1) and (3) of the United Nations Charter³⁶ and Article 2(1) of the International Covenant on Economic, Social and Cultural Rights (ICESCR) offer essential doctrinal direction in this regard. The ICESCR, more specifically, lays out the duty of states “to take steps . . . through international assistance and co-operation, especially economic and technical . . . with the view to achieving progressively the full realization of . . . rights.”³⁷ In connection with this, the ICESCR’s treaty body specified in its General Comment No. 3 that international cooperation is an obligation of all states,³⁸ an approach that resonates with Article 4 of the United Nations Framework Convention on Climate Change (UNFCCC) and Article 12 of the Paris Agreement.³⁹

Moreover, adjudicative bodies could invoke these sources of international law as persuasive authority to interpret and inform the remedies they issue. In doing so, they could communicate to states that while they are not exclusively responsible for the drivers of climate change that ultimately lead to human rights violations, they nonetheless have obligations to take all appropriate measures to bridge the resource gap. This entails proactively pursuing cooperation to redress violations and ensure non-repetition. Additionally, judges could also draw from the reporting obligations under Article 13 (10) of the Paris Agreement, particularly with respect to providing information on the support needed for finance, technology transfer, and capacity building.

Notably, UN treaty bodies are already framing the obligation to cooperate in the context of climate change as a human rights duty. For instance, in 2018, the Committee on the Elimination of Discrimination against Women (CEDAW) stressed in its General Recommendation No. 37 on gender in the context of climate change that an “adequate and effective allocation of financial and technical resources for . . . climate change prevention, mitigation and adaptation must be ensured both through national budgets and by

³⁶ See United Nations, *Charter of the United Nations and Statute of the International Court of Justice* (New York: United Nations, 2015).

³⁷ United Nations, ‘Official Documents United Nations Human Rights Covenants: International Covenant on Economic, Social and Cultural Rights, International Covenant on Civil and Political Rights, Optional Protocol to the International Covenant on Civil and Political Rights’ (1967) 61 *American Journal of International Law* 861.

³⁸ See UN Committee on Economic, Social and Cultural Rights, CESCR General Comment No. 3: The Nature of States Parties’ Obligations, UN Doc. E/1991/23, at ¶13 (1990).

³⁹ See United Nations Framework Convention on Climate Change, Rio de Janeiro, May 9, 1992, 1771 UNTS 107; see also Paris Agreement to the United Nations Framework Convention on Climate Change, Paris, Dec. 12, 2015, TIAS No. 16-1104.

means of international cooperation.”⁴⁰ The same year, CEDAW and the Committee on the Rights of the Child (CRC) published their Concluding Observation on the report of the Marshall Islands and Palau respectively, which nicely capture the very spirit of the envisaged formulation for future remedies. CEDAW recommended that the state “seek international cooperation and assistance, including climate change financing, from other countries, in particular the United States, whose extraterritorial nuclear testing activities have exacerbated the adverse effects of climate change and natural disasters in the State party.”⁴¹ The CRC used a similar approach.⁴²

As trite and redundant as it might seem, it is important to emphasize that the boldness of courts in interpreting state duties and designing remedies cannot wholly replace multilevel climate governance. Undeniably, turning the duty to cooperate into a judicial remedy might reproduce the very same limitations that multilateral negotiations face when fleshing out some of the principles of the climate regime. For instance, contentious cases could mirror, at a smaller scale, how states at multilateral climate negotiations often cannot agree on the details of certain provisions of principles, such as the principle of common but differentiated responsibilities.⁴³ However, when courts impose a specific remedy to cooperate, the scope of diplomatic maneuver for states narrows, and what otherwise is a nebulous obligation to cooperate has the potential to become a concrete one, in particular, with judicial follow-up and the imposition of deadlines. Additionally, this model, whereby courts adopt and interpret international cooperation to guide their decisions, may also be applied in Global North jurisdictions, especially if victims from the Global South pursue extraterritorial climate litigation and demand financial contributions, technology transfer, and capacity building.

Another potential drawback is the foreseeable allegation that courts may be acting beyond their mandate, thus encroaching on the role of other branches of government with long-standing legitimacy and authority in matters of cooperation. Nevertheless, most of the time, courts do have the authority to

⁴⁰ Committee on the Elimination of Discrimination Against Women, General Recommendation No. 37 on Gender-Related Dimensions of Disaster Risk Reduction in the Context of Climate Change, UN Doc. CEDAW/C/GC/37, at ¶45 (2018).

⁴¹ Committee on the Elimination of Discrimination Against Women, Concluding Observations on the Combined Initial to Third Periodic Reports of the Marshall Islands, UN Doc. CEDAW/C/MHL/CO/1-3, ¶45 (2018).

⁴² See Committee on the Rights of the Child, Concluding Observations on the Second Periodic Report of Palau, UN Doc. CRC/C/PLW/CO/2, at ¶49 (2018).

⁴³ See Benoît Mayer, *The International Law on Climate Change* (Cambridge: Cambridge University Press, 2018), p. 101; see also Daniel Bodansky et al., *International Climate Change Law* (Oxford: Oxford University Press, 2017), p. 128.

interpret the law to set minimum obligations with an ample margin of discretion that avoids the *trias politica*, an argument that has been immortalized in the *Urgenda v. Netherlands* case.⁴⁴ However, assuming that the separation of powers argument hinders a more comprehensive judgment, the judge could order the continuation of the carbon-intensive activity under the condition that high levels of pollution are reduced and compensation is paid for the damage inflicted. The result may be different, and more optimistic, if the case deals with the early stages of a new carbon-intensive project.

6.5 CONCLUSION

Litigants in the Global South are actively drawing on human rights law to demand more just and more ambitious climate action. Yet the traditional human rights approach to reparations, which enables victims to seek restitution from their own state, requires alteration since developing states are not fully responsible for the adverse effects of climate change. As a result, I have suggested that adjudicative bodies might address this remedy conundrum by integrating international cooperation as an obligation of conduct into their rulings. In so doing, they could instruct states to do their utmost to seek suitable resources, especially from more affluent countries, to protect those human rights threatened or encroached upon by climate change. UN human rights treaty bodies are already delineating such approach, though it could benefit from more granularity.

Global South nations can and should implement mitigation projects and policies that go hand in hand with just transition models, especially from a perspective of restorative and distributive justice. To support the latter in litigation, judges should incorporate considerations of historical responsibility into their deliberations, which would also ideally be incorporated into a specific mandate within their rulings. In light of the global, interdependent, and complex dimensions of climate change, this chapter aimed to highlight the risks that the implementation of climate change response measures, especially if designed without a human rights perspective, pose to the rights of local communities. After all, instituting a production and energy system that does not depend on fossil fuels does not necessarily preclude market abuses, which would inevitably generate negative externalities for local communities. The problem here is that any development model, including the extractivist model, can be framed as a sustainable one, without that being true in practice.

⁴⁴ See *Urgenda Foundation v. Netherlands*, Hof's-Gravenhage 9 oktober 2018, AB 2018, 417 m.nt. GA van der Veen, Ch.W. Backes (Staat der Nederlanden/Stichting Urgenda).

It is also important to underscore that the adoption of mitigation measures through a court order and at the expense of citizens' budgets is not the real predicament; the challenge, instead, is the prospect of it being done in such a way that reproduces the features of the current extractivist model without any corrective actions. I have proposed in this chapter that it is the role of the judge to formulate alternatives to correct certain distortions of the principles of environmental or climate justice that, in my opinion, is skewed when global and historical dimensions are not part of the formula. If the judge does weigh these dimensions of complexity, it would be most reasonable to interpret the polluter-pays principle in light of the principle of common but differentiated responsibilities. In this way, state responsibility for the climate crisis would include its obligation to seek the necessary means to address the climate crisis without compromising its ability to guarantee the rights of its citizens.

Incorporating the obligation to cooperate with judgments in the Global North is also important, especially in future cases that may arise around extraterritorial obligations. Moreover, given that litigation in the Global South is just beginning to take off, judges from both the Global North and Global South should approach climate litigation from a more holistic perspective. In short, I believe that transferring discussions on general principles of climate law, prevalent at the international level, to the domestic jurisdictions can provide new normative tools to help materialising the Global South's justice aspirations.

Staying within Atmospheric and Judicial Limits

Core Principles for Assessing Whether State Action on Climate Change Complies with Human Rights

SOPHIE MARJANAC AND SAM HUNTER JONES

7.1 INTRODUCTION

We have a right to practise our culture and to practise it here, in our traditional homeland, where we belong. Our culture has a value to us that no money could ever compensate for. Our culture starts here on the land. It is how we are connected with the land and the sea. You wash away the land and it is like a piece of us you are taking away from us. The impact of climate change on our culture – sea levels rising, coastal erosion, the effect of climate change and coral bleaching on our practices connected with the sea – it is beyond one's understanding.

Kabay Tamu (Warraber)

Climate change threatens human rights around the world by increasing the frequency and intensity of extreme weather events and through the degradation of the environmental resources on which human populations depend.¹ For some particularly vulnerable populations, however, climate

¹ The most comprehensive and internationally accepted assessments of the science of climate change are those of the Intergovernmental Panel on Climate Change (IPCC), an international organization established in 1988 that has 195 member States. The IPCC issues assessment reports synthesizing the state of knowledge in the field of climate change science. At the time of writing, the most recent was its Fifth Assessment Report (AR5) issued in 2014. The AR5 finds that climate change will have the following effects on human systems: it is very likely that heat waves will occur more often and last longer and that extreme precipitation events will become more intense and frequent in many regions. The ocean will continue to warm and acidify, and global mean sea level will rise. Low-lying areas are at risk from sea-

change represents a critical and immediate threat to both their subsistence and their way of life. Indigenous Australians living on the tiny, remote islands of the Torres Strait are already living with the effects of climate change, with sea level rise literally eroding their cultural heritage and threatening their most basic fundamental human right – their right to enjoy and subsist from their territorial homeland.

This chapter begins by discussing the approach to interpreting and applying human rights law taken in a communication to the Human Rights Committee by a group of Torres Strait Islanders against their home state, Australia. The Islanders allege that by failing to implement sufficient climate change policies, Australia has failed to respect and ensure the protection of their civil and political rights guaranteed by the International Covenant on Civil and Political Rights (ICCPR). Specifically, they allege infringements of the right to life, the right to protection from arbitrary or unlawful interference with privacy, family and home, the rights of the child, and the right of minorities to enjoy and practise their culture (Articles 6, 17, 24, and 27 of the ICCPR).

level rise, which will continue for centuries even if global mean temperature is stabilized (high confidence). It is virtually certain that global mean sea-level rise will continue for many centuries beyond 2100 (the amount will depend on future emissions). Over the course of the twenty-first century, climate change is expected to lead to increases in ill-health in many regions, especially in developing countries with low incomes (high confidence). The negative impacts of climate change on crop yields, across a wide range of regions and crops, have been more common than positive impacts (high confidence). Climate change is projected to increase risks in urban areas for people, assets, economies, and ecosystems, including from heat stress, storms and extreme precipitation, inland and coastal flooding, landslides, air pollution, drought, water scarcity, sea level rise, and storm surges (very high confidence). These risks are amplified for those lacking essential infrastructure and services or living in exposed areas. See 'Climate Change 2014: Synthesis Report (AR5 Synthesis Report)' (2014) Intergovernmental Panel on Climate Change (IPCC) 4, 6, 8, 10, 13, 15–16. The more recent IPCC Special Report on Global Warming of 1.5°C, published in October 2018, describes the 'robust differences' in climate impacts between present-day warming and warming of 1.5°C and between 1.5°C and 2°C. See 'Special Report on Global Warming of 1.5°C (SR15) (Summary for Policymakers, B.1)' (2018) Intergovernmental Panel on Climate Change (IPCC). It finds that 'limiting global warming to 1.5°C, compared with 2°C, could reduce the number of people both exposed to climate-related risks and susceptible to poverty by up to several hundred million by 2050' (ibid. B.5.1) and that 'there are limits to adaptation and adaptive capacity for some human and natural systems at global warming of 1.5°C, with associated losses' (ibid. B.6).

Although there is growing state,² judicial,³ institutional,⁴ and academic⁵ acceptance of states' responsibilities to guarantee protection from climate change-related harms under human rights law, there has been more limited discussion of how in practice courts (and other bodies) might approach adjudicating the effectiveness of states' climate policies. We have therefore sought in this chapter to outline possible approaches that judges and other adjudicators can take in this context, with a focus on certain 'core' assessment criteria that should be capable of near-universal application, that is, even in jurisdictions with the strongest separation of the judicial and political branches of the state. Many jurisdictions or fora may well provide scope for more intense and detailed legal scrutiny, but this chapter seeks to explore principles of general application across legal systems.

As we will explain, the task of assessing state action on climate change is aided by the comprehensive system of greenhouse gas accounting and reporting under the United Nations Framework Convention on Climate

- ² In December 2019, at the 25th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) (COP25), Chile, Costa Rica, Fiji, Luxembourg, Mexico, Monaco, Nigeria, Peru, Sweden, Slovenia, Spain, and Uruguay signed a Declaration on Children, Youth and Climate Action, acknowledging the negative impacts of climate change on children's rights and that 'a safe climate is a vital element of the right to a safe, clean, healthy and sustainable environment and is essential to human life and well-being'. See details at 'Declaration on Children, Youth and Climate Action', Children's Environmental Rights Initiative, <<https://www.childrenenvironment.org/declaration-children-youth-climate-action>>.
- ³ See HR 20 december 2019, 41 NJ 2020, m.nt. J.S. (Urgenda/Netherlands) (Neth.) (hereinafter *Urgenda*); See *Föreningen Greenpeace Norden v. Norway*, 18-060499ASD-BORG/3 at 20 (23.01.2020) (Borgarting Lagmannsrett).
- ⁴ See 'Understanding Human Rights and Climate Change' (2015) Office of the High Commissioner for Human Rights (OHCHR), <<https://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf>>; see also Committee on the Elimination of Discrimination Against Women, Committee on Economic, Social and Cultural Rights, Committee on the Protection of the Rights of All Migrant Workers and Members of their Families, Committee on the Rights of the Child, and Committee on the Rights of Persons with Disabilities, 'Joint Statement on Human Rights and Climate Change', United Nations Human Rights, 16 September 2019, <<https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=24998&LangID=E>>; see also Special Rapporteur on Human Rights and the Environment 'Safe Climate: A Report of the Special Rapporteur on Human Rights and the Environment' (2019) UN Human Rights, <<https://www.unenvironment.org/resources/report/safe-climate-report-special-rapporteur-human-rights-and-environment>>.
- ⁵ See Margaretha Wewerinke-Singh, *State Responsibility, Climate Change and Human Rights Under International Law* (Oxford: Hart, 2018); see also Alan Boyle, 'Climate Change, the Paris Agreement and Human Rights' (2018) 67 *International and Comparative Law Quarterly* 759; see also John Knox 'Human Rights Principles and Climate Change,' in Kevin R. Grey et al. (eds.), *Oxford Handbook of International Climate Change Law* (Oxford: Oxford University Press, 2016); see also Kate Cook, 'A Mutually Informed Approach: The Right to Life in an Era of Pollution and Climate Change' (2019) 24 *European Human Rights Law Review* 274.

Change (UNFCCC) and, in particular, by the terms of the 2015 Paris Agreement,⁶ which sets an overarching global temperature goal and requires state signatories to ensure that their emission reduction policies reflect their ‘highest possible ambition’.⁷ We argue that these generally accepted legal, as well as technical and scientific, frameworks give judges and other adjudicators a reliable basis on which to assess a state or public body’s climate policy and compliance with international, regional, or domestic human rights law. In particular, ‘due diligence’ principles and internationally accepted climate change science allow human rights courts and other adjudicators to develop and apply coherent and objective assessment criteria, something that they are well used to doing in relation to other rights violations.

Before turning to these general principles, we discuss a recent case – brought against Australia by a group of Torres Strait Islanders – to illustrate both (i) the wide range of human rights that can be, and are already being, affected by climate change and (ii) how well-established human rights law principles can be used to judge the adequacy of states’ climate policy.

7.2 THE TORRES STRAIT CLIMATE CASE

On 13 May 2019, eight individuals (formally called ‘authors’) filed a communication under the Optional Protocol to the ICCPR with the United Nations Human Rights Committee (HRC), both on their own and on behalf of six of their minor children. The authors are from four small low-lying island communities (Boigu, Poruma, Masig, and Warraber) in the Torres Strait region, which is a narrow strip of sea between the State of Queensland and Papua New Guinea. Torres Strait Islanders are, together with mainland Aboriginal peoples, recognized as Australian first nations indigenous peoples, with their traditional rights to land ownership recognized by the Australian government and in Australian law.⁸ The authors’ ancestors have inhabited their islands for

⁶ See the Paris Agreement under the United Nations Framework Convention on Climate Change, Art. 13, 12 December 2015, TIAS No. 16-1104.

⁷ These are known as ‘Nationally Determined Contributions’ (NDCs) per Article 4 of the Paris Agreement. Each State party must submit an updated, and increasingly ambitious, NDC every five years as part of the global stocktake established by Articles 4(9) and 14. As Professor Alan Boyle argues: ‘the Paris Agreement is important precisely because it provides a clearer yardstick by which to measure ... detrimental [environmental and human rights] impact than previous climate change agreements have done’. Alan Boyle, ‘Climate Change, the Paris Agreement and Human Rights’ (2018) 67 *International and Comparative Law Quarterly* 759.

⁸ See *Mabo v. State of Queensland (No 2)*, [1992] 175 CLR 1; see also *Native Title Act 1993* (Cth) (Austl.).

over 9,000 years, developing a deep spiritual connection to their lands and a rich and vibrant cultural tradition that is still proudly practised today.⁹

The effects of climate change on the authors, their children, and their communities are severe and predicted to worsen. Each of the authors' home islands are between approximately three and ten metres above sea level, and some are already subject to regular inundation at the highest tides. Expert scientific evidence predicts that the continued viability of each island community will be threatened in the next ten to thirty years, primarily due to sea level rise, which will cause unavoidable saltwater incursion into critical infrastructure, including that related to water supplies and sewerage. Residents currently experience anxiety as inundation and storm surges erode their lands, damaging important cultural heritage sites, such as cemeteries and burial grounds, as well as gardens and homes. Elders also speak with remarkable consistency about the impact of a changing climate on seasonal patterns and traditional ways of life, which are deeply intertwined with the predictable rhythms of weather and the associated cycles of local flora and fauna. Coral bleaching has also affected critical marine resources, such as the fisheries on which islanders depend for subsistence, and the region's main industry, the tropical rock lobster (*panulirus ornatus*) fishery. It is also further depleting endangered turtle and dugong populations, which are important animals to Torres Strait Islanders spiritually, culturally, and ceremonially.¹⁰

All of the authors have provided evidence to the HRC that the degradation of natural sea and land resources is causing an irreparable loss of culture, damaging their sense of dignity and identity as a people, and affecting their ability to pass their culture on to their children. The evidence provided to the HRC describes in detail how damage to biodiversity and the disruption of predictable seasonal patterns affects traditional ecological knowledge, which is the fundamental basis of the authors' unique culture. Author Keith Pabai of Boigu summarizes the deep connection of the authors to their lands and the interdependency between the people and the natural environment of the islands:

we as a people are so connected to everything around us. The Island is what makes us, it gives us our identity. We know everything about the

⁹ See, e.g., 'Culture Art and Heritage', Torres Strait Regional Authority (TSRA), <<http://www.tsra.gov.au/the-tsra/programmes/culture-arts-and-heritage/>>; see also Gab Titui Cultural Center, <<http://www.gabtitui.gov.au/>>.

¹⁰ 'Torres Strait Climate Change Strategy 2014–18: Building Community Adaptive Capacity and Resilience' (2014) Torres Strait Regional Authority, <http://www.tsra.gov.au/__data/assets/pdf_file/0003/7419/TSRA-Climate-Change-Strategy-2014-2018-Upload4.pdf>.

environment on this island, the land, the sea, the plants, the winds, the stars, the seasons Our whole life comes from the island and the nature here, the environment. It is a spiritual connection. We know how to hunt and fish from this island – to survive here. We get that from generations of knowledge that been passed down to us. I know every species of plant, animal, wind on this island, the way the vegetation changes, what to harvest at different times of the year. That is the cultural inheritance we teach our children. It is so important to us, this strong spiritual connection to this island, our homeland.

The authors' claim is also supported by evidence that erosion due to rising seas and storm surges is impacting cultural heritage, including recent damage to ancient graves and cemeteries, coconut plantations, and other important community sites and resources. The damage to cemeteries and graves is particularly acute and distressing for Torres Strait Islanders, who have cultural obligations to tend to and protect their ancestors' graves.

Finally, the authors' evidence also explains how forced displacement and dispossession due to rising seas would cause an irreparable loss of culture and damage to their sense of identity as Indigenous people, expressed by Yessie Mosby of Masig as follows:

our land is the string connecting us to our culture. It ties us to who we are. If we were to have to move we would be like helium balloons disconnected from our culture. Our culture would become extinct. We would be a dying race of people.

Given the severity of the situation, the Torres Strait Regional Authority (TSRA), an Australian government organ based in the region, warns that climate change threatens 'a looming human rights crisis' for the Torres Strait.¹¹

The authors allege that Australia is obliged under the ICCPR to ensure that their rights are protected by (i) adopting policies and measures that facilitate their safe continued habitation of the islands by protecting their islands from rising seas and other climate impacts (the Adaptation Claim) and (ii) adopting and implementing sufficient national emission reduction policies to address the cause of the issue (the Mitigation Claim).

In relation to the Adaptation Claim, the authors argue that the State party must, at a minimum:

¹¹ *Ibid.* iii.

- immediately provide AUD \$20 million of emergency sea wall funding requested by the Torres Strait Island Regional Council (which was promised by the Australian government on 18 December 2019);¹²
- commission a comprehensive and fully costed study of all coastal defence and resilience measures available in respect of each island, with the primary objective being to avoid the communities' forced displacement from their islands and to minimize erosion and inundation as far as possible; and
- implement fully and expeditiously coastal defense and resilience measures based on that study in consultation with the island communities, while monitoring and reviewing the effectiveness of those outcomes and resolving any deficiencies as soon as practicable.¹³

In relation to the Mitigation Claim, they argue that Australia must, at a minimum:

- remain a party to the UNFCCC and the Paris Agreement and participate in good faith in the processes and mechanisms established therein, cooperating with other countries in order to achieve the temperature and emissions reduction goals in Articles 2 and 4 of the Paris Agreement;
- comply with the terms of the Paris Agreement and accordingly increase its nationally determined contribution (NDC) in 2020 in line with an assessment of all appropriate means available, applying its maximum available resources. In line with the advice of the Australian Climate Change Authority, this should result in an increase from the current target of between 26 and 28 per cent below 2005 levels by 2030 to at least 65 per cent by 2030 and net zero by 2050;¹⁴

¹² Shahni Wellington, 'Funding to Build Seawalls in the Torres Strait, amidst Calls for Climate Change Action', National Indigenous Television, 22 December 2019, <<https://www.sbs.com.au/nitv/article/2019/12/22/funding-build-seawalls-torres-strait-amidst-calls-climate-change-action>>.

¹³ Of the 127 adaptation tasks identified in the Torres Strait Regional Adaptation and Resilience Plan 2016–2021, 5 had been completed, 58 were partially complete, and 59 had not commenced.

¹⁴ On 31 December 2020, the Australian Government submitted its updated NDC to the UNFCCC, without an increase in its 2030 target or any strategy or long-term target for 2050. See: <<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Australia%20First/Australia%20NDC%20recommunication%20FINAL.PDF>>. The Climate Action Tracker found that despite Australia's submission claiming that it will 'overachieve' its current target, this 'has little or no basis in fact'. See 'Australia repeats old target with no increase in ambition', Climate Action Tracker, <<https://climateactiontracker.org/climate-target-update-tracker/australia/>>.

- put in place and pursue measures (including laws, policies, and practices) that are sufficient to achieve its NDC (without carrying over credits from the Kyoto Protocol regime);¹⁵ and
- cease all policies actively promoting the use of thermal coal in electricity generation (both domestically and internationally) and phase out all coal mining as soon as possible (taking into account the need for a just transition for coal mining communities).

The communication also includes detailed submission and authoritative expert evidence demonstrating that Australia is a global ‘climate laggard’ when compared to other countries of similar size and wealth. As reflected in the authors’ Mitigation Claim, the claim also relies in part on recommendations made by the Climate Change Authority, an independent statutory authority established to advise the Australian government on climate change policy. In July 2015, ahead of the Conference of the Parties at which the Paris Agreement was reached (and at which the ‘highest possible ambition’ standard was set), the Authority recommended that Australia pursue an emissions reduction target for 2030 of between 45 and 65 per cent below 2005 levels. The Authority concluded that such a target would be both fair and feasible, and ‘no more challenging than the targets many other developed countries have been pursuing’.¹⁶

The communication argues that in order to meet their human rights obligations under the ICCPR in the context of climate change, states must – at a minimum¹⁷ – comply with applicable international climate change law, being the UNFCCC and Paris Agreement. The communication argues that these international law regimes should inform the Committee’s interpretation and application of the ICCPR, applying Article 31(3)(c) of the Vienna

¹⁵ See Ben Doherty, ‘Australia Won’t Use Kyoto Carryover Credits to Meet Paris Climate Targets, Scott Morrison Confirms’, *The Guardian*, 11 December 2020, <<https://www.theguardian.com/world/2020/dec/11/australia-wont-use-kyoto-carryover-credits-to-meet-paris-climate-targets-scott-morrison-confirms>>.

¹⁶ See Australia Climate Change Authority, ‘Final Report on Australia’s Future Emissions Reductions Targets,’ (2015) Australian Government 6 and figure 2, <<https://www.climatechangeauthority.gov.au/news/final-report-australias-future-emissions-reduction-targets>>.

¹⁷ This is further reinforced in this case by the science on 1.5°C of warming and its impact on the population of the Torres Strait Islands. In addition to local impact reports and projections, this is also reflected in the most recent international science: see, e.g., IPCC, ‘Special Report on Global Warming of 1.5°C’, above note 1, Summary for Policymakers, B.6.2: ‘Some vulnerable regions, including small islands and Least Developed Countries, are projected to experience high multiple interrelated climate risks even at global warming of 1.5°C (high confidence).’

Convention on the Law of Treaties.¹⁸ The communication also argues that the Committee's approach to assessing compliance with the ICCPR should be informed by general norms of international law, including the precautionary principle and due diligence standard. This is in line with the clear guidance provided by the HRC's General Comment 36 on the Right to Life, finalized in October 2018, which states that:

Environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life. The obligations of States parties under international environmental law should thus inform the content of article 6 of the Covenant, and the obligation of States parties to respect and ensure the right to life should also inform their relevant obligations under international environmental law. Implementation of the obligation to respect and ensure the right to life, and in particular life with dignity, depends, inter alia, on measures taken by States parties to preserve the environment and protect it against harm, pollution and climate change caused by public and private actors. States parties should therefore ensure sustainable use of natural resources, develop and implement substantive environmental standards, conduct environmental impact assessments and consult with relevant States about activities likely to have a significant impact on the environment, provide notification to other States concerned about natural disasters and emergencies and cooperate with them, provide appropriate access to information on environmental hazards and pay due regard to the precautionary approach.¹⁹

¹⁸ Article 31 provides in relevant part:

1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.

2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes: (a) Any agreement relating to the treaty which was made between all the parties in connexion with the conclusion of the treaty; (b) Any instrument which was made by one or more parties in connexion with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.

3. There shall be taken into account, together with the context: (a) Any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions; (b) Any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation; (c) Any relevant rules of international law applicable in the relations between the parties.

Vienna Convention on the Law of Treaties, Vienna, 23 May 1969, in force 27 January 1980, 1155 UNTS 331; (1969) 8 ILM 679; UKTS (1980) 58.

¹⁹ Human Rights Committee, 'General Comment No. 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, on the Right to Life', UN Doc. CCPR/C/GC/36 (15 October 2018), pp. 14–15, <https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1_Global/CCPR_C_GC_36_8785_E.pdf>.

7.3 AN EMERGING JURISPRUDENCE

While many aspects of the Torres Strait Climate Case are novel, it presents the same fundamental question to the adjudicating body as any other climate case against a state: is there a standard that is amenable to legal analysis and judicial enforcement by which the state's conduct can be judged? Alongside a dramatic increase in the number of climate-related cases and decisions in recent years,²⁰ a common approach to this question has started to emerge through a series of prominent decisions, each finding that such a standard does exist. However, it is also the case that some courts continue to take a starkly contrasting view, as exemplified by a recent North American judgment.

In *Juliana v. United States*, a group of young people brought a challenge against the US federal government under the US Constitution, including in respect of their rights to life, liberty, and property. The plaintiffs sought (*inter alia*) an injunction requiring the US federal government to:

prepare and implement an enforceable national remedial plan to phase out fossil fuel emissions and draw down excess atmospheric CO₂ so as to stabilize the climate system and protect the vital resources on which Plaintiffs now and in the future will depend.²¹

The majority of the United States Federal Ninth Circuit Court decided that the plaintiffs did not have standing on the basis that their claims were not amenable to resolution by the courts. They found that although 'there is much to recommend the adoption of a comprehensive scheme to decrease fossil fuel emissions and combat climate change', it was beyond the power of the federal court to order the production of such a remedial plan. The judges found that the plan would 'necessarily require a host of complex policy decisions entrusted, for better or worse, to the wisdom and discretion of the executive and legislative branches'.²² The minority judge, District Judge Staton, disagreed with this conclusion. She found that the '*Constitution* does not condone the Nation's wilful destruction' and that 'a federal court need not

²⁰ See Joana Setzer and Rebecca Byrnes, 'Global Trends in Climate Change Litigation: 2020 Snapshot' (2020) Grantham Research Institute on Climate Change, <<https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-change-litigation-2020-snapshot/>>.

²¹ First Amended Complaint, *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), <<https://static1.squarespace.com/static/571d109b04426270152febe0/t/57a35ac5ebbd1aco3847eece/1470323398409/YouthAmendedComplaintAgainstUS.pdf>>.

²² *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

manage all of the delicate foreign relations and regulatory minutiae implicated by climate change to offer real relief'.²³

In *Urgenda Foundation v. Netherlands*,²⁴ the Supreme Court of the Netherlands considered Urgenda's request for a slightly different remedy – a minimum level of emission reductions across the Dutch economy by a given date²⁵ – and rejected the state's argument that this would wrongly infringe on the state's margin of discretion and power to legislate.²⁶ In determining the Dutch state's compliance with Articles 2 and 8 of the European Convention on Human Rights (ECHR), the Dutch Supreme Court found that judges can define the concept of a 'minimum fair share' of emission reductions, 'in accordance with the widely supported view of states and international organizations, which view is also based on the insights of climate science'. Applying the jurisprudence of the European Court of Human Rights and the requirement to observe due diligence and pursue good governance, the Dutch Supreme Court considered that the question was 'whether there are sufficient objective grounds from which a concrete standard can be derived in the case in question'. And whilst the Court noted that courts must observe restraint in such cases, the state 'must properly substantiate that the policy it pursues meets the requirements to be imposed'.²⁷

A similar view was also recently taken by the Norwegian courts in a case brought under Article 112 of the Norwegian Constitution²⁸ by the NGOs Nature and Youth and Greenpeace Nordic. The claimants argued that the issuing of various oil and gas production licences in the Barents Sea infringed human rights protected by the Norwegian Constitution and the ECHR due

²³ Ibid.

²⁴ See HR 20 December 2019, 41 NJ 2020, m.nt. J.S. (*Urgenda/Netherlands*) (Neth.).

²⁵ The remedy sought was an order directing the state to reduce the emission of greenhouse gases so that, by the end of 2020, those emissions will have been reduced by 40 per cent, or in any case at by at least 25 per cent, compared to 1990. The Dutch Supreme Court granted an order directing the state to reduce greenhouse gases by the end of 2020 by at least 25 per cent compared to 1990.

²⁶ *Urgenda*, above note 3, at ¶¶3.4, 3.5.

²⁷ Ibid. at ¶¶6.3–6.5.

²⁸ Article 112 of the Norwegian Constitution: 'Every person has the right to an environment that is conducive to health and to a natural environment whose productivity and diversity are maintained. Natural resources shall be managed on the basis of comprehensive long-term considerations which will safeguard this right for future generations as well. In order to safeguard their right in accordance with the foregoing paragraph, citizens are entitled to information on the state of the natural environment and on the effects of any encroachment on nature that is planned or carried out. The authorities of the state shall take measures for the implementation of these principles.'

to the climate change impacts of the related oil and gas extraction.²⁹ The Norwegian Court of Appeal found that it was able to set limits on political action when the matter involves protecting constitutionally established values, with the question being the measure of discretion allowed to the authorities or 'where the threshold for review lies'.³⁰ Importantly, although the court declined to grant the claimants relief, it found that the Paris Agreement could 'contribute to clarifying what is an acceptable tolerance limit and appropriate measures'³¹ for state action to protect the environment. The court also found that the impacts of 'downstream' emissions generated extra-territorially (outside of Norway) from the combustion of Norwegian oil and gas would need to be considered at a later stage by the government under the environmental assessment regulations and Article 112 of the Norwegian Constitution, including with respect to the rights of future generations. The Court of Appeal's decision was subsequently upheld by the Supreme Court, albeit with a dissenting minority of the court finding that the government's failure to assess the climate impacts of downstream emissions did amount to a breach of environmental assessment regulations, read in conjunction with Article 112.³²

In *Friends of the Irish Environment v. Ireland*, the Irish Supreme Court quashed the Irish government's National Mitigation Plan on the basis that it failed to comply with the requirements of the governing legislation, the Climate Action and Low Carbon Development Act 2015. And while the court found that the claimant did not have standing to pursue claims under the ECHR or the Irish Constitution, it expressly affirmed the court's role in reviewing even complex areas of government policy where such policies may infringe rights:

It is again important to reiterate that questions of general policy do not fall within the remit of the courts under the separation of powers. However, if an individual with standing to assert personal rights can establish that those rights have been breached in a particular way (or, indeed, that the Constitution is not being complied with in some matter that affects every citizen equally as occurred in *Crotty v An Taoiseach* [1987] I.R. 713), then the

²⁹ See *Föreningen Greenpeace Norden v. Norway*, 18-060499ASD-BORG/3 at 20 (23 January 2020) (Borgarting Lagmannsrett), <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2020/20200123_HR-2020-846-J_judgment.pdf>.

³⁰ *Ibid.* p. 19.

³¹ *Ibid.* p. 22, §2.4.

³² See *Föreningen Greenpeace Norden v. Norway*, HR-2020-2472-P (20-051052SIV-HRET) (22.12.2020), <<https://www.domstol.no/en/Enkelt-domstol/supremecourt/rulings/2020/supremecourt-civil-cases/hr-2020-2472-p/>>.

Court can and must act to vindicate such rights and uphold the Constitution. *That will be so even if an assessment of whether rights have been breached or constitutional obligations not met may involve complex matters which can also involve policy. Constitutional rights and obligations and matters of policy do not fall into hermetically sealed boxes. There are undoubtedly matters which can clearly be assigned to one or other. However, there are also matters which may involve policy, but where that policy has been incorporated into law or may arguably impinge rights guaranteed under the Constitution, where the courts do have a role.*³³

More recently, the German Constitutional Court issued its judgment in *Neubauer, et al. v. Germany*, in which the claimants challenged the lawfulness of the German government's emission reduction commitments. The Court held that the Federal Climate Change Act violated the German Constitution (or 'Basic Law') by failing to ensure that the fundamental freedoms of future generations were not disproportionately affected. This interference on the rights of future generations was held to stem from a failure to initiate and plan for emissions reductions in good time, and specifically by failing to provide for emissions reduction targets covering the period from 2031:

Art. 20a of the Basic Law obliges the state to take climate action. This includes the aim of achieving climate neutrality. . . .

Art. 20a of the Basic Law is a justiciable legal provision designed to commit the political process to a favouring of ecological interests, partly with a view to future generations.

Compatibility with Art. 20a of the Basic Law is required in order to justify under constitutional law any state interference with fundamental rights.

Under certain conditions, the Basic Law imposes an obligation to safeguard fundamental freedom over time and to spread the opportunities associated with freedom proportionately across generations. In their subjective dimension, fundamental rights – as intertemporal guarantees of freedom – afford protection against the greenhouse gas reduction burdens imposed by Art. 20a of the Basic Law being unilaterally offloaded onto the future. Furthermore, in its objective dimension, the protection mandate laid down in Art. 20a of the Basic Law encompasses the necessity to treat the natural foundations of life with such care and to leave them in such condition that future generations who wish to carry on preserving these foundations are not forced to engage in radical abstinence. Respecting future freedom also

³³ See 'Friends of the Irish Environment v. Ireland' (emphasis added), Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/friends-of-the-irish-environment-v-ireland/>> for the Supreme Court judgment and ¶8.16 therein.

requires initiating the transition to climate neutrality in good time. In practical terms, this means that transparent specifications for the further course of greenhouse gas reduction must be formulated at an early stage, providing orientation for the required development and implementation processes and conveying a sufficient degree of developmental urgency and planning certainty.³⁴

Despite this series of high-profile decisions that have recognized courts' ability to assess the lawfulness of climate policy, there remains a possibility that other courts and adjudicators will follow the approach taken by the Federal Ninth Circuit in *Juliana* for fear of overstepping their remit. Accordingly, as constitutional and human rights courts and adjudicators around the world are asked to adjudicate more and more frequently states' emissions reduction policies,³⁵ we have sought to show in the remainder of this chapter how even the most conservative of courts can proceed to decide such cases, irrespective of the potential novelty of the claims' subject matter. Indeed, as we set out in Section 7.4, there are a range of well-established judicial tools that can be used to adjudicate these potentially novel and complex issues. These are based on, or consistent with, existing international and human rights law, including the concept of due diligence.

7.4 CORE ASSESSMENT PRINCIPLES

As discussed above, the obligations contained in the Paris Agreement can act as a helpful guide to the minimum standard expected of states in respect of their climate mitigation policy.³⁶ This does not mean that 'compliance' with the Paris Agreement simply substitutes for compliance with a state's human rights obligations – rather that existing principles and legal commitments made by states can assist in assessing whether a state's conduct has infringed the human rights of individuals.

³⁴ BVerfG, Beschluss des Ersten Senats vom 24. März 2021 – 1 BvR 2656/18, 1 BvR 288/20, 1 BvR 96/20, 1 BvR 78/20 - Rn. (1-270), <http://www.bverfg.de/e/rs20210324_1bvr265618en.html>, Official translation, pp 1–2.

³⁵ See Jacqueline Peel and Hari M. Osofsky, 'A Rights Turn in Climate Litigation?' (2018) 7 *Transnational Environmental Law* 37. This article describes cases based on human rights standards being brought or proposed in the following countries: Colombia, Norway, Austria, Belgium, France, Germany, Italy, Switzerland, Mexico, South Korea, Australia, the United States, Czech Republic, Canada, and Peru.

³⁶ Given the near-universal adoption of the Paris Agreement, the Agreement's standard-setting function may also be capable of applying in jurisdictions that have not themselves adopted it.

The Agreement has been called a ‘hybrid’ agreement of both top-down and bottom-up governance,³⁷ with states determining their own NDCs within the constraint that their contributions must:

- (i) ‘represent a progression’ over time (the principle of upward only progression or non-regression)³⁸; and
- (ii) reflect a party’s ‘highest possible ambition’.³⁹

‘Highest possible ambition’ means that states must assess their capacity to reduce emissions to the maximum extent possible, which can be equated to the ‘due diligence’ and ‘best efforts’ standards in international law. As Christina Voigt explains:

It implies that every State ought to act according to its best capabilities, or ‘to do as well as they can’. In other words, every State is required to exert its best possible efforts and to take all appropriate measures to holding the increase in temperatures well below 2°C.⁴⁰

The requirement to take ‘all appropriate measures’ also exists in international human rights law. In the recent case of *Portillo Cáceres and others v. Paraguay*, for example, the Human Rights Committee held that:

³⁷ See Harro van Asselt and Thomas Hale, ‘Maximizing the Potential of the Paris Agreement: Effective Review in a Hybrid Regime’ (2016) Stockholm Environment Institute.

³⁸ Article 4(9) requires state parties to present new and updated NDCs every five years in accordance with the global stocktake established by Article 14, which is intended to create an ‘international normative pull’ per Christina Voigt and Felipe Ferreira, “‘Dynamic Differentiation’: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement’ (2016) 5 *Transnational Environmental Law* 285.

³⁹ The concept of common but differentiated responsibilities (CBDR) of the UNFCCC is retained in Article 4(3), with developed countries expected to take the lead in making the deep emissions reductions of Article 4(4). However, the Annex 1 and 2 distinction of the Kyoto Protocol, whereby developed countries were required to make specific reductions, has been abandoned in favor of this more flexible approach. See *ibid.* 294.

⁴⁰ Christina Voigt, ‘The Paris Agreement: What Is the Standard of Conduct for Parties?’ (2016) 26 *Questions of International Law, Zoom-in* 17, 26–27. See also *ibid.* 21–22: ‘The provision expresses the requirement that Parties will deploy their best efforts in setting their national mitigation targets and in pursuing domestic measures to achieve them . . . As a result, each Party commits to taking all appropriate measures at its disposal. This would require defining the highest possible mitigation target that is not economically disproportionately burdensome or impossible to achieve. Such a target should be comprehensive and based on a thorough assessment of mitigation options in all relevant sectors. Parties would need to deploy all political, legal, socio-economic, financial and institutional capacities and possibilities in defining such target. Moreover, Parties would need to plan their climate strategies holistically and within a long-term time frame.’

States parties should take all appropriate measures to address the general conditions in society that may give rise to threats to the right to life or prevent individuals from enjoying their right to life with dignity, and these conditions include environmental pollution.⁴¹

These requirements are also similar to states' obligations in international human rights law to devote their 'maximum available resources' to avoiding the violation of rights.⁴² In particular, under Article 2(1) of the Covenant on Economic, Social and Cultural Rights, states must take 'deliberate, concrete and targeted measures, making the most efficient use of available resources, to move as expeditiously and effectively as possible towards the full realization of rights'.⁴³ The way that this provision has been interpreted by human rights courts and treaty body committees is also instructive. In assessing compliance with this obligation, courts and treaty body committees have established the concept of a 'minimum core obligation',⁴⁴ against which it is possible to identify instances of non-compliance objectively while respecting a state's

⁴¹ Human Rights Committee, Views Adopted by the Committee under article 5(4) of the Optional Protocol, concerning communication No. 2751/2016, ¶7.3 Communication No. 2751/2016, 25 July 2019 (*Portillo Cáceres and others v. Paraguay*).

⁴² See, e.g., Human Rights Council, 'Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment', ¶48, 11 February 2016, UN Doc. A/HRC/31/52 ('This distinction is relevant to all of the human rights obligations of States in relation to climate change, including the duty of international cooperation. As in human rights law generally, some of these obligations are of immediate effect and require essentially the same conduct of every State. For example, every State must respect the rights of free expression and association in the development and implementation of climate-related actions. At the same time, the implementation of other responsibilities – e.g., efforts to reduce emissions of greenhouse gases – can be expected to vary based on differing capabilities and conditions. Even in such cases, however, each State should do what it can. More precisely, consistent with article 2[1] of the International Covenant on Economic, Social and Cultural Rights, each State should take actions "to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means".'); see also Committee on Economic, Social and Cultural Rights, 'Climate Change and the International Covenant on Economic, Social and Cultural Rights', ¶6, 31 October 2018, UN Doc. E/C.12/2018/1.

⁴³ See Committee on Economic, Social and Cultural Rights, 'General Comment No. 3: The nature of States' parties obligations', ¶3, 14 December 1990, UN Doc. E/1991/23; see also Committee on Economic, Social and Cultural Rights, 'General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12)', ¶31, 11 August 2000, UN Doc E/C.12/2000/4.

⁴⁴ See Committee on Economic, Social and Cultural Rights, 'General Comment No. 3: The nature of States' parties obligations', ¶10, 14 December 1990, UN Doc. E/1991/23 ('On the basis of the extensive experience gained by the Committee, as well as by the body that preceded it, over a period of more than a decade of examining States parties' reports the Committee is of the view that a minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels of each of the rights is incumbent upon every State party. Thus, for

margin of appreciation and discretion. Indeed, the minimum core obligation can be seen as analogous to the concept of ‘minimum fair share’ developed by the Supreme Court of the Netherlands and the concept of the ‘threshold for review’ developed by the Norwegian Court of Appeal.⁴⁵ We suggest that similar approaches can be developed and adopted by decision-makers in other climate change cases.

There are several principles that human rights courts and other adjudicators could apply in order to identify a state’s ‘minimum’ or ‘core’ obligations, by reference both to the scientific literature identified above and the factual circumstances of each case. Relevant principles include:

- (a) Consistency (i.e., with approaches and measures taken by comparably resourced states as well as internally between policies);
- (b) Proportionality (i.e., of the state’s measures in view of the gravity of the risk and harm);
- (c) Due process (i.e., public participation, adequate reason-giving and justification, taking into account all material issues); and
- (d) Good faith and effective participation in, and implementation of, relevant international processes.

In applying this approach in the context of a state’s climate policy, courts and other human rights decision-makers may find that the following are relevant considerations by which states’ compliance can be judged:

- (a) Whether a state has participated in and complied with agreed international environmental law on climate change (i.e., the UNFCCC and

example, a State party in which any significant number of individuals is deprived of essential foodstuffs, of essential primary health care, of basic shelter and housing, or of the most basic forms of education is, *prima facie*, failing to discharge its obligations under the Covenant. If the Covenant were to be read in such a way as not to establish such a minimum core obligation, it would be largely deprived of its *raison d’être*. By the same token, it must be noted that any assessment as to whether a State has discharged its minimum core obligation must also take account of resource constraints applying within the country concerned. Article 2 (1) obligates each State party to take the necessary steps “to the maximum of its available resources”. In order for a State party to be able to attribute its failure to meet at least its minimum core obligations to a lack of available resources it must demonstrate that every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations.’). See also Maastricht Guidelines on Violations of Economic, Social and Cultural Rights, Maastricht, 22–26 January 1997, <http://hrlibrary.umn.edu/instreet/Maastrichtguidelines_.html>.

⁴⁵ See Hof Hague, 9 October 2018, HA ZA 13-1396, 2018 (Urgenda Foundation/Netherlands).

Paris Agreement), effectively and in good faith, including by implementing commitments made in its NDC.⁴⁶

- (b) Whether a state has submitted an NDC that is consistent with the due diligence standard of 'highest possible ambition'⁴⁷ and complies with all other terms of the Paris Agreement, including Article 4(4), which requires developed country parties to have economy-wide emissions reduction targets. And in so doing, whether a state has taken proper account of its technical and economic capability, including:
- (i) whether the state's analysis aimed to match or better the measures and targets of the most ambitious comparable states;
 - (ii) whether modelling and other analysis conducted by the state included the costs of climate change impacts, as well as the economic, public health, and other benefits of transitioning to a low-carbon economy;
 - (iii) whether target setting has been conducted transparently, with public participation, to allow all possible options and measures to be considered; and
 - (iv) whether the state has justified any failure to align its policies with higher ambition states on capacity-based grounds that are rational and supported by sound evidence.

The Annex below includes a set of more specific criteria that could be relevant to assessing whether a state has met its due diligence obligation and complied with the principles set out above. We suggest that in order to meet their human rights obligations in the context of climate change, states must – at a minimum – comply with applicable international law (i.e., the UNFCCC and the Paris Agreement), as well as the 'no harm' and precautionary principles and due diligence standard in international environmental law, assessed by reference to these kinds of objective criteria. This task may involve the consideration of complex economic and scientific issues, but the application of the legal principles is firmly within the competence of courts and other human rights adjudicators.

In this chapter, we have tried to illustrate how national climate policy can be adjudicated in a way that may have great practical and environmental impact, while also staying well clear of judgements that might be said to fall within a state's discretion. The types of objective criteria that can be applied are frequently used by human rights adjudicators and stay well with the terrain

⁴⁶ See 'Understanding Human Rights and Climate Change', above note 4.

⁴⁷ Paris Agreement, above note 6, Art. 4(3).

of legal analysis and away from questions of political judgement. They provide a framework with which judges and other adjudicators can safely and confidently assess the lawfulness of climate and energy policies, while seeking to ensure the protection of fundamental rights in the context of one of this century's defining challenges.

ANNEX: LIST OF CRITERIA POTENTIALLY RELEVANT TO ASSESSING
WHETHER A STATE'S CLIMATE CHANGE POLICIES MEET A 'DUE
DILIGENCE' LEGAL STANDARD

- (1) Compliance / implementation of the state's obligations under the Paris Agreement
 - Is the state complying with its formal/procedural obligations under the Paris Agreement, including timely submission of its NDC?
 - Are planned policies consistent with its NDC (and being implemented)?
 - Is there a clear commitment to the Paris Agreement and its objectives in national climate policy and legislation?
 - Has there been a failure to update targets following adoption of the Paris Agreement?
- (2) Targets and monitoring
 - Are there national long-term targets, for example, for 2030/2050?
 - Are there regular reviews of progress against targets and opportunities to increase their ambition?
- (3) External consistency of climate policy (i.e., with the ambition of other states' climate policy)
 - Benchmarking with comparator states (i.e., states with a similarly structured economy/development status GDP per capita)
 - (i) Are the state's 2030/2050 targets consistent with comparator states? Are justifications for lower ambition given on the basis of capability?
 - (ii) Are the sector-specific targets/policies consistent with comparator states?
 - Is the discount rate used in modelling consistent with that used in other states?
- (4) Internal consistency of climate policy (i.e., with targets and other government policy)
 - Are the planned policies consistent with meeting national targets?

- Is there consistency between the targets and objectives in climate policy and other relevant national or regional/local strategies? For example:
 - (i) Are there fossil fuel support policies that run counter to national climate policy?
 - (ii) Are local government policy and decision making consistent with national policy?
- (5) Timeline for policy implementation
 - Do policies have a timeline for coming into force/achieving objectives?
 - Is the timeline based on an assessment of the earliest date at which the state can end such support?
 - Will compliance with the timeline be monitored/kept under review?
- (6) Policy gaps
 - Is there a failure to address emissions from particular sectors/industries? Are justifications for lower ambition given on basis of capability?
 - Is there a failure to consider opportunities to increase carbon sinks? Are justifications for lower ambition given on basis of capability?
- (7) Policy implementation/effectiveness
 - Are policies being implemented?
 - Is there a failure to address the ineffectiveness of any existing policies?
- (8) Lack of progression
 - Is there a failure to increase the ambition of climate policy over time? Are justifications given on the basis of capability?
 - Is climate policy being rolled back? Are justifications given on the basis of capability?
- (9) Sound methodology
 - Is robust modelling/analysis being used to develop climate policy on the basis of capability?
 - Does the modelling/analysis reflect up-to-date technology costs?
 - Does it take account of the benefits as well as the costs of climate action?
 - Does it cover all sectors/industries?
 - Does it reflect the Paris Agreement temperature goals?
 - Is any discount rate used appropriate?
- (10) Transparency
 - Has there been effective public consultation at different stages of policy-making process – that is, before a draft exists and when all options are still on the table, as well as on interim and final drafts?
 - Are the assumptions and data used in the modelling transparent/accessible?

Litmus Tests as Tools for Tribunals to Assess State Human Rights Obligations to Reduce Greenhouse Gas Emissions

ASHFAQ KHALFAN*

How much does an individual state have to do reduce emissions within its jurisdiction and by when? This is one of the most challenging questions raised by climate litigation, and it is difficult for tribunals to address, as they are often concerned by the prospect of straying beyond their legal function into policy-making. However, this debate is essential; without it, there can't be an effective remedy for affected complainants or a way to hold states accountable for their obligations through litigation. What, therefore, are the criteria by which a tribunal can objectively assess the adequacy of states' efforts to reduce emissions?

This chapter proposes five tests, building on the practice of the UN Committee on Economic, Social and Cultural Rights (CESCR), for such an assessment. Among international human rights treaty bodies, the CESCR has had to grapple the most with the question of the progressive realization of rights, rather than more binary questions of law, and thus has developed useful guidance in this sphere. A sixth test addresses the 'how' question, rather than 'how much or how fast' and, more specifically, whether the measures proposed are themselves rights-respecting.

These tests should be examined separately as well as cumulatively. They are designed to apply state obligations set out under the International Covenant on Economic, Social and Cultural Rights (ICESCR) and may be applicable to other national or international standards that explicitly or implicitly require states to reduce carbon emissions.

* I would like to thank Iain Byrne for carrying out the Amnesty 'law and policy' check on this chapter, as well as Chiara Liguori, Sebastien Duyck, and Fiona Koza for comments and, of course, the many colleagues in the climate justice movement for their insights that have informed my thinking.

They can therefore be used in periodic monitoring by the CESCR and for complaints brought under the Optional Protocol to the ICESCR and could also potentially be used in other national or international courts or accountability mechanisms, if and to the extent that the relevant applicable standards contain similar obligations to reduce emissions. To be clear, these tests may not be useful in certain jurisdictions, beyond simply assisting litigators in their scoping of relevant legal arguments.

Before setting out the tests, I will touch on the legal basis for obligations to reduce emissions. Under international human rights law, states have obligations to protect the enjoyment of human rights from harm (within their borders and in other countries) caused by conduct or omissions within their territory or jurisdiction, whether committed by state or non-state actors, including businesses.¹ According to CESCR, ‘a failure to prevent foreseeable human rights harm caused by climate change, or a failure to mobilize the maximum available resources in an effort to do so, could constitute a breach of this obligation’.² It has further indicated that, as a matter of obligation, states’ nationally determined contributions (NDCs) ‘should be revised to better reflect the “highest possible ambition” referred to in the Paris Agreement (article 4.3)’.³ The following six tests will speak to assessing whether the highest possible ambition has been achieved and whether a state has taken sufficient and adequate steps to prevent greenhouse gas emissions.

8.1 TEST ONE: HAS EVERY FEASIBLE STEP TO REDUCE EMISSIONS BEEN TAKEN?

This test assesses whether a state has taken – or is taking – all of the rights-respecting steps that it can to reduce and eliminate carbon emissions in the present, whether through introducing alternative clean energy or by reducing the extent of activities that yield emissions. Its NDC would need to propose a clear plan to phase out all forms of these emissions from its jurisdiction and all

¹ ‘Climate Change and the International Covenant on Economic, Social and Cultural Rights: Statement of the Committee on Economic, Social and Cultural Rights’, Committee on Economic, Social and Cultural Rights, 8 October 2018, ¶5. For an analysis of the legal basis for extraterritorial obligations under international human rights standards, see Olivier De Schutter et al., ‘Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights’ (2012) 34 *Human Rights Quarterly* 1084.

² *Ibid.* ¶6.

³ *Ibid.*

possible ways it can take steps within its jurisdiction to remove carbon from the atmosphere, including by preventing deforestation and ensuring afforestation, within the shortest time frame possible. As part of this obligation, high-income states must take all feasible steps to cooperate with and provide assistance to developing countries to help them reduce emissions.⁴

With this, an immediate question arises: what level of resources and other costs is a state required to expend in order to meet the above obligations? Whilst a state is obliged to ensure adequate priority to the realization of human rights in its resource allocation, CESCR has clarified that a state should be accorded a ‘margin of appreciation’ to determine the optimal use of its resources in how it meets its rights obligations.⁵ CESCR has described some of the considerations that it would use to determine whether steps taken by states are adequate or reasonable. These include:

The extent to which the measures taken were deliberate, concrete and targeted towards the fulfilment of economic, social and cultural rights . . . whether the State party exercised its discretion in a non-discriminatory and non-arbitrary manner . . . where several policy options are available, whether the State party adopts the option that least restricts Covenant rights . . . whether the steps had taken into account the precarious situation of disadvantage and marginalized individuals and groups and . . . whether they prioritized grave situations or situations of risk.⁶

These criteria can be used to review individual resource allocation decisions. The second and third tests, discussed below, also can address resource challenges.

A state may argue that the necessary technology is not yet available to mitigate emissions, for example, emissions from air travel, fully. Where a high-income state makes such an argument, it would need to show that it has taken all feasible steps to help develop such technology, including funding research and development and ensuring that pricing and tax policies create an incentive for the development of such technology.

⁴ For an assessment of how the extent to which international cooperation can be measured, see Ashfaq Khalfan, ‘Division of Responsibility amongst States’ in Malcom Langford et al. (eds.), *Global Justice, State Duties: The Extraterritorial Scope of Economic, Social, and Cultural Rights in International Law* (Cambridge: Cambridge University Press, 2013).

⁵ See CESCR, ‘An Evaluation of the Obligation to Take Steps to the “Maximum of Available Resources” under an Optional Protocol to the Covenant’, Committee on Economic, Social and Cultural Rights, UN Doc. E/C.12/2007/1, 10 May 2007, ¶12.

⁶ *Ibid.* ¶8.

The question that next arises is whether a state has taken steps to prevent activities that lead to emissions where a switch to clean energy cannot end such emissions. A case can be made that a state should phase out 'luxury emissions' or 'convenience emissions', permitting only those that are strictly necessary to realize human rights (in a manner that is proportionate to the impact of the emissions on the rights of others) and other essential public goods and services.⁷ Examples may include frequent air travel for reasons other than, for example, family reunification or migration. Furthermore, where emissions may be needed to realize human rights such as the right to an adequate standard of living and work (and this would be the majority of them, even in cases such as tourism), states would need to ensure that such emissions are necessary and proportionate to the impact that they have on the rights of affected people. The state bears the burden of proving that there are no other feasible alternatives to permitting such emissions and that it is taking steps to phase out such emissions as quickly as possible. A state could not justify permitting harm to the minimum essential realization of rights of persons in another state in order to secure economic, social, and cultural (ESC) rights above the minimum essential realization of ESC rights and preferences of persons within its territory. In most cases, such emissions could only be justified as a transitional measure, permissible due to the potential economic harm and corresponding negative impact on the minimum essential realization of rights that would result from the immediate cessation of emissions as opposed to the phasing out of such emissions with appropriate just transition measures.

One part of the feasibility test is assessing whether pledges made within the NDC have been met. A pledge can be seen as at least setting out some of the reasonable steps that a government can take. If the given government has not met a pledge, it would be its burden to demonstrate that it was unable to do so for reasons beyond its control, such as the COVID-19 pandemic or its population's failure to reduce food waste and set out steps it will take to overcome these challenges. Needless to say, meeting a pledge does not, by itself, demonstrate compliance with state obligations.

⁷ Article 4 of the ICESCR indicates that the state may subject such rights only to such limitations as are determined by law and only insofar as it is compatible with the nature of these rights and solely for the purpose of promoting the general welfare in a democratic society. The test of necessity and proportionality would apply to emissions justified for non-human rights goals as much as for human rights goals.

8.2 TEST TWO: IS THE STATE SUBSIDIZING EMISSIONS, DISPROPORTIONATELY ALLOCATING RESOURCES TO NON-PUBLIC BENEFIT COSTS, OR FAILING TO MOBILIZE RESOURCES?

A state's overall resource use can be reviewed to determine whether it demonstrates that adequate priority has been given to the realization of human rights, including whether it has devoted sufficient spending to climate measures (or to addressing its claim that it has insufficient resources to phase out emissions in the short-term). CESCR has noted with concern circumstances in which a state has allocated significantly more funds to areas unrelated to ESC rights or that do not target the realization of ESC rights as compared to ICESCR objectives. For example, such a situation may arise when more funding is dedicated to military defence compared to health or education, to the development of the oil industry (in contexts where these would benefit only a small number of workers) compared to the small- and medium-scale enterprises needed to ensure the livelihoods of major segments of the population and to ornamental public works compared to housing projects.⁸

It could also be suggested that any use of resources for purposes that do not provide reasonable public benefit constitutes a failure to use available resources for the realization of the ICESCR. An example would be the procurement of goods and services at inflated prices, whether through officially sanctioned high-level corruption or through poor price management. Similarly, subsidizing or funding fossil fuels, and thereby contributing to an increase in emissions, implies a violation of state obligations, except potentially where such subsidies are a strictly temporary transitional measure to ensure affordable access to energy as alternative clean energy supplies are being put into place. Relatedly, a failure to mobilize resources (through overall low and regressive levels of taxation compared to peer states or a high level of tax exemptions for private parties that are not justified by any public policy measure) could demonstrate a failure to utilize available resources.

8.3 TEST THREE: IS THE CLIMATE PLAN REASONABLY AMBITIOUS IN COMPARISON TO PEER STATES?

This test allows a tribunal to apply tests one and two above while taking into consideration conditions in peer states – that is, states that have broadly similar levels of wealth and access to other relevant resources, such as natural

⁸ See Magdalena Sepúlveda, *The Nature of the Obligations under the ICESCR* (Cambridge: Intersentia, 2003), pp. 317–18.

resources like wave power or consistent solar power. This test would apply a method used by CESCRC to assess territorial obligations to fulfil ESC rights, according to which it compares the proportion of a country's budget spent on a particular sector, such as health and education, against corresponding amounts spent by states at the same level of development. Where the percentage of the national budget is considerably lower than that of other states at a similar level of development, it is treated by CESCRC as indicative of the non-use of the maximum of available resources.⁹ Budgetary spending is of course only one measure of whether a state has taken adequate steps – the standards that it adopts are also critical – and indeed may reduce the extent of public finances required. For example, a state that institutes robust standards for energy efficiency and the use of non-fossil fuel energy sources in housebuilding will thereby reduce the eventual amount of public finance required to subsidise energy efficiency and installation of electric heating and cooling in houses.

Applying CESCRC's practice by analogy in assessing whether a state has met its obligation to reduce emissions to the greatest extent possible, a state should be given a narrow margin of appreciation when it fails to take steps carried out by the majority of its peers or – with respect to quantifiable steps – in comparison to the average performance of its peers, unless it can offer a reasonable explanation for the difference in performance. A state can also be compared to those peer states (taking into account relevant differences, such as GDP per capita and geographic conditions that facilitate the use of renewable energy such as wind and solar) that are the best performing with respect to climate change; states can then be required to provide evidence that they cannot take steps comparable to those best performers.

8.4 TEST FOUR: HAS THERE BEEN A PROGRESSIVE INCREASE IN AMBITION AND AVOIDANCE OF ANY RETROGRESSION?

This test would assess whether a state has progressively increased steps to mitigate climate change and avoided retrogressive steps without cause. Such a criterion is used in the context of the territorial fulfilment of ESC rights, where CESCRC expects states to enhance the enjoyment of ESC rights territorially as their economic situations improve.¹⁰ As there is a presumption that any retrogressive step is contrary to the ICESCRC, after the state takes a retrogressive step, the burden shifts to a state to show that it has fully used

⁹ See *ibid.* at 317.

¹⁰ See *ibid.* at 322–23.

available resources.¹¹ In addition, such retrogressive steps require reasonable justification; the comprehensive examination of alternatives; genuine participation by affected groups in the examination of the proposed measures; refraining from direct or indirect discrimination; no sustained, unreasonable impact on economic, social and cultural rights; and no deprivation of the minimum essential realization of the rights for any individual or group, whilst also including independent review of the measures at the national level.¹²

CESCR has further stated that where a state explains and seeks to justify retrogressions due to resource constraints, it will assess such explanations by taking into account, inter alia, the country's level of development, its economic situation, and the extent to which it had sought or rejected international assistance.¹³

8.5 TEST FIVE: IS THE STATE PLANNING TO REDUCE EMISSIONS IN LINE WITH KEEPING THE GLOBAL TEMPERATURE BELOW 1.5 DEGREES CELSIUS?

While the four tests above are contextual and mostly qualitative, this test provides a specific numeric target, though it, as discussed below, must be applied with reference to points one through four above. Although states have not committed to collectively limiting the temperature rise to 1.5 degrees Celsius (only to pursuing efforts to that end), CESCR has nonetheless indicated that states should treat a global temperature rise of 1.5 degrees Celsius above pre-industrial temperatures as 'a limit'.¹⁴ This is a justified reading of the ICESCR given that the impact of a 1.5 degrees Celsius rise in temperature, as compared to 2 degrees Celsius, would have far less devastating consequences for human health, livelihoods, food security, and water supply.¹⁵ For example, around 420 million fewer people would be frequently exposed to extreme heatwaves at a temperature increase of 1.5 degrees Celsius, compared to 2 degrees Celsius.¹⁶ With global warming of 2 degrees Celsius, more than

¹¹ See 'General Comment No. 3: The Nature of States Parties' Obligations', Committee on Economic, Social and Cultural Rights, UN Doc. E/1991/23, 14 December 1990, ¶9.

¹² This set of criteria were set out in regard to the right to social security in CESCR, 'General Comment No. 19', para. 42, but presumably would apply to other ESC rights particularly given that is one of the most recent to address individual substantive rights in the Covenant.

¹³ See CESCR, 'Obligation to Take Steps to the "Maximum of Available Resources"', above note 5 at ¶10.

¹⁴ See *ibid.* ¶2.

¹⁵ Myles Allen et al., 'Global Warming of 1.5°C: Summary for Policymakers' (2018) IPCC 9.

¹⁶ See Valérie Masson-Delmotte et al. (eds.), 'Global Warming of 1.5°C' (2018) IPCC 177.

one billion people could suffer from a severe reduction in water resources.¹⁷ Limiting this rise to (at the very least) 1.5 degrees Celsius could reduce the number of people exposed to climate-induced water stress by 50 per cent, compared to those exposed at two degrees Celsius of warming.¹⁸

Limiting the increase in temperature to 1.5 degrees Celsius would require the reduction of emissions on an accelerated time frame and scale. The IPCC has shown that it is feasible for states to do this by collectively reducing greenhouse gases by 45 per cent globally from 2010 levels by 2030 and to net zero by 2050.¹⁹ This implies that global emissions must be cut by 7.6 per cent per year until 2030.²⁰

The IPCC did not provide a breakdown of how fast individual states should reduce emissions to net zero, and, thus, the only questions here are the extent to which the 2030 target reductions of 45 per cent must be distributed among states and which countries, if any, could legally emit net carbon in 2050. However, on the basis of human rights standards and the principle of common but differentiated responsibilities, it would be unreasonable and unrealistic to expect that developing countries make this transition at the same pace as developed countries. Developed countries emit approximately one-third of global emissions.²¹ Even if developed countries were to reach zero carbon emissions by 2030, in order to meet the IPCC targets, developing countries would need to reduce their emissions by at least one-third below 2010 levels by 2030 – a deeply difficult task, for which many will require significant financial assistance and technical cooperation.

Looking at the global picture, tribunals should therefore ask developed countries for strong justifications for their failures to put in place plans to achieve carbon emissions that are as close as possible to zero by 2030. Thus, the considerations listed in tests one through four apply to this test as well; however, the tribunal would need to stipulate that the burden of proof rests on the state to demonstrate that it cannot meet this target and that the necessity and proportionality tests will be applied strictly, given the scope of the human rights harms caused by failing to limit global warming to 1.5 degrees Celsius.

¹⁷ See 'AR5, WGII Report: Impacts, Adaptation and Vulnerability' (2014) IPCC.

¹⁸ See Masson-Delmotte et al. (eds.), 'Global Warming of 1.5°C', above note 16 at 179.

¹⁹ See Allen et al., 'Global Warming of 1.5°C: Summary for Policymakers', above note 15 at 12.

²⁰ See 'The Emissions Gap Report 2019' (2019) United Nations Environment Programme, <<https://www.unenvironment.org/resources/emissions-gap-report-2019>>.

²¹ This is based on the figures for production based emissions, see Hannah Ritchie and Max Roser, 'CO₂ Emissions', <<https://ourworldindata.org/co2-emissions#co2-emissions-by-region>>. These countries have emitted approximately three fifths of historical cumulative emissions.

Tribunals should also assess the extent to which such countries are planning to introduce ‘negative emissions’, in a way that does not have negative human rights consequences, to make up for the inability of low-income countries to reduce emissions as quickly as needed.²² With regard to developing countries, tribunals should also hold them accountable for any failures to plan to reduce emissions by 45 per cent from 2010 levels by 2030, taking into account the relevant capacities they have. For example, China would be expected to achieve a reduction much faster than Fiji. Tribunals, when dealing with low-income countries, should also consider whether they sought international assistance to achieve such an emission reduction.

8.6 TEST SIX: IS THE MANNER IN WHICH EMISSIONS ARE BEING LIMITED CONSISTENT WITH HUMAN RIGHTS STANDARDS?

It should go without saying that emission reductions must be carried out in a manner consistent with human rights, including, for example, the obligation of non-discrimination and the obligation to refrain from harming human rights, like the right to an adequate standard of living and the rights of Indigenous peoples. Carbon taxes, for example, should be designed in a manner that does not prevent low-income people from being able to heat their homes, thus undermining their right to adequate housing. Indigenous people should not be denied their right to enjoy their ancestral lands and territories on the basis of climate mitigation. This test both stands alone and intersects with the others. This requirement for human rights consistency helps preclude purported alternatives to the rapid phase-out of fossil fuels. For example, one possible state argument against the obligation to speedily reduce emissions is the assertion that emissions can be reduced through new technologies, such as bioenergy with carbon capture and storage (BECCS). Such arguments can be rebutted on the basis that these technologies would have very substantially negative consequences on the enjoyment of human rights by requiring the use of large areas of agricultural land, thereby reducing access to food and likely resulting in forced evictions.

Furthermore, all policymaking relating to emissions reduction should take into account the full range of state human rights obligations, not just the obligation to prevent harm to human rights. For example, in regulating and subsidizing the renewable energy industry, states should give effect to obligations to ensure, for example, just and favourable conditions of work as the industry grows.

²² This is not only a matter of fulfilling a primary obligation but also a matter of remedy for harms caused by those states’ historic emissions.

8.7 CONCLUSION

This chapter has discussed and set out six tests that can be used by tribunals to assess whether states have taken sufficient steps to reduce emissions within their jurisdictions. The first test: has every feasible human-rights consistent step been taken by the state to reduce emissions? The second: is the state subsidizing emissions, disproportionately allocating resources to non-public benefit costs, or failing to mobilize resources? The third: is the climate plan reasonably ambitious in comparison to peer states? The fourth: has there been a progressive increase in ambition and avoidance of any retrogression? The fifth: is the state planning to reduce emissions in line with limiting the global temperature increase to 1.5 degrees Celsius? And the sixth and final test: is the manner in which emissions are being limited consistent with human rights standards?

These tests are stringent and may be contested by states and those sceptical of rapid climate action on the basis that no state could pass all or even most of these tests. Yet these tests reflect the standards that are contained in human rights law, which can, by definition, never be said to be fully realized, as they explicitly aim towards the 'continuous improvement of living conditions'. Equally, some climate activists may think that these tests give states far too much leeway to argue that they cannot carry out the actions required to preserve a safe climate. Such leeway may delay or drag out proceedings and potentially result in tribunal decisions that do not contain robust, monitorable targets. These are indeed dangers. But they reflect the standards that are contained in human rights law, which allow states significant leeway in the implementation of their obligations; this is thus a limit to what can be achieved through litigation alone. Only new binding international or national standards can fully fix this defect. Litigation that achieves partial successes in at least in some jurisdictions will increase the political incentive for states to advocate for or accept such standards.

Not all of these tests will be useful in all climate litigation. Some are plainly easier to monitor and apply than others. Only experience in the coming decades can tell us which will be most impactful practically. Yet, if there is one thing that can be said with total confidence, it is that, given the scale of the climate crisis and the extent to which jurists around the world are throwing themselves into this challenge, the field of climate litigation as a field is well-positioned to consider every possible argument. My hope is that this chapter will be of some use towards that end.

The Farmer or the Hero Litigator?

Modes of Climate Litigation in the Global South

JOLENE LIN AND JACQUELINE PEEL*

9.1 INTRODUCTION

Over the last twenty years, climate litigation has grown from a handful of cases to become a global phenomenon, casting courts as significant actors in global climate governance.¹ Whereas climate litigation began to emerge in the Global North in the 1990s, climate litigation in the Global South started almost twenty years later and has gained visibility only in the past few years. The vast majority of climate litigation scholarship focuses on court actions in the Global North and typically on a small number of high-profile cases in the United States, Europe, and Australia. However, we are beginning to see a growing body of scholarship that is focused on Global South litigation.²

This is a promising development. This analysis of the Global South experience of climate litigation is essential if transnational climate jurisprudence is to contribute meaningfully to global climate governance and, particularly, to ensuring that governments are held to account for the commitments they have

* The authors thank the participants in the *Litigating the Climate Crisis* workshop held at NYU Law School (March 9–10, 2020) for their feedback on a draft version and Ms. Rebekkah Markey-Towler for assistance with footnoting.

¹ See generally William C. G. Burns and Hari M. Osofsky, “Overview: The Exigencies that Drive Potential Causes of Action for Climate Change,” in William C. G. Burns and Hari M. Osofsky (eds.), *Adjudicating Climate Change: State, National, and International Approaches* (Cambridge: Cambridge University Press, 2009), p. 1; see also Hari M. Osofsky, “The Continuing Importance of Climate Change Litigation” (2010) 1 *Climate Change Law* 3; see also Jolene Lin, “Climate Change and the Courts” (2012) 32 *Legal Studies* 35; see also Jacqueline Peel et al., “Climate Change Law in an Era of Multi-Level Governance” (2012) 1 *Transnational Environmental Law* 245.

² See recent scholarship, e.g., Jacqueline Peel and Jolene Lin, “Transnational Climate Litigation: The Contribution of the Global South” (2019) 113 *American Journal of International Law* 679; see also Joana Setzer and Lisa Benjamin, “Climate Litigation in the Global South: Constraints and Innovations” (2020) 9 *Transnational Environmental Law* 77.

made pursuant to the Paris Agreement.³ Moreover, a richer understanding of transnational climate litigation – one that takes developments in the Global South into account – underscores that judicial contributions to global climate governance are not a purely Global North phenomenon. A number of courts in the Global South are taking bold steps and crafting innovative approaches to compel action on climate change, oftentimes drawing on human rights norms and frames. For additional context on climate litigation in specific Global South countries, see Julia Mello Neiva and Gabriel Antonio Silveira Mantelli’s chapter on Brazilian climate litigation (Chapter 19), Waqqas Mir’s chapter on Pakistani climate litigation (Chapter 22), and Arpitha Kodiveri’s chapter on Indian climate litigation (Chapter 20) in this volume.

We engage in the dialogue proposed in this collective volume by filling a lacuna in our developing understanding of Global South climate litigation concerning how such litigation emerges. In this regard, our focus is the different, prototypical modes of legal action in the Global South and how they are shaped by particular actors, including local activists, global non-profit foundations, and lawyers. We propose a theoretical framework to explain these modes and their implications for the emergence of climate litigation in the Global South. Our hope is that this model will provide valuable insights for both scholars and practitioners on the key drivers that make climate litigation more or less likely, as well as the conditions that support or obstruct the emergence of climate litigation.

The remainder of the chapter is structured as follows. Section 9.2 begins by elaborating our understanding of climate litigation, which eschews a narrow focus on lawsuits where climate change issues are central or “at the core” of the case in favor of a broader understanding. It then proceeds to sketch the key characteristics of climate cases in the Global South – derived from our article published recently in the *American Journal of International Law* – as a basis for developing our framework of modes of climate litigation in the Global South.⁴ In line with the goals of this volume, we include an analysis of the role of rights-based litigation in the Global South.

³ For discussion of the “bottom up” approach of the Paris Agreement and its preservation of state autonomy in determining their contributions under the Agreement coupled with the provision for a transparency framework, see Lavanya Rajamani, “Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics” (2016) 65 *International and Comparative Law Quarterly* 493; see also Meinhard Doelle, “The Paris Agreement: Historic Breakthrough or High Stakes Experiment?” (2016) 6 *Climate Law* 1.

⁴ See Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 2.

Section 9.3 focuses on this framework. We posit that there are five dominant modes of climate litigation in the Global South, which we have labeled “the grassroots activist,” “the hero litigator,” “the farmer,” “the enforcer,” and “the engineer” respectively. These are all proactive modes of litigation; however, there are also some, still-limited examples of anti-regulatory litigation in the Global South. In Section 9.4, we conclude with observations on future research directions that can be taken to continue to build our collective knowledge of climate litigation in the Global South.

9.2 AN OVERVIEW OF THE GLOBAL SOUTH CLIMATE DOCKET

There has been a proliferation of scholarly efforts to define and classify climate litigation.⁵ What is notable is that the most commonly applied definitions of climate litigation all share a focus on “core” cases where climate change “is a central issue in the litigation.”⁶ As a result, most of the scholarship on climate litigation in the Global North tends to be about high-profile mitigation cases, such as the US Supreme Court decision in *Massachusetts v. Environmental Protection Agency (EPA)* or the recent judgment of the Dutch Supreme Court in the *Urgenda* case.⁷

By contrast, other types of cases receive minimal coverage. For instance, there is very little scholarship on adaptation cases as opposed to mitigation-focused ones, partly because the former tend to be lower-profile, smaller scale, and have more diffuse causal connections with climate policy.⁸ This has led to calls for a broader conceptualization of climate litigation that includes, for

⁵ See, e.g., David Markell and J. B. Ruhl, “An Empirical Survey of Climate Change Litigation in the United States” (2010) 40 *Environmental Law Review* 10644; see also David Markell and J. B. Ruhl, “An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence Or Business As Usual?” (2012) 64 *Florida Law Review* 15; see also Chris Hilson, “Climate Change Litigation: An Explanatory Approach (or Bringing Grievance Back)”, in Fabrizio Fracchia and Massimo Occhiena (eds.), *Climate Change: La Risposta del Diritto* (Naples: Editoriale Scientifica, 2010), p. 421; see also Jacqueline Peel and Hari M. Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge: Cambridge University Press, 2015).

⁶ Peel and Osofsky, *Climate Change Litigation*, above note 5 at 8.

⁷ See *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007); see also HR 20 december 2019, 41 NJ 2020, m.nt. J.S. (*Urgenda/Netherlands*) (Neth.) (hereinafter “*Urgenda v. Netherlands*”).

⁸ However, see Jacqueline Peel and Hari M. Osofsky, “Sue to Adapt?” (2015) 99 *Minnesota Law Review* 2177; see also Margaret Rosso Grossman, “Climate Change and the Individual” (2018) 66 *American Journal of Comparative Law* 345, 371–75; see also X. He, “Legal and Policy Pathways of Climate Change Adaptation: Comparative Analysis of the Adaptation Practices in the United States, Australia and China” (2018) 7 *Transnational Environmental Law* 347.

example, cases at sub-national levels of governance and cases where climate change issues are less “visible” and the interface with domestic climate policy happens “inadvertently.”⁹

Similarly, we find that there is relatively little scholarly attention paid to climate litigation in the Global South. This is because the dominant definitions of climate litigation often do not capture these cases, which are “invisible” or fly below the radar because climate change tends to lie at the “periphery” rather than at the “core” of the litigation. We have argued elsewhere that this failure to capture developments in the Global South is problematic and that attention to the types of climate cases emerging in the Global South is helpful to promote a reframing of our understanding of climate litigation. This understanding can, in turn, inform advocacy, partnering initiatives, and capacity-building efforts designed to foster more robust climate governance in the Global South, which is essential for the achievement of the global mitigation and adaptation goals articulated in the Paris Agreement.¹⁰

Thus, in our work on climate litigation in the Global South, we are looking beyond “core” cases to include “peripheral” cases where climate issues are subsidiary to other arguments (e.g., contravention of natural resource management laws) or one of a number of arguments or issues raised in a dispute. In applying this understanding to the case law review, we consider a case to be part of the “Global South docket” when it engages directly or indirectly with climate change in the pleadings, judgment, campaign materials, or the media publicity. A case is excluded if climate change issues are mentioned incidentally or in passing but not otherwise considered in a meaningful way.

For example, the case law review has identified several cases about projects with potential environmental impacts, such as large infrastructure developments or natural resource activities, in which the court mentions climate change as one of the several environmental concerns at stake but does not consider it further in any meaningful way.¹¹ Such cases are not included in the “Global South docket,” although we note these cases with interest as they

⁹ See, e.g., Kim Bouwer, “The Unsexy Future of Climate Change Litigation” (2018) 30 *Journal of Environmental Law* 483.

¹⁰ See Paris Agreement to the United Nations Framework Convention on Climate Change, December 12, 2015, TIAS No. 16-1104, Art. 4(1) and (2) (on emissions reduction and mitigation measures) & Art. 7(1) (establishing “the global goal on adaptation”).

¹¹ See, e.g., *Lahore Bachao Tehrik v. Canal Road Project*, Government of Punjab, Lahore – SMC No. 25/2009 [2011] PKSC 34 (September 15, 2011) (Pak.) (concerns the widening of Canal Road and removing surrounding green belt areas).

suggest that petitioners and judges in future similar cases may begin to engage with climate change issues in a more sophisticated way.¹²

Based on our recent survey, we have identified three key characteristics of climate cases in the Global South. These characteristics can also be found in the Global North jurisprudence but are less pronounced. We therefore view these characteristics to be on a spectrum, with Global South cases presently concentrated at one end and Global North cases at the other end.¹³ Furthermore, these key characteristics do not apply across every jurisdiction in the Global South, which is a large grouping of countries with contrasting socioeconomic conditions and political systems. Nonetheless, these characteristics are shared widely enough in the Global South case law for us to consider them as notable features that distinguish climate litigation in the Global South from that in the Global North.

9.2.1 *The Prevalence of Rights-Based Claims*

A significant number of Global South climate cases, such as the high-profile *Leghari v. Pakistan*¹⁴ case and the *Colombian Youths* case,¹⁵ rely on constitutional rights or human rights, including alleged violations of the rights to life and/or a clean environment.¹⁶ Rights-based claims, in contrast, have been less prominent in the Global North climate jurisprudence. That said, there is growing interest in rights-based claims in Northern jurisdictions, particularly after the decision in *Urgenda v. Netherlands*, where the Dutch Supreme Court held that the Dutch government was required by international and European human rights legal obligations to increase the ambition and stringency of its climate mitigation targets.¹⁷

¹² Though we note that this is an assumption that remains to be tested.

¹³ See Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 2 at 713.

¹⁴ See *Leghari v. Pakistan*, (W.P. No. 25501/2015), Lahore High Court Green Bench, Order of 4 Sept. 2015, <https://elaw.org/PK_AsgarLeghari_v_Pakistan_2015>.

¹⁵ See Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala de Casación Civil, abril 5, 2018, M.P.: L.A. Tolosa Villabona, Expediente 11001-22-03-000-2018-00319-01 (Colom.), <<http://climatecasechart.com/non-us-case/future-generation-v-ministry-environment-others/>>.

¹⁶ The use of human rights discourse as a key feature of Global South climate litigation has also been identified by Joana Setzer and Lisa Benjamin, who also argue that the application of a human rights framework to the impacts of climate change is particularly relevant in the Global South because populations in these countries are highly vulnerable; see Setzer and Benjamin, “Climate Litigation in the Global South: Constraints and Innovations,” above note 2 at 85 and 90.

¹⁷ Cf. decision of Ninth Circuit in *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020). On January 17, 2020, by a 2–1 vote, the court dismissed the case on the basis that the plaintiffs lacked

We have argued that the relatively high percentage of rights-based claims in the Global South docket is, at least in part, due to the fact that many of the national constitutions of Global South jurisdictions contain environmental rights and/or the right to life that have been interpreted to include the right to live in a healthy and clean environment.¹⁸ We also suggested that there is significant potential for the development of rights-based climate litigation in Latin America because there is a rich environmental constitutional jurisprudence in various Latin American jurisdictions, which provides many “hooks” for climate litigation.¹⁹ The Inter-American Court of Human Rights in 2017 also issued an Advisory Opinion on Human Rights and the Environment, emphasizing the linkages between human rights and environmental protection and providing endorsement for rights-based environmental claims, including on issues of climate change.²⁰ Finally, successful cases led by local environmental organizations, such as Dejusticia, offer the potential for South-South cooperation to advance climate litigation in Latin America.²¹

César Rodríguez-Garavito argues that the rights-based route to climate litigation taken in the Global South “is not serendipitous, or the result of the absence of specialized climate change legislation that litigants would otherwise have used in framing their cases. Instead, it is a route whose tracks were firmly laid over the last three decades through public interest law practice, research and judicial activism regarding constitutional rights in general and socioeconomic rights (SERs) in particular.”²² More specifically, he argues that civil society actors have been advocating for SERs for a long time and are now carrying over lessons from this advocacy experience and applying them to climate change and other environmental harms.

standing to assert a violation of a constitutional right to a “climate system capable of sustaining life” (noting that a petition for rehearing en banc was filed on March 2, 2020).

¹⁸ See Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 2 at 712–14.

¹⁹ For example, many of the constitutions of nations in this region contain environmental rights and provide mechanisms for expedited legal action to facilitate access to justice by reducing costs and delays; see Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 2 at 707–8, 713–14.

²⁰ See *The Environment & Human Rights*, Advisory Opinion OC-23/17, Inter-Am. Ct. H.R. (ser. A), No. 23, <http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf>.

²¹ Dejusticia (the NGO supporting the Columbian Youths case) specifies collaboration across the Global South and the Global North as one of its key objectives, see “Internationalization: Global South & North Collaborations,” Dejusticia, <<https://www.dejusticia.org/en/how-we-work/internationalization/>>.

²² César Rodríguez-Garavito, “Human Rights: The Global South’s Route to Climate Litigation” (2020) 114 *AJIL Unbound* 40.

The same judicial organs that have been receptive to arguments that advance the protection of SERs are more likely to be similarly receptive to rights-based arguments that advance climate protection, particularly for those who are most vulnerable. Rodríguez-Garavito points out that both SERs litigation and rights-based climate litigation share a multilevel framing (i.e., while conducted in national courts, the litigation and rulings are founded on international treaties and constitutional norms), which makes the litigation experience with SERs “directly relevant to climate lawsuits.”²³

In their work, Joana Setzer and Lisa Benjamin also identify the application of human rights frameworks to be a key feature of climate change litigation in the Global South. They highlight that the socioeconomic and political contexts of Global South jurisdictions are relevant explanatory factors. The post-colonial histories of many Global South jurisdictions feature exploitation by multinational corporations and the continuation of colonial practices by Northern countries in some cases, causing a drain on natural resources, ethnic conflicts, corruption, and weak governance institutions. This has led to grave human rights violations and environmental destruction, but, as a result, some national courts have been progressive in upholding human rights and environmental rights.²⁴

9.2.2 Enforcement of Existing Laws

Regulation-forcing litigation or litigation that pursues a climate law reform rationale, akin to *Massachusetts v. EPA* and *Urgenda v. Netherlands*, is notably absent in the Global South docket. Instead, what we have identified from our case law survey is that the Global South climate cases demonstrate a preference for the enforcement of laws and policies that already exist (and which suffer from lax or non-enforcement) rather than pushing for new or better climate laws. In seeking enforcement of existing laws, we argue that plaintiffs in Global South jurisdictions are trying to address what they perceive to be more fundamental drivers of climate change. For example, in the case of *Pandey v. Union of India*, the nine-year-old claimant sought proper enforcement of the national forestry law, the air pollution control law, and the environmental impact assessment (EIA) law on the basis that the

²³ Ibid. 41. For discussion, also see Daniel Bonilla Maldonado (ed.), *Constitutionalism of the Global South* (Cambridge: Cambridge University Press, 2013).

²⁴ See Setzer and Benjamin, “Climate Litigation in the Global South: Constraints and Innovations,” above note 2 at 89–90.

non-enforcement of these laws “has led to adverse impacts of climate change across the country.”²⁵

Further, in bringing this type of enforcement lawsuit, litigants are able to rely on tried-and-tested case theories and judicial precedents to ground their pleadings. This increases the chances of obtaining a favorable judgment, a factor that, of course, weighs significantly on the minds of all litigators, but more so for those who have to work with fewer financial resources. A related point is that, by relying on fairly well-established legal arguments, Global South plaintiffs avoid the risk of judicial reluctance to address climate change directly for fear of the accusation of judicial overreach.²⁶

Setzer and Benjamin have also pointed out that Global South plaintiffs bring cases to address poor enforcement of existing planning and/or environmental laws because they are aware of the capacity constraints involved in passing new legislation on climate change.²⁷ Further, the Global South cases tend to involve efforts to protect important native ecosystems, for example, the Amazon, and combat environmental degradation that has been going on for decades.²⁸

9.2.3 *Stealthy Climate Litigation*

We use the term “stealthy” to convey the sense in which Global South climate litigation seeks to advance cautiously and quietly by packaging climate change issues with less controversial claims. This is done to dilute the political potency of climate issues and to avoid the political question doctrine (or non-justiciability doctrine) arguments that are likely to be raised by defense counsel. We have argued that an important reason why litigants in some Global South countries may prefer to pursue climate cases in a more indirect manner is the traditions of judicial restraint and limited judicial review in these jurisdictions. This is the case in a number of Southeast Asian

²⁵ *Pandey v. India*, Application, App. No. 187/2017, Nat’l Green Tribunal (March 2017), at ¶3, p. 2, <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2017/20170325_Original-Application-No.-___-of-2017_petition-1.pdf>.

²⁶ Judicial overreach is a commonly used argument by defendants in climate lawsuits; see, e.g., *Urgenda v. Netherlands*, above note 7, ¶¶8.1–8.3.5, and the court’s response to the argument.

²⁷ See Setzer and Benjamin, “Climate Litigation in the Global South: Constraints and Innovations,” above note 2 at 86.

²⁸ See *ibid.* 87–88.

jurisdictions, which eschew notions of the kind of activist court that can be found in other Asian common law jurisdictions (such as India and Pakistan).²⁹

More generally, we have observed that there is often a tailoring of legal claims in Global South climate cases to what is viewed as the most important policy issue in the jurisdiction, which is not always climate change. An example is China, where urban air pollution has been a major concern for Chinese citizens and an issue at the top of the political agenda.³⁰ It is unsurprising in this case that Chinese scholars, as well as prosecutors, see significant potential for public interest litigation (PIL) to tackle air pollution to serve as a pathway for the emergence of climate litigation in China.³¹ We note that this “stealthy” characteristic of Global South climate litigation may change over time, particularly if there is greater judicial recognition of the links between climate change and well-established legal avenues (e.g., constitutional rights) or if an increasing number of Global South jurisdictions adopt climate change-specific laws in fulfilment of their Nationally Determined Contributions (NDCs) under the Paris Agreement.³²

9.3 MODES OF CLIMATE LITIGATION IN THE GLOBAL SOUTH

Strategic climate litigation in the Global North has been enabled by generous financial support from non-profit foundations, individuals through crowd-funding strategies, and well-resourced environmental non-governmental organizations (NGOs).³³ In the United States, subnational actors such as the state attorney general play a prominent role in bringing high-profile cases to

²⁹ See Jacqueline Peel and Jolene Lin, “Climate Change Adaptation Litigation: A View from Southeast Asia,” in Jolene Lin and Douglas A. Kysar (eds.), *Climate Change Litigation in the Asia Pacific* (Cambridge: Cambridge University Press, 2020).

³⁰ For example, an online documentary on air pollution in China, “Under the Dome,” was watched by millions before being taken down by the government. See Steven Mufson, “This Documentary Went Viral in China. Then It Was Censored. It Won’t Be Forgotten,” *Washington Post*, March 17, 2015, <<https://www.washingtonpost.com/news/energy-environment/wp/2015/03/16/this-documentary-went-viral-in-china-then-it-was-censored-it-wont-be-forgotten/>>. Additionally, China’s State Council has released a number of action plans for air pollution prevention and control (the first in 2013 and a subsequent update in 2018).

³¹ See Yue Zhao et al., “Prospects for Climate Change Litigation in China” (2019) 8 *Transnational Environmental Law* 349. However, see Zhu Yan for a contrasting view, Zhu Yan, “The Subordinate and Passive Position of Chinese Courts in Environmental Governance,” in Jolene Lin and Douglas A. Kysar (eds.), *Climate Change Litigation in the Asia Pacific* (Cambridge: Cambridge University Press, 2020).

³² See Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 2 at 717.

³³ See, e.g., “Climate Change: A Low Carbon World Will Help Secure a Healthy and Prosperous Future for Children,” Children’s Investment Fund Foundation, <<https://ciff.org/priorities/>>

challenge federal agencies to regulate climate change issues.³⁴ *Massachusetts v. EPA* and *California v. EPA* – a petition filed in November 2019 by a coalition of states led by California seeking review of, inter alia, the EPA’s proposal to withdraw the waiver it had previously provided to California for that state’s Greenhouse Gas and Zero Vehicle Emissions programs under section 209 of the Clean Air Act – are just two examples.³⁵ Environmental law clinics, established firms with a thriving environmental law practice, and legal aid centers with environmental law expertise all contribute greatly to creating relatively favorable conditions for climate litigation in many Global North jurisdictions.³⁶

In comparison, much less is currently understood about the modes of climate legal action in the Global South and the constellation of actors needed to support them. Our survey of climate litigation in the Global South, as well as our consultancy work for the Children’s Investment Fund Foundation (CIFF) – a philanthropic organization that provides financial support to various climate litigation initiatives in both the Global North and Global South – have yielded some observations, which we present here as five prototypical modes of legal action (see Table 9.1).³⁷ We also draw from our understanding of the litigation pathways that have been undertaken in Global North jurisdictions to develop a number of hypotheses about the modes of

climate-change>. For information on Global Legal Action Network launching a crowdfunding campaign to help Portuguese children affected by forest fires take governments to the European Court of Human Rights, see “Crowdfunding Campaign for Climate Change Legal Action Launched,” Global Legal Action Network, <<https://www.glanlaw.org/single-post/2017/09/24/Crowdfunding-campaign-for-climate-change-legal-action-launched>>. See also Climate Action Network, a network of over 1,300 NGOs working to promote government and individual action to limit climate change. See “About CAN,” Climate Action Network International, <<http://www.climatenetwork.org/about/about-can>>.

³⁴ See Juliet Eilperin, “NYU Law Launches New Center to Help State AGs Fight Environmental Rollbacks,” *Washington Post*, August 16, 2017, <www.washingtonpost.com/politics/nyu-law-launches-new-center-to-help-state-ags-fight-environmental-rollbacks/2017/08/16/e4df8494-82ac-11e7-902a2a9f2d808496_story.html?utm_term=.0bee1744ca06>.

³⁵ See “Attorney General Becerra Files Lawsuit Against EPA for Attacking California’s Advanced Clean Car Standards,” Xavier Becerra: Attorney General, November 15, 2019, <<https://oag.ca.gov/news/press-releases/attorney-general-becerra-files-lawsuit-against-epa-attacking-california%E2%80%99s>>; see also Ronald Brownstein, “Trump’s War on Blue America,” *Atlantic*, September 19, 2019, <<https://www.theatlantic.com/politics/archive/2019/09/trump-epa-california-car-emissions/598381/>>.

³⁶ For analysis of how these organizations are overcoming cost barriers of litigation in the Global North, see Peel and Osofsky, *Climate Change Litigation*, above note 5 279–83. For a more general review of the literature on climate change litigation, see Joana Setzer and Lisa C. Vanhala, “Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance” (2019) 10 *WIREs Climate Change* 19.

³⁷ See “About Us,” Children’s Investment Fund Foundation, <<https://ciff.org/about-us/>>.

TABLE 9.1 *Prototypical modes of climate litigation in the Global South*

Grassroots Activist 	<ul style="list-style-type: none"> • Local activists and community groups sue governments or companies to realize more ambitious climate action. • Little or no collaboration with actors from other Global South jurisdictions (South-South cooperation) or with actors from Global North jurisdictions (North-South cooperation).
Hero Litigator 	<ul style="list-style-type: none"> • A dominant figure – the activist lawyer – drives the litigation strategy and process. • The hero litigator sees himself or herself as an unequivocal force for good. • Can be a local lawyer or a foreign lawyer who is inspired to fight for climate justice on behalf of the community.
The Farmer 	<ul style="list-style-type: none"> • Foundations and other non-profit organizations provide funding to local lawyers and environmental non-governmental organizations to “seed” new climate litigation. • May be the basis for significant local capacity-building, which could have a positive multiplier effect for more climate litigation.
The Engineer 	<ul style="list-style-type: none"> • A transnational actor seeks to replicate the success of a particular legal strategy in other jurisdictions deemed to have suitable conditions for successful transplantation. • Builds upon the vast literature on legal transplants. • Advances a new line of enquiry about the suitability of a legal transplant approach in climate litigation.
The Enforcer 	<ul style="list-style-type: none"> • Prosecutors or government agencies bring lawsuits to enforce local laws. • Local NGOs may engage with enforcement agencies to support these actions.

action that could emerge in the Global South. As this is a work in progress, and we are at an early stage of trying to gain a fuller picture of how particular actors – local activists, global charities, and lawyers, for example – are contributing to the emergence of climate litigation in the Global South, this framework is preliminary in nature but could serve as a useful starting point for further investigation.

9.3.1 *The Grassroots Activist*

This category refers to the type of litigation that arguably is most likely to emerge in jurisdictions with a tradition of PIL for the protection of

environmental and socioeconomic rights. In these jurisdictions, for example, Pakistan, India, the Philippines, and Colombia, PIL has been enabled by legal reforms and institutional mechanisms that facilitate access to justice for vulnerable groups in society.³⁸ Requirements such as the submission of formal petitions to commence proceedings, hefty court fees, and restrictive *locus standi* rules are typically removed to make it easier for citizens to approach the court.³⁹ As a result, PIL is perceived to be a viable route to protect rights, and local activists and communities have pursued it in many environmental claims.⁴⁰ It is then an incremental – but crucial – step for local communities and activists to use PIL as a pathway for climate litigation by pressing for enforcement of existing laws and protection of their constitutional rights.

Apart from PIL that is typically pursued against government agencies, the Grassroots Activist Model also includes litigation by local communities and activists against companies. This is most likely in the natural resource extractive sector, such as oil and gas production, mining, and timber logging. In some Global South jurisdictions, environmental activists and local communities have endured long struggles to prevent multinational corporations from engaging in industrial activities that cause significant damage to their land and ecology.⁴¹ Some communities have also turned to the courts to seek compensation from corporations that have caused pollution and environmental degradation.⁴² These campaigning and litigation experiences provide Grassroot Activists with the knowledge and expertise to undertake climate litigation. From a different perspective, climate litigation emerges when these activists and local communities include climate change as one of the issues in the litigation, either because climate change worsens the environmental problems that they have been trying to address (e.g., flooding and extreme weather

³⁸ See Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 2, 705–8.

³⁹ See, for example, the introduction of a Procedure for Environmental Cases in the Supreme Court of the Philippines to facilitate the protection and advancement of the constitutional right to a balanced and healthful ecology.

⁴⁰ See Peel and Lin, “Transnational Climate Litigation: The Contribution of the Global South,” above note 2 at 720.

⁴¹ A recent example is the industrial pollution from Indian pharmaceutical companies that make medicines for nearly all major global drug companies. For a discussion, see Madlen Davies, “Big Pharma’s Pollution Is Creating Deadly Superbugs While the World Looks the Other Way,” The Bureau of Investigative Journalism, May 6 2017, <<https://www.thebureauinvestigates.com/stories/2017-05-06/big-pharmas-pollution-is-creating-deadly-superbugs-while-the-world-looks-the-other-way>>.

⁴² A prominent example is *Gbemre v. Shell Petroleum Development Company of Nigeria Ltd. and others*, Suit No. FHC/B/CS/53/05; AHRLR 151 (NgHC 2005).

patterns) or the remedy sought by the activists will have climate change co-benefits (e.g., protection of native ecosystems such as glaciers).

The cases within the emerging “Global South climate docket” that fall within the Grassroots Activist category offer scant evidence that the participants in the litigation (the activists, the local community, or the legal team) collaborate with actors from other Global South jurisdictions (South-South cooperation) or with actors from Global North jurisdictions (North-South cooperation). We would hypothesize that, as Global South climate litigation develops, there will be more South-South cooperation and North-South cooperation as participants increasingly engage in global networks and platforms to share their knowledge and expertise.⁴³

9.3.2 The Hero Litigator

The Hero Litigator is a lawyer-activist who is passionate about the use of litigation and other legal tools to champion climate justice. She is a dominant figure who has a high-profile role in relation to the litigation, often raising publicity for the case (and climate litigation more broadly) through press conferences and appearances on television programs. The Hero Litigator drives the litigation strategy and process.

In the Global North climate case law, there are a number of cases that have been fought by “Hero Litigators.” An example is *Juliana v. United States*, the constitutional climate change case brought by twenty-one youths against the US government for violating their Fifth Amendment rights to life, liberty, property, and public trust resources. The lead counsel in *Juliana* is Julia Olson, the Executive Director and Chief Legal Counsel of Our Children’s Trust. Julia Olson founded Our Children’s Trust to serve as a non-profit public interest law firm that supports litigation by youths “to secure the legal right to a stable climate and healthy atmosphere.”⁴⁴ This goal underpins the litigation strategy (i.e., rights-based constitutional challenges by youth plaintiffs) adopted in *Juliana* and other cases around the world that are supported by Our Children’s Trust.⁴⁵

⁴³ Litigating the Climate Crisis: Lessons and Strategies (Centre for Human Rights and Global Justice and Global Justice Clinic, NYU School of Law) is an example of a global network/platform that can facilitate North–South and South–South cooperation.

⁴⁴ See “Our Team,” Our Children’s Trust, <<https://www.ourchildrenstrust.org/our-team>>.

⁴⁵ See, e.g. *Pandey v. India*, above note 25; see also “Ali v. Federation of Pakistan,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/ali-v-federation-of-pakistan-2/>>; see also “National Inquiry on Climate Change,” Republic of the Philippines Commission on Human Rights, <<http://chr.gov.ph/nicc-2/>>; see also Lalanath de Silva,

Another example of a Hero Litigator is Roda Verheyen, a partner in a Hamburg law firm who has been involved in climate action for a long time.⁴⁶ Verheyen is the lead counsel in at least four groundbreaking climate lawsuits, including *Lliuya v. RWE, Carvalho & Others v. Parliament & Council* (the *People's Climate Case*), the *Farming Families* case, and the *German Youths* case.⁴⁷ At the time of writing, the *German Youths* case had recently been filed. Verheyen will be representing a group of youth plaintiffs who are seeking review by the Federal Constitutional Court of Germany's new climate protection law that was passed in November 2019. The youth plaintiffs argue that the German government's new climate policy fails to protect their fundamental rights, and they will be making arguments similar to those advanced in *Urgenda v. Netherlands*.⁴⁸

As climate litigation develops in the Global South, we hypothesize that some cases following the Hero Litigator model are likely to emerge. In India, for example, M. C. Mehta is widely celebrated as the country's environmental champion and has filed a record number of PIL suits addressing a wide range of environmental concerns. These include issues of air quality in New Delhi and the prevention of industrial water pollution in the Ganga, which is one of the most sacred rivers to the Hindus and a lifeline to a billion Indian citizens who live along the course of this river.⁴⁹ There are many environmental lawyers in India today who aspire to follow in the footsteps of M. C. Mehta. In this context, it would not be surprising to witness the emergence of a number of Hero Litigators who seek climate justice particularly for the most

"Greenwatch Uganda Champions Information Rights," World Resources Institute, March 4, 2008, <<https://www.wri.org/blog/2008/03/greenwatch-uganda-champions-information-rights>> (discussing the *Kenneth Kakuru and Greenwatch v. Attorney General of Uganda* case).

⁴⁶ A profile of Roda Verheyen is in Tim Altegör, "A Champion of Climate Justice," *New Energy*, October 17, 2018, <<https://www.newenergy.info/people/portraits/a-champion-of-climate-justice>>.

⁴⁷ See "Luciano Lliuya v RWE AG," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/liiuya-v-rwe-ag/>>; see also Case T-330/T18, *Carvalho v. Parliament*, Gen. Ct. of the European Union (Second Chamber) (May 8, 2019) ("People's Climate Case"), <<http://curia.europa.eu/juris/liste.jsf?num=T-330/18&language=EN>>; see also "Family Farmers and Greenpeace Germany v. Germany," Sabin Center for Climate Change Law, <http://climatecasechart.com/non-us-case/family-farmers-and-greenpeace-germany-v-german-government>.

⁴⁸ See the comment from Verheyen: "We rely very much on the reasoning and methods of the Dutch Supreme Court." Dana Drugmand, "Youth Lawsuit Challenges Germany's Newest Climate Law," *Climate Liability News*, January 21, 2020, <<https://www.climate-liability-news.org/2020/01/21/germany-climate-lawsuit-youth/>>.

⁴⁹ These cases include *M.C. Mehta v. India*, WP (Civil) No. 13381 of 1984 (Supreme Court of India) (India); *M.C. Mehta v. India* (1991) 2 SCC 353 (India); and *M.C. Mehta v. India*, WP (Civil) No. 3727 of 1985 (Supreme Court of India) (India).

vulnerable and marginalized sectors of Indian society.⁵⁰ It is also noteworthy that some international organizations working in the Global South seek to cultivate “environmental law champions,” including the Hero Litigator.⁵¹

9.3.3 *The Farmer*

This mode of climate litigation refers to the efforts by foundations and other non-profit organizations to “seed” climate lawsuits in the Global South. In the Global North, a number of foundations and global environmental NGOs have played an instrumental role in providing financial and knowledge support to local lawyers and environmental NGOs to launch strategic climate litigation. For example, the *People’s Climate Case* is funded by a German NGO (Protect the Planet) and Climate Action Network (a large coalition of European NGOs working on energy and climate issues). In the case of *Lliuya v. RWE*, another German NGO (Germanwatch) funded the litigation. Efforts to promote climate change litigation in Europe received a boost from the Children’s Investment Fund Foundation (CIFF), a nonprofit philanthropy based in London, which aims to reduce carbon dioxide emissions from existing coal plants, improve air quality, and reduce emissions from the corporate sector by funding strategically selected legal cases. CIFF has also awarded a multi-year grant to the UK environmental law firm ClientEarth to “support strategic litigation to accelerate Europe’s low carbon transition and secure Europe’s climate leadership by putting it on a path to net zero carbon emissions by 2030.”⁵²

While ClientEarth’s *modus operandi* in Europe has been about holding governments and companies accountable for their climate actions and policies, ClientEarth’s China program focuses on building legal and judicial capacity for environmental governance more broadly. For example, ClientEarth (China) has an ongoing initiative that involves cooperation with the Supreme People’s Procuratorate (SPP) to develop the relatively new

⁵⁰ We note that there has also been a backlash and a degree of disillusionment with the efficacy of PIL to promote environmental governance in India, see, e.g., Lavanya Rajamani, “Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability” (2007) 19 *Journal of Environmental Law* 293.

⁵¹ See, e.g., Abuzar Salman Khan Niazi, “From Tax Litigation to Environmental Advocate – a Young Lawyer Shares His Journey,” UN Environment Programme, <<https://www.unenvironment.org/ru/node/24078>>.

⁵² See “ClientEarth Phase II,” Children’s Investment Fund Foundation, <<https://ciff.org/grant-portfolio/clientearth-phase-ii/>>.

system of prosecutor-led environmental PIL.⁵³ It can be argued that through its work with the SPP, ClientEarth (China) is providing valuable knowledge support to a set of actors that is widely recognized to be uniquely placed to hold state-owned enterprises, provincial authorities, and private companies accountable for their compliance with environmental and energy laws using prosecutorial enforcement powers.⁵⁴

In contemporary China, there is a fairly well-established tradition of foreign organizations bringing in foreign ideas, money, or experts. In 1947, the Rockefeller Foundation alone invested \$45 million in Chinese medical programs.⁵⁵ In more recent times, the Clinton and Bush administrations gave strong support to rule-of-law programs in China, which were not too different from earlier American efforts to bring legal assistance to Latin America, Africa, and parts of Southeast Asia during the law and development movement of the 1960s.⁵⁶ According to Rachel Stern, between 2001 and 2008, at least eight organizations, including the American Bar Association, the Natural Resources Defense Council, the Ford Foundation, and Environmental Defense Fund, ran programs on environmental information, legal aid, and public participation in environmental decision-making in China.⁵⁷ Rachel Stern argues that many American donors seldom support the costs of litigation and generally opt for “soft support: investing instead in skills to make future litigation and advocacy possible.” This is not surprising as the “toll of state surveillance (both real and imagined) helps explain the enthusiasm for soft support programs . . . many Beijing-based representatives of American NGOs and foundations agree that direct financial support for an environmental lawsuit

⁵³ See Dimitri de Boer, “ClientEarth Helps Build System for Public Interest Cases by Chinese Prosecutors,” Client Earth, July 18, 2018, <<https://www.clientearth.org/clientearth-helps-build-system-for-public-interest-cases-by-chinese-prosecutors/>>.

⁵⁴ For a discussion, see Yue Zhao et al., “Prospects for Climate Change Litigation in China,” above note 31; see also Jiangfeng Li, “Climate Change Litigation: A Promising Pathway to Climate Justice in China?” (2019) 37 *Virginia Environmental Law Journal* 134.

⁵⁵ See Quisha Ma, “The Peking Union Medical College and the Rockefeller Foundation’s Medical Programs in China,” in William H. Schneider (ed.), *Rockefeller Philanthropy & Modern Biomedicine: International Initiatives from World War I to the Cold War* (Bloomington: Indiana University Press, 2002), p. 159; see also Rachel Stern, *Environmental Litigation in China: A Study in Political Ambivalence* (Cambridge: Cambridge University Press, 2013), p. 184; see Fengshi Wu, “Double-Mobilization: Transnational Advocacy Networks for China’s Environment and Public Health,” PhD dissertation, University of Maryland (2005), p. 7.

⁵⁶ See Stern, *Environmental Litigation in China*, above note 55 at 184.

⁵⁷ See *ibid.* 186.

falls beyond their comfort zone . . . Their goal is to support local reformers, not to be expelled from China or draw attention to themselves.”⁵⁸

It is arguable that the Farmer mode of climate litigation in the Global South could either take the form of (a) Global North non-profit organizations beginning to expand their programs to fund climate litigation in Global South jurisdictions that are highly vulnerable to the impacts of climate change or that are major GHG emitters (e.g., Brazil) or (b) broad “soft support” programs (to borrow Rachel Stern’s terminology). Either route could be the basis for significant local capacity-building, which could have a positive multiplier effect for climate litigation.

9.3.4 *The Engineer*

In the Global North, the Engineer Model is most clearly illustrated by Urgenda, the organization behind the groundbreaking legal victory that has compelled the Dutch government to increase the stringency of its GHG emission reduction targets. Urgenda’s case theory is heavily influenced by Roger Cox, whose book explicitly endorses a transplant model to climate litigation.⁵⁹ Urgenda’s vision is that its success can be replicated elsewhere, and it has led to similar litigation in Belgium, Germany, Ireland, and the United Kingdom.⁶⁰ The Engineer is typically proactively involved in the transplant efforts (e.g., by actively sharing information about its legal strategy and working with local lawyers in the “target jurisdiction”).

There is a vast literature on legal transplants, which seeks to address questions such as the essential conditions for successful legal transplant and how imported legal institutions and rules perform in the long run.⁶¹ While we seek to draw lessons from this literature, we use the term “legal transplant” in a

⁵⁸ Ibid. 189.

⁵⁹ See Roger Cox, *Revolution Justified: Why Only the Law Can Save Us Now* (Maastricht: Planet Prosperity Foundation, 2012); see also Roger Cox, “A Climate Change Litigation Precedent: Urgenda Foundation v The State of The Netherlands” (2016) 34 *Journal of Energy and Natural Resources* 143, 161.

⁶⁰ See “Global Climate Litigation,” Urgenda, <<https://www.urgenda.nl/en/themas/climate-case/global-climate-litigation/>>.

⁶¹ See, e.g., Alan Watson, *Legal Transplants: An Approach to Comparative Law* (Edinburgh: Scottish Academic Press, 1974); see also William Ewald, “Jurisprudence (II): The Logic of Legal Transplants” (1995) 43 *American Journal of Comparative Law* 489; see also Natasha Affolder, “Contagious Environmental Lawmaking” (2019) 31 *Journal of Environmental Law* 187; see also Jonathan B. Wiener, “Something Borrowed for Something Blue: Legal Transplants and the Evolution of Global Environmental Law” (2001) 27 *Ecology Law Quarterly* 1295.

more deliberate manner than how it is commonly used in the literature. Our use refers to a concerted effort by a transnational actor to replicate the success of a particular climate litigation strategy elsewhere outside its home jurisdiction, with the aim of driving change in that jurisdiction's climate law and policy. Our review of the Global South case law has not revealed that there are currently cases driven by the Engineer's mode of action, but we hypothesize that the growing interest in Global South climate litigation could lead to a transnational actor seeking to replicate its success in the Global South.

9.3.5 *The Enforcer*

In this mode, cases are initiated by prosecutors or law enforcement authorities in a country, sometimes with technical (scientific and legal) support provided by non-governmental organizations. In Brazil and Indonesia, for instance, the plaintiff in the majority of climate litigation cases has been the public prosecutor or a government ministry seeking enforcement of domestic laws.⁶² For example, both *Ministry of Environment and Forestry v. PT Jatim Jaya Perkasa* and *MoEF v. PT Waringin Agro Jaya* were enforcement actions brought by the Indonesian Ministry of Environment and Forestry against palm oil companies for illegally setting fire to the land to clear it for palm oil cultivation. The ministry sought restoration measures, including compensation for carbon released into the atmosphere.⁶³ In China, as previously mentioned, the prosecution service has been granted extensive powers to pursue environmental enforcement litigation in the public interest, and this has led to cases to address urban air pollution (which have co-benefits of climate change mitigation).⁶⁴

⁶² In Brazil: see *Public Prosecutor's Office v. Oliveira* (2008); *Sao Paulo Public Prosecutor's Office v. United Airlines & others* (2014); *Public Prosecutor's Office v. H Carlos Scheider S/A Comercio e Industria* (2007). In Indonesia: see *MoE v. Selatnasik and Simpang* (2010); *MoE v. PT Merbau Pelalawan Lestari* (2014); *MoE v. PT Kalista Alam* (2013); *MoEF v. PT Bumi Mekar Hijau* (2016); *MoEF v. PT Jatim Jaya Perkasa* (2016); *MoEF v. PT Waringin Agro Jaya* (2017). For further details of these cases, please visit the Case Appendix supplementary to Peel and Lin, "Transnational Climate Litigation: The Contribution of the Global South," above note 2, <<https://www.cambridge.org/core/journals/american-journal-of-international-law/article/transnational-climate-litigation-the-contribution-of-the-global-south/ABE6CC59AB7BC276A3550B9935E7145A#fndtn-supplementary-materials>>.

⁶³ See *ibid.*

⁶⁴ The first tort-based public interest litigation case on air pollution was brought by public prosecutors in May 2018. See Zhao et al., "Prospects for Climate Change Litigation in China," above note 31 at 367.

Our case law review did not include consideration of whether external actors (e.g., environmental NGOs) provided assistance to the enforcement agencies in bringing these cases. However, informal discussions with our contacts in civil society and government-affiliated research institutions have indicated that it is not uncommon for enforcement agencies in Global South jurisdictions, which are typically under-resourced, to work with external actors who can provide valuable information from their programs and expert evidence.⁶⁵

We suggest that the Enforcer mode has the potential to advance climate litigation in the Global South, particularly with greater recognition of the link between enforcement of existing environmental and natural resource management laws and climate change.

9.4 CONCLUSION

This chapter has sought to provide a brief overview of our current understanding of climate litigation in the Global South. We started by elaborating our understanding of climate litigation and highlighting a number of key characteristics that we believe distinguish Global South climate litigation. We then proposed a framework that elucidates the different, prototypical modes of legal action in the Global South and how they are shaped by particular actors, including local activists, global non-profit foundations, and lawyers.

There is currently an unprecedented level of scholarly interest as well as practical action in the climate litigation space. There is also an emerging transnational climate litigation community comprising environmental activists, lawyers, scholars, and judges that is interacting with other transnational climate social movements such as FridaysforFuture. With the Global North having twenty years of climate litigation experience ahead of the Global South, it could be tempting to replicate familiar patterns of knowledge diffusion premised on the notion of the Global South learning and receiving resources from the (advanced) North. This temptation should be resisted, and the climate litigation space shows that the Global South experience is a rich and powerful one that offers many interesting opportunities for multi-directional learning.

⁶⁵ See other chapters in this book.

The Impacts of High-Profile Litigation against Major Fossil Fuel Companies

JOANA SETZER*

10.1 INTRODUCTION

Climate change litigation has been growing in importance over the past three decades as a way of either advancing or delaying effective action on climate change.¹ Of particular interest to the present analysis are the various legal strategies that have been developed and are being used against major fossil fuel companies. The trend is underpinned by the idea that high-profile climate litigation in private law has the potential to effectively target a relatively small group of corporations who are responsible for a large percentage of emissions.² The cases filed in this new wave of litigation against major emitters (the ‘Carbon Majors’) have been supported by Richard Heede’s work, as well as by advancements in the science of climate attribution.³ See Richard Heede’s chapter (Chapter 12) and Michael Burger, Jessica Wentz, and Daniel Metzger’s chapter in this volume (Chapter 11) for more on this. But questions

* This chapter is an extended version of the blog entry that I wrote for an Open Global Rights special series coordinated by César Rodríguez-Garavito, which was published in July 2020. I am grateful for the comments and suggestions made by Ben Batros and Jon Tan in the drafting of this chapter. I would also like to thank Jon Tan and Henry Cornwall for their research assistance in reviewing some of the events study literature.

¹ See Jacqueline Peel and Hari M. Osofsky, *Climate Change Litigation Regulatory Pathways to Cleaner Energy* (Cambridge: Cambridge University Press, 2015); see also Jacqueline Peel and Hari M. Osofsky, ‘Climate Change Litigation’ (2020) 16 *Annual Review of Law and Social Science* 2021; see also Joana Setzer and Rebecca Byrnes, ‘Global Trends in Climate Change Litigation: 2020 Snapshot’ (2020) Grantham Research Institute on Climate Change and the Environment.

² See Geetanjali Ganguly et al., ‘If at First You Don’t Succeed: Suing Corporations for Climate Change’ (2018) 38 *Oxford Journal of Legal Studies* 841.

³ See Richard Heede, ‘Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854–2010’ (2014) 122 *Climatic Change* 229.

about whether the outcomes of such litigation actually help to address climate change in a meaningful way remain unanswered.⁴

Measuring the impact of strategic litigation is never easy. When looking at climate litigation against governments, there are successful landmark cases where it has been possible to identify pro-regulatory impacts that resulted from this type of legal strategy.⁵ In the *Urgenda* case, for example, following the Supreme Court decision, the Dutch government committed to reducing the capacity of its remaining coal-fired power stations by 75 per cent and implementing a three-billion-euro package of measures to reduce Dutch emissions by 2020. Regulatory challenges to permits authorizing high emitting projects can also be considered successful in regulating emissions. These decisions could lead to effective mitigation or adaptation action, provided that the court mandates are not overturned by ministerial action or inaction.⁶

The impacts of high-profile litigation against major fossil fuel companies, however, are less clear. To start, the majority of high-profile cases filed against Carbon Majors are still ongoing, and it can take many years before nuisance and fraud cases are decided in court. Also, many of these cases are legally difficult, in that they face both procedural and substantive doctrinal hurdles. For these reasons, before high-profile nuisance and fraud cases against major fossil fuel companies reach a decision in court, litigants often use intermediate steps to apply pressure on companies. Even before they get to a trial on the merits and an eventual judgment, litigants use the cases to influence different audiences – not just the companies directly, but also the public, investors or financiers, insurers, and regulators. Another strategy is to bring cases against

⁴ See Sabrina McCormick et al. 'Strategies in and Outcomes of Climate Change Litigation in the United States' (2018) 8 *Nature Climate Change* 829; see also Joana Setzer and Lisa C. Vanhala, 'Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance' (2019) 10 *WIREs Climate Change* e580; see also Kim Bouwer and Joana Setzer, 'New Trends in Climate Litigation: What Works?' Working paper presented at the New Trends in International Climate and Environmental Advocacy Workshop, Johns Hopkins University SAIS Europe and European University Institute (2020).

⁵ See Lesley Hughes, 'The Rocky Hill Decision: A Watershed for Climate Change Action?' (2019) 37 *Journal of Energy and Natural Resources Law* 341; see also Jonathan Verschuuren, 'The State of the Netherlands v Urgenda Foundation: The Hague Court of Appeal upholds judgment requiring the Netherlands to further reduce its greenhouse gas emissions' (2019) 28 *Review of European, Comparative and International Environmental Law* 94; see also Jacqueline Peel and Hari M. Osofsky, 'A Rights Turn in Climate Change Litigation?' (2018) 7 *Transnational Environmental Law* 37.

⁶ See Emily Barritt and Boitumelo Sediti, 'The Symbolic Value of *Leghari v. Federation of Pakistan*: Climate Change Adjudication in the Global South' (2019) 30 *King's Law Journal* 203; see also Tracy-Lynn Humby, 'The Thabametsi Case: Case no 65662/16, Earthlife Africa Johannesburg v Minister of Environmental Affairs' (2018) 30 *Journal of Environmental Law* 145.

other actors that will have indirect effects on Carbon Major companies (e.g., divestment cases)⁷ or to use alternative legal interventions that have more immediate results and easier wins (e.g., bringing claims of deceptive 'green-washing' marketing campaigns by Carbon Major companies to courts or non-judicial bodies).

Ultimately, strategic climate litigation directly against and/or indirectly targeting Carbon Majors aims to help reshape narratives about energy production and the consequences of global warming. This type of litigation advocates a shift from fossil fuels to renewables and draws attention to the vulnerability of coastal communities and infrastructure to extreme weather and rising sea levels. In addition, it articulates climate change as a legal and financial risk with the aim of driving behavioural change and guiding climate change-responsive adjudication in the longer term. As such, this type of litigation not only seeks the provision of effective legal remedies for climate harms but also aims to transform how climate change is defined and how it should be addressed.⁸

This chapter considers key characteristics of high-profile climate litigation brought against Carbon Majors, while also taking into consideration some of the impacts that climate litigation brought against governments and against other private actors might have on Carbon Majors. The chapter examines the different types of cases using a temporal framing: cases that look into the past (liability cases) and cases that look into the present and the future (fraud claims, disclosure claims, and human rights procedures). It then introduces a discussion on how to assess some of the direct and indirect regulatory and financial impacts of such cases. Focusing on the indirect financial impacts, this chapter suggests that event studies could be applied to assess the potential impact of climate litigation on the stock prices of defendant companies.

The structure of this chapter is as follows. Section 10.2 presents key aspects of strategic private climate litigation against Carbon Majors. Section 10.3 discusses some of the ways in which climate litigation can potentially impact major emitters and contemplates the possibility of using event studies to assess the eventual impact of climate litigation on the market valuation of listed Carbon Majors companies. Lastly, Section 10.4 presents conclusions and issues for further exploration.

⁷ See generally Benjamin Franta, 'Litigation in the Fossil Fuel Divestment Movement' (2017) 39 *Law and Policy* 393.

⁸ See Grace Nosek, 'Climate Change Litigation and Narrative: How to Use Litigation to Tell Compelling Climate Stories' (2018) 42 *William & Mary Environmental Law and Policy Review* 733.

10.2 LITIGATION AGAINST CARBON MAJORS

Up until the end of 2020, there were at least forty-seven ongoing climate cases worldwide against Carbon Major companies.⁹ The majority of these cases have been brought in the United States, starting in 2005, and more significantly beyond the United States since 2015. Following a first wave of unsuccessful lawsuits against oil, gas, and electric companies in the early 2000s in North American courts, a new wave of climate change lawsuits have been filed over the past five years against major fossil fuel companies.¹⁰ These two waves of climate litigation against Carbon Majors can be visualized in Figure 10.1. The Carbon Majors research helped drive this second wave, singling out a list of corporations that historically have contributed the most to GHG emissions.¹¹ This research mapped and quantified the cumulative emissions of the ninety largest carbon producers from 1854 to 2010.

Other advancements in climate science are also contributing to the development of climate litigation against major emitters. In terms of the science, there is robust evidence to establish a strong causal connection between historic and future anthropogenic greenhouse gas emissions, an increase in the global mean surface temperature, and the likelihood of individual severe weather and climate-related events.¹² But in an increasing number of climate litigation cases, challenges remain when attributing specific climate-related events to global GHG emissions or specific emitters. Legal scholars and climate scientists are making a clear effort to make findings in climate attribution research more accessible to litigants. Interdisciplinary research has started to offer approaches that enable causal statements to be made in law about the physical reality of climate phenomena, side by side with the

⁹ Thirty-three lawsuits in the United States; two lawsuits in France (*Friends of the Earth et al. v. Total* and *Notre Affaire à Tous and Others v. Total*); one lawsuit in Argentina (*Mapuche Confederation of Neuquén v. YPF et al.*); one lawsuit in Germany (*Lliuya v. RWE*); one lawsuit in the Netherlands (*Milieudefensie et al. v. Royal Dutch Shell plc.*); one lawsuit in Nigeria (*Gbemre v. Shell Petroleum Development Company of Nigeria Ltd et al.*); one inquiry in the Philippines (Carbon Majors Inquiry, Human Rights Commission); and one lawsuit and one complaint in the United Kingdom (*Deutsche Bank AG v. Total Global Steel Ltd.* and *Complaint against BP in respect of violations of the OECD Guidelines*).

¹⁰ See Ganguly et al., 'If at First You Don't Succeed: Suing Corporations for Climate Change', above note 2.

¹¹ See Heede, 'Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854–2010', above note 3.

¹² See Petra Minnerop and Friederike Otto, 'Climate Change and Causation: Joining Law and Climate Science on the Basis of Formal Logic' (2020) 27 *Buffalo Journal of Environmental Law* 49.

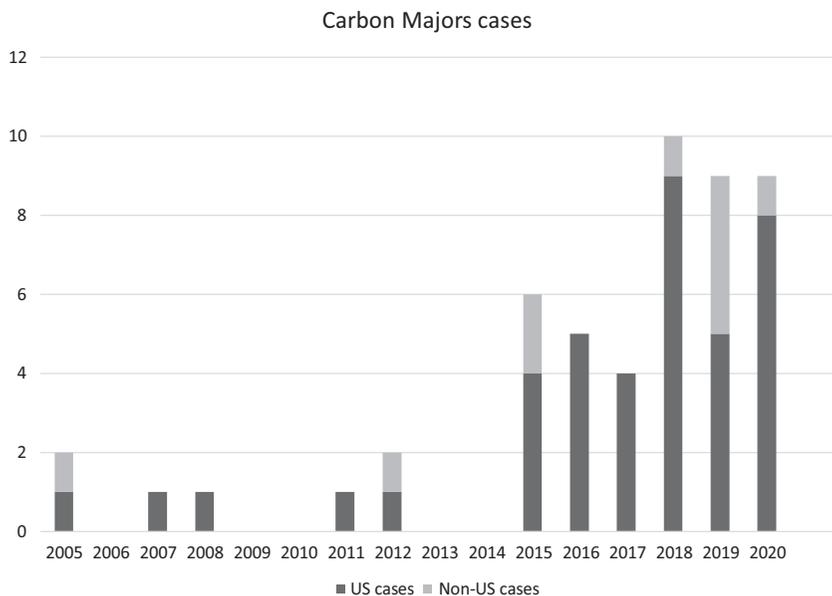


FIGURE 10.1 Numbers of cases against the Carbon Majors, January 2005–December 2020.
SOURCE: Setzer and Byrnes (2020), based on CCLW and Sabin Center data

presentation of probabilistic evidence that defines the relationships between factors in and events caused by a changing climate.¹³

This litigation against Carbon Majors has different aims.¹⁴ Some cases are directed at changing corporate behaviour directly, for example, by seeking an order requiring the targeted company to change its policies. Other cases provide the basis on which different groups and individuals can subsequently pressure major emitters to change their corporate behaviour. This section examines different types of climate litigation filed against major emitters, taking into consideration a temporal framing: cases that look into the past (liability cases) and cases that look into the present and/or the future (fraud claims, disclosure claims, and human rights procedures).¹⁵

¹³ See, e.g., Michael Burger et al., ‘The Law and Science of Climate Change Attribution’ 2020 45 *Columbia Journal of Environmental Law* 57; see also *ibid*.

¹⁴ See Bower and Setzer, ‘New Trends in Climate Litigation: What Works?’ above note 4.

¹⁵ Note that this is different from the approach used by Hilson to explore the temporal framing in high-profile climate litigation. Hilson’s analysis focuses on cases brought against governments, emphasizing the tension between a future-looking scientific framing of time and both an environmentalist policy framing of time and a present-based scientific time frame. This chapter considers the temporal framing of cases brought against Carbon Majors and the remedies they

10.2.1 *Looking into the Past*

Several high-profile cases against Carbon Majors have been sought in tort, including public nuisance, private nuisance, and negligence. The premise of such cases is that Carbon Majors have contributed a significant amount to the greenhouse gases that cause climate change and understood the consequences of burning fossil fuels and, yet, continued to do so; therefore, they should be held liable for the consequent damages.¹⁶ Further, some litigants argue that Carbon Major corporations have taken actions to confound or mislead the public about climate science.¹⁷ These cases typically rely on tort law and advancements in climate science, particularly climate attribution. Liability cases against major emitters include *Lliuya v. RWE AG*,¹⁸ the case brought in Germany by a Peruvian farmer against RWE, the German electric utilities company, and the thirteen lawsuits brought in the United States by subnational governments – cities, counties, and one state – against a number of Carbon Major companies.

10.2.2 *Cases Looking into the Present and the Future*

In addition to cases that focus on the impacts of past emissions, litigants have brought cases seeking to change current and future corporate behaviour. Several lawsuits have asserted that companies are misleading consumers about the central role that their products play in causing climate change and/or intentionally misleading investors about material climate-driven risks to their business. Importantly, in some cases, litigants are seeking an injunction relief, a remedy that would require Carbon Majors to refrain from performing a particular act.

In the unsuccessful civil case of *New York v. Exxon Mobil Corporation*,¹⁹ the state's Attorney General argued that the company had engaged in fraud

seek. See Chris Hilson, 'Framing Time in Climate Change Litigation' (2018) 9 *Oñati Socio-legal Series* 361.

¹⁶ See Vic Sher, 'Forum versus Substance: Should Climate Damages Cases Be Heard in State or Federal Court?' (2020) 72 *Stanford Law Review* 134; see generally Peter C. Frumhoff et al., 'The Climate Responsibilities of Industrial Carbon Producers' (2015) 132 *Climatic Change* 157.

¹⁷ See Geoffrey Supran and Naomi Oreskes, 'Assessing ExxonMobil's Climate Change Communications (1977–2014)' (2017) 12 *Environmental Research Letters* 084019; see also Sophie Marjanac and Lindene Patton, 'Extreme Weather Event Attribution Science and Climate Change Litigation: An Essential Step in the Causal Chain?' (2018) 36 *Journal of Energy and Natural Resources Law* 265.

¹⁸ See 'Luciano Lliuya v. RWE', Climate Change Laws of the World, LSE-Grantham Research Institute on Climate Change and the Environment.

¹⁹ See 'People of the State of New York v. Exxon Mobil Corporation,' Sabin Center Climate Change Litigation Databases.

through its statements about how it accounted for the costs of climate change regulation. The case started in 2015, with a four-year investigation that led ultimately to a lawsuit alleging that Exxon's publicly disclosed projections of climate change-related costs were inconsistent with its internal projections and were therefore fraudulent. The court held that the majority of investment decisions are not based on climate change cost assumptions and therefore the Attorney General had not been able to prove material misrepresentation. However, the court was careful to note that its decision did not excuse Exxon from any responsibility that it may have for causing climate change as the case related only to issues of fraud and not to climate change more broadly.

Another modality of climate litigation that addresses a discrepancy between discourse and action, sometimes referred to as 'greenwashing', manifests when products, services, or advertising campaigns mislead consumers about their overall environmental performance or benefits. An example of a greenwashing (or 'climaterwashing') case against a Carbon Major is the Complaint against BP,²⁰ filed by the environmental law firm/NGO ClientEarth before the UK Contact Point under the OECD Guidelines for Multinational Enterprises. The complaint alleged that a BP advertising campaign had misrepresented the scale of BP's low-carbon activities, provided inaccurate information about the emissions savings from its natural gas activities, and overemphasized the importance and desirability of increasing primary energy demand. The complaint did not proceed further as BP ended the advertising campaign in question. Nevertheless, the UK Contact Point analyzed the filing and found that the complaint was material and substantiated.

In this effort to shift the current and future corporate behaviour of major emitters, an important trend has been for litigants to rely on human rights law to define the scope of corporate duty of care and due diligence. In *Milieudéfensie et al. v. Royal Dutch Shell*,²¹ the plaintiffs claim that Shell committed to support the Paris Agreement and, at the same time, continued to lobby against climate policies and invest in oil and gas extraction. In this case, the applicants rely on human rights to define the contours of the corporate duty of care and due diligence obligations under Dutch tort law, seeking an injunctive relief that would require Shell to align its emissions with

²⁰ See 'Complaint against BP in Respect of Violations of the OECD Guidelines', Climate Change Laws of the World, LSE-Grantham Research Institute on Climate Change and the Environment.

²¹ See 'Milieudéfensie et al. v. Royal Dutch Shell plc.', Climate Change Laws of the World, LSE-Grantham Research Institute on Climate Change and the Environment.

the Paris goals. In *Notre Affaire à Tous and Others v. Total*,²² an alliance of French NGOs and local governments sought a court order forcing Total to issue a new vigilance plan that considered the risks related to global warming beyond 1.5 degrees Celsius, Total's contributions to those risks, and a plan aligning the company's activities with a greenhouse gas emissions reduction pathway compatible with limiting warming to 1.5 degrees Celsius.

The last type of forward-looking cases using human rights as a basis for Carbon Majors litigation argues that corporations have specific human rights responsibilities. However, unlike states' duties to protect,²³ private law is an area in which human rights law is not clear-cut.²⁴ The so-called business and human rights regime is only specified in soft law instruments, such as the UN Guiding Principles on Business and Human Rights. The first of such cases is an extra-judicial investigation – the inquiry initiated by the Commission on Human Rights of the Philippines in response to a petition filed by Greenpeace Southeast Asia and the Philippines in 2015.²⁵

10.3 UNDERSTANDING THE POTENTIAL IMPACTS OF CLIMATE LITIGATION

As climate change litigation is increasingly used as a tool for climate governance, it is important for litigators to understand the potential impacts that litigation against Carbon Majors can have in order to assess its resonance in different circumstances. The impacts of climate litigation can be regulatory and financial, direct and indirect. This section discusses (i) the regulatory and (ii) financial impacts of cases brought against Carbon Majors (described in Section 10.2) as well as cases brought against other actors but that might impact Carbon Majors. It also contemplates (iii) the possibility of using event studies to assess the eventual impact of climate litigation on the market valuation of listed Carbon Majors companies.

²² See 'Notre Affaire à Tous and Others v. Total', Climate Change Laws of the World, LSE-Grantham Research Institute on Climate Change and the Environment.

²³ See César Rodríguez-Garavito, 'Human Rights: The Global South's Route to Climate Litigation' (2020) 114 *AJIL Unbound* 40.

²⁴ See Annalisa Savaresi and Juan Auz, 'Climate Change Litigation and Human Rights: Pushing the Boundaries' (2019) 9 *Climate Law* 244.

²⁵ See Jacqueline Peel and Hari M. Osofsky, 'A Rights Turn in Climate Change Litigation?' (2018) 7 *Transnational Environmental Law* 37; see also Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' (2019) 113 *American Journal of International Law* 679; see also Joana Setzer and Lisa Benjamin, 'Climate Litigation in the Global South: Constraints and Innovations' (2019) 9 *Transnational Environmental Law* 77.

It should be noted, however, that while different impacts can be observed among all types of climate litigation, questions about whether the outcomes of these cases actually help to address climate change in a meaningful way remain unanswered.²⁶ Assessing the significance of climate change litigation involves questions of how to define impact, which evidence sources to consider, and the relevant time frame for assessment.²⁷ Time frame is particularly important given that legal cases may take several years to progress through the courts and the full effects may be manifested much later down the line. At the same time, an evaluation of the effectiveness and impacts of climate litigation does not end with the result in the courts; a consideration of what cases or strategies work must include an understanding that a win or loss in litigation may have implications that are complex and difficult to understand.²⁸ Moreover, litigation strategies do not take place in isolation from other political and social mobilization efforts; rather, litigation strategies are combined with other strategies, such as policy advocacy and public campaigns.²⁹

10.3.1 *Direct and Indirect Regulatory Impacts of Litigation*

One way to proceed with an assessment of the regulatory impacts of climate litigation is to follow frameworks such as the one suggested by Peel and Osofsky.³⁰ According to this framework, direct regulatory impacts occur where formal legal change results from the litigation. This may be manifested through targeted rules, policies, or decision-making procedures that are mandated by a judgment or arise out of the legal interpretation developed by the court. Direct regulatory impacts resulting from litigation brought against governments can indirectly affect Carbon Major companies. These forms of litigation, although focused on regulatory behaviour, have the potential to change government policies and thereby affect Carbon Majors. When successful, these cases have implications for the speed and scope of the transition to a lower carbon economy. For example, litigation against governments can

²⁶ See Kim Bouwer, 'The Unsexy Future of Climate Change Litigation' (2018) 30 *Journal of Environmental Law* 483; see also Setzer and Vanhala, 'Climate Change Litigation', above note 4.

²⁷ See Setzer and Vanhala, 'Climate Change Litigation', above note 4.

²⁸ See Kim Bouwer, 'Lessons from a Distorted Metaphor: The Holy Grail of Climate Litigation' (2020) 9 *Transnational Environmental Law* 1.

²⁹ See Scott L. Cummings and Deborah L. Rhode, 'Public Interest Litigation: Insights From Theory and Practice' (2009) 36 *Fordham Urban Law Journal* 603.

³⁰ See Peel and Osofsky, *Climate Change Litigation Regulatory Pathways to Cleaner Energy*, above note 1.

lead to more stringent emissions standards, compel the inclusion of GHG emissions limits in regulatory permits issued to new activities/particular sectors, result in the delay or revocation of permits and licences, or lead to more stringent procedural obligations, such as reporting and disclosure.³¹

Indirect regulatory impacts, in turn, describe pathways that arise due to the incentives that judgments provide for behavioural change by governmental and non-governmental actors. Indirect regulatory impacts include the increased sensitization of legal institutions to the nature of climate change and increased public awareness of climate change and its impacts. Examples of indirect regulatory impacts experienced by corporate actors include the spillover of regulatory actions (e.g., when lawsuits are combined with other forms of activism and public campaigns) and an increased perception of 'litigation risk'.³²

10.3.2 *Direct and Indirect Financial Impacts of Litigation*

Because strategic litigation against Carbon Majors is intended to change the behaviour and, ultimately, the business models of companies that contribute significantly to GHG emissions, understanding the financial impacts of these claims is also critical. For that, it is necessary to pursue a quantitative assessment of the direct and indirect economic costs and financial impacts of climate litigation.³³

Direct financial impacts are easier to calculate. As with other types of litigation, for the defendants, direct impacts usually include legal and administrative costs, legal fees and fines, and, if the case is successful, awards of damages. These financial impacts can occur at a pre-filing stage, during the legal proceeding itself, and after the final judgment, award, or decision.³⁴ The exponential increase in harmful climate impacts globally means that Carbon Major corporations may be liable for billions of dollars' worth of damages for existing as well as future climate impacts, and not all climate change damage

³¹ See Ganguly et al., 'If at First You Don't Succeed: Suing Corporations for Climate Change', above note 2; see also Javier Solana, 'Climate Litigation in Financial Markets: A Typology' (2019) 9 *Transnational Environmental Law* 1.

³² See Bouwer and Setzer, 'New Trends in Climate Litigation', above note 4.

³³ See Joana Setzer, 'Climate Litigation against "Carbon Majors": Economic Impacts', Open Global Rights, 16 July 2020.

³⁴ Javier Solana, 'Climate Litigation as Financial Risk', in *EBI BrieFin: #3 Sustainable Finance* (Frankfurt am Main: European Banking Institute for Research on Banking Regulation, 2020), <<http://xoktk.mjt.lu/nl2/xoktk/5kyomo.html>>.

is covered by the insurance policies held by Carbon Major companies.³⁵ The scale of the liability for damages may vary depending on whether they arise out of past emissions or out of future emissions if there is no change of course in their emissions.

As with indirect regulatory impacts, the indirect financial impacts of climate litigation against major carbon emitters are harder to measure. To start, the regulatory impacts of successful high-profile cases brought against governments (mentioned in Section 10.3.1) can result in economic costs to major emitters. In some instances, Carbon Majors might experience the indirect regulatory impacts of cases brought against financiers, pension funds, and university endowments. Some of these cases might intend to pressure Carbon Majors and are brought as part of a broader strategy by social movements or organizations to increase the viability of ongoing campaigns against major emitters.³⁶ Indirect financial impacts of litigation against Carbon Majors also include increasing premiums under liability insurance policies, increasing capital costs, and the devaluation of shares of listed companies.³⁷

Indirect economic impacts resulting from climate litigation are still speculative.³⁸ In theory, investors may react to the direct cost of the lawsuit and/or perceive that climate cases could undermine companies' reputations and try to anticipate potential reputational losses by selling their shares.³⁹ In addition, climate lawsuits brought by shareholders against Carbon Majors on the basis that these companies will have to radically shift their business model or else risk exposure to stranded assets might also result in investors trying to anticipate potential costs by selling their shares.

10.3.3 *Measuring the Indirect Impact of Litigation on Stock Prices*

When considering the indirect economic impacts of litigation, one of the most common indicators is identifying whether litigation affects the market valuation of listed companies. The impact of litigation on stock prices is measured through event studies – a methodology widely used to examine

³⁵ See Ganguly et al., 'If at First You Don't Succeed: Suing Corporations for Climate Change', above note 2.

³⁶ See Bower and Setzer, 'New Trends in Climate Litigation', above note 4.

³⁷ See Solana, 'Climate Litigation as Financial Risk', above note 34.

³⁸ See Setzer, 'Climate Litigation against "Carbon Majors": Economic Impacts', above note 33.

³⁹ See John Armour et al., 'Regulatory Sanctions and Reputational Damage in Financial Markets' (2017) 52 *Journal of Financial and Quantitative Analysis* 1429; see also Solana, 'Climate Litigation as Financial Risk', above note 34.

the shareholder wealth consequences of different types of lawsuits.⁴⁰ Event studies assessing the impacts of litigation have been undertaken for different types of litigation, including tobacco, asbestos, and environmental litigation in the United States. In tobacco litigation, unfavourable litigation announcements were found to cause share prices to fall relative to those in reference industries.⁴¹ Factors causing this revaluation of share prices include the prospect of high legal fees, significant liability or settlement payments, and reputational costs.⁴² The financial impact of strategic litigation was equally, if not more, significant for the asbestos industry. Researchers estimate that between 1976 and 2004 at least seventy-three companies filed for bankruptcy as a result of the costs of asbestos litigation and the prospect of future liability.⁴³

Within the field of environmental regulation, both actual and potential environmental lawsuits were found to lead to falls in share prices. The Volkswagen emissions scandal of 2015 ('Dieselgate') stands out, with the disclosure of the breach by the Environmental Protection Agency leading to a loss in market value of around 30 per cent in several days.⁴⁴ Dieselgate had significant spillover effects, with American automobile companies all experiencing falls in their share values.⁴⁵ Furthermore, following Dieselgate, share price drop in response to failures to meet environmental standards increased, reflecting heightened scrutiny of the automotive industry by investors.⁴⁶

Although the existing literature analyzed different industries and types of cases, they suggest that strategic litigation can impose detrimental financial impacts on the share prices of the industries against which cases are brought.⁴⁷ These financial impacts were, in the tobacco and asbestos cases, exacerbated by additional suits or the unveiling of damaging internal documents tracing a pattern of concealment and misrepresentation. In environmental cases, the impact of disclosure has been particularly severe, as it unveils greenwashing,

⁴⁰ See Sanjai Bhagat and Roberta Romano, 'Event Studies and the Law: Part I: Technique and Corporate Litigation' (2002) 4 *American Law and Economics Review* 141.

⁴¹ See Frank A. Sloan et al., 'Litigation and the Value of Tobacco Companies' (2005) 24 *Journal of Health Economics* 427, 427–39.

⁴² Bhagat and Romano, 'Event Studies and the Law: Part I', above note 40.

⁴³ See Stephen J. Carroll et al., 'Asbestos Litigation Costs and Compensation: An Interim Report' (2002) RAND Institute for Civil Justice.

⁴⁴ See Mauro Nunes and Camila Lee Park, 'Caught Red-Handed: The Cost of the Volkswagen Dieselgate' (2016) 7 *Journal of Global Responsibility* 288.

⁴⁵ See Lincoln C. Wood et al., 'Stock Market Reactions to Auto Manufacturers' Environmental Failures' (2018) 38 *Journal of Macromarketing* 364.

⁴⁶ *Ibid.*

⁴⁷ See generally Matteo Arena and Stephen P. Ferris, 'A Survey of Litigation in Corporate Finance' (2017) 43 *Managerial Finance* 4.

which in turn is found to lead to additional litigation, losses in reputation, consumer trust, and corresponding market share.⁴⁸

In a number of cases that have been studied, drops in share value have influenced corporate behavioural change.⁴⁹ One notable example is the signing of the master settlement agreement by tobacco companies, as it indicated a willingness to pay a premium to stabilize share prices and obtain price stability.⁵⁰ Decades of law and finance literature suggest that litigation risk and actual litigation can have significant long-lasting effects on defendant firms and their executives and directors, with further ramifications for corporate activities, policies, behaviours, and outcomes.

Would that also be the case for climate litigation against Carbon Majors? The climate lawsuits filed against Carbon Majors have already imposed significant direct costs on both plaintiffs and defendants. An assessment of indirect costs suffered by Carbon Majors companies could show whether, in addition to the direct costs, these companies are suffering – or will suffer – drops in share values that are significant enough to drive shifts in their policies and behaviour.

10.4 CONCLUSION

Litigation as a governance strategy is costly and risky, and it takes place alongside other political and social mobilization efforts. The indirect impacts of climate litigation against Carbon Major corporations constitute one piece of a larger puzzle that needs to be put together when considering if and to what extent litigation can operate as a governance tool capable of driving change in corporate policies and behaviours. If the costs to defendants associated with defending claims – including reputational costs – do not outweigh the benefits of continuing the impugned conduct or similar practices, the defendants' imperative to change their behaviour will be limited, and the strategy could be ineffectual. This will be the case regardless of the costs and benefits to the plaintiffs.

Event studies have not yet been carried out to assess the eventual impact of climate litigation against major carbon emitters. Considering the findings in studies carried out in other types of litigation, it is possible that strategic

⁴⁸ See Nunes and Park, 'Caught Red-Handed', above note 44.

⁴⁹ See Shameek Konar and Mark A. Cohen, 'Information as Regulation: The Effect of Community Right to Know Laws on Toxic Emissions' (1997) 32 *Journal of Environmental Economics and Management* 109.

⁵⁰ See Sloan et al., 'Litigation and the Value of Tobacco Companies', above note 41.

litigation will impose detrimental financial impacts on the share prices of Carbon Major companies, and such drops in share value could influence corporate behavioural change. But assessing the indirect costs incurred by Carbon Majors as a result of their involvement in climate litigation is not an easy task. Nevertheless, developing an understanding of the costs and impacts of climate litigation is still crucial, not only within academic circles but also for the legal professionals, claimants, defendants, funders, and individuals that are involved in or affected by the outcomes of these cases.

PART III

Beyond the Law

Science and Narratives in Rights-Based Climate Litigation

Climate Science and Human Rights

Using Attribution Science to Frame Government Mitigation and Adaptation Obligations

MICHAEL BURGER, JESSICA WENTZ, AND DANIEL J. METZGER

11.1 INTRODUCTION

Since 2005, dozens of human rights claims have been brought against governments for their failure to adequately mitigate and adapt to the impacts of climate change.¹ These claims are supported by a growing body of climate change detection and attribution research, which demonstrates that climate change is already occurring, that the harmful impacts are manifest and not merely speculative, and that those impacts can be traced, at least in part, to the government defendant's policies and conduct.

There are several interrelated streams of attribution research, specifically: (i) climate change attribution, which examines how human activities are affecting the global climate system; (ii) impact attribution, which examines how changes in the global climate system affect other interconnected natural and human systems; (iii) extreme event attribution, which examines how changes in the global climate system affect the frequency, magnitude, and other characteristics of extreme events; and (iv) source attribution, which examines the relative contributions of different sectors, activities, and entities to global climate change.

The current body of research shows that anthropogenic climate change is already having pervasive impacts across the world, and there is a robust body of evidence linking human-induced changes in the climate system to broad trends such as global atmospheric and marine warming, slow-onset impacts like sea level rise, and heat-related extreme events. The confidence in attribution findings tends to be lower when examining trends and changes at a

¹ For an overview, see, among others, the chapters by César Rodríguez-Garavito (Chapter 1), Ben Batros and Tessa Khan (Chapter 3), and Jolene Lin and Jacqueline Peel (Chapter 9) in this volume.

smaller geographic or temporal scale, attributing non-heat extreme events, and attributing specific human injuries to climate change.

We have previously written on how attribution research has been used to support claims of causation, injury, and justiciability across a wide range of different types of litigation.² In this chapter, we discuss how parties in recent human rights cases are using this research to frame government mitigation and adaptation obligations. These cases provide a vehicle for exploring two issues not addressed in our previous work, specifically the role of attribution science in supporting, or defending against, claims based on (i) violations of community rights, as compared with individual rights; and (ii) failures to adapt, as compared with failures to mitigate.

11.2 PROTECTING INDIVIDUAL AND COLLECTIVE RIGHTS

Most of the human rights proceedings challenging government inaction on climate change have been initiated by groups of individuals and nongovernmental organizations (NGOs) seeking to enforce government obligations with respect to individual rights, such as the rights to life, health, and private and family life.³ Some of the most recent proceedings deal specifically with the rights of children and women, as individuals in these groups tend to be more

² Michael Burger et al., “The Law and Science of Climate Change Attribution” (2020) 45 *Columbia Journal of Environmental Law* 57.

³ Recent proceedings initiated by individual plaintiffs include: “Sacchi et al. v. Argentina et al.,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/sacchi-et-al-v-argentina-et-al/>> (CRC petition); “La Rose v. Her Majesty the Queen,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/la-rose-v-her-majesty-the-queen/>> (children’s rights); “Maria Khan v. Federation of Pakistan et al.,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/maria-khan-et-al-v-federation-of-pakistan-et-al/>> (children’s and women’s rights); “ENVironnement JEUnesse v. Canada,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/environnement-jeunesse-v-canadian-government/>> (children’s rights); “Kim Yujin et al. v. South Korea,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/kim-yujin-et-al-v-south-korea/>> (children’s rights); “Family Farmers and Greenpeace Germany v. Germany,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/family-farmers-and-greenpeace-germany-v-german-government/>>; “Armando Ferrão Carvalho and Others v. The European Parliament and the Council,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/armando-ferrao-carvalho-and-others-v-the-european-parliament-and-the-council/>>; “Future Generations v. Ministry of Environment & Others,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/future-generation-v-ministry-environment-others/>>. Recent proceedings initiated by NGOs on behalf of individuals include: *Friends of the Irish Environment v. Ireland* [2019] IEHC 747, 748 (H. Ct.) (Ir); “Notre Affaire à Tous and Others v. Total,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/notre-affaire-a-tous-and-others-v-total/>>; “Friends of the Earth Germany, Association of Solar Supporters, and Others

vulnerable to and disproportionately affected by climate change.⁴ For example, in *Sacchi v. Argentina*, sixteen children filed a petition alleging that Argentina, Brazil, France, Germany, and Turkey have violated their rights under the UN Convention on the Rights of the Child (“CRC”) by failing to implement adequate climate change mitigation and adaptation measures.⁵

Various proceedings have also been initiated on behalf of communities that are adversely affected by climate change.⁶ These include, for example, a

v. Germany,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/friends-of-the-earth-germany-association-of-solar-supporters-and-others-v-germany/>>.

⁴ See “*Sacchi et al. v. Argentina et al.*,” above note 3; see also “*La Rose v. Her Majesty the Queen*,” above note 3; see also “*Maria Khan v. Federation of Pakistan et al.*,” above note 3; see also “*ENVironnement JEUnesse v. Canada*,” above note 3; see also “*Kim Yujin et al. v. South Korea*,” above note 3.

⁵ See “*Sacchi et al. v. Argentina et al.*,” above note 3.

⁶ See, e.g., “*Commune de Grande-Synthe v. France*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/commune-de-grande-synthe-v-france/>> (case filed by a French municipality on behalf of its residents); see also “Rights of Indigenous People in Addressing Climate-Forced Displacement,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/rights-of-indigenous-people-in-addressing-climate-forced-displacement/>> (petition to UN Special Rapporteurs filed by Indigenous communities in the US); “*Lho’imggin et al. v. Her Majesty the Queen*,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/gagnon-et-al-v-her-majesty-the-queen/>> (legal challenge filed by an indigenous group alleging that the Canadian government’s approach to climate change has violated their constitutional and human rights); see also “Hearing on Climate Change Before the Inter-American Commission on Human Rights,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/hearing-on-climate-change-before-the-inter-american-commission-on-human-rights/>> (on the impacts of climate change on the human rights of Indigenous peoples, women, children, and rural communities); see also “Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations of the Rights of Arctic Athabaskan Peoples Resulting from Rapid Arctic Warming and Melting Caused by Emissions of Black Carbon by Canada,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/petition-inter-american-commission-human-rights-seeking-relief-violations-rights-arctic-athabaskan-peoples-resulting-rapid-arctic-warming-melting-caused-emissions/>> (petition alleging that Canada’s fragmentary and lax regulations of black carbon emissions threaten the Athabaskan people’s human rights, including collective Indigenous rights); see also “Petition To The Inter-American Commission on Human Rights Seeking Relief From Violations Resulting from Global Warming Caused By Acts and Omissions of the United States,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/petition-to-the-inter-american-commission-on-human-rights-seeking-relief-from-violations-resulting-from-global-warming-caused-by-acts-and-omissions-of-the-united-states/>> (petition seeking to hold the United States accountable for violations of individual and collective rights of Indigenous peoples arising from contributions to climate change); see also “A Request for an Advisory Opinion from the Inter-American Court of Human Rights Concerning the Interpretation of Article 1(1), 4(1) and 5(1) of the American Convention on Human Rights,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/request-advisory-opinion-inter-american-court-human-rights-concerning-interpretation-article-11-41-51-american-convention-human-rights/>>

complaint submitted on behalf of five tribes in the United States asking UN Special Rapporteurs to investigate and issue recommendations on the obligations of federal and state governments to address forced displacement as a result of climate change,⁷ a Canadian lawsuit filed by members of an Indigenous group alleging that the Canadian government's approach to climate change has violated their constitutional and human rights,⁸ and a lawsuit initiated by a French municipality against the French government for its failure to take meaningful action on climate change.⁹ While all three proceedings deal with community-level impacts and the obligations of governments with respect to communities, the petition to the UN Special Rapporteurs specifically alleges violations of collective rights of Indigenous communities – specifically those laid out in the UN Declaration on the Rights of Indigenous Peoples, the UN Guiding Principles on Internal Displacement, the Pinheiro Principles, and the Peninsula Principles.¹⁰ In particular, that petition alleges violations of the tribes' collective rights to self-determination, cultural heritage, subsistence and food security, safe drinking water, physical and mental health, and an adequate standard of living.¹¹

One potential advantage of community petitions – particularly those based on collective rights – is that it may be easier to prove that climate change is causing damage at the community scale as compared with the individual scale. This is because evidence of attribution tends to be more robust when looking at impacts on a broader geographic and temporal scale, for example, when looking at impacts on Indigenous land holdings and natural resources. Moreover, for extreme events, attribution research has shown that climate change increases the frequency and/or severity of many types of events, but the research is not always able to draw firm conclusions as to whether climate change caused or contributed to a specific event. When dealing with event frequencies and probabilities, the bigger the area and longer the time frame, the larger the climate signal. And when dealing with impacts, the greater the number of people impacted, the easier it is to establish a causal connection to the events.

(discussing the linkages between tribal and Indigenous rights and the right to a clean environment).

⁷ See “Rights of Indigenous People in Addressing Climate-Forced Displacement,” above note 6.

⁸ See “Lho’inggin et al. v. Her Majesty the Queen,” above note 6.

⁹ See “Commune de Grande-Synthe v. France,” above note 6.

¹⁰ G.A. Res. 61/295, UN Declaration on the Rights of Indigenous Peoples, September 13, 2007.

¹¹ See “Rights of Indigenous People in Addressing Climate-Forced Displacement,” above note 6. *Sacchi et al. v. Argentina et al.* also involved alleged violations of the rights of Indigenous youth plaintiffs, but the lawsuit focuses on harms to the individual plaintiffs.

For example, the IPCC has expressed high- and medium-confidence in research linking climate change to increases in the frequency and severity of wildfires in certain regions,¹² and recent studies have been able to quantify the impacts of climate change on the 2017 wildfire season in Canada¹³ and the 2019/2020 wildfire season in Australia.¹⁴ It is arguably more difficult to ascertain the effects of climate change on the characteristics of a specific wildfire and individual harm arising from that fire – there are many confounding factors, such as fire suppression and fuel loading, which complicate the causation analysis at this level of granularity.¹⁵ Thus, an individual claimant may have a tougher time proving that personal injury from a fire, such as loss of property or life, can be attributed to climate change (i.e., that it would not have occurred in the absence of anthropogenic influence on climate). However, an Indigenous community could more readily prove that its collective rights to self-determination and “the conservation and protection of the environment and the productive capacity of their lands or territories and resources”¹⁶ have been adversely affected by a regional increase in wildfire frequency and/or severity over time.

There are ways to overcome downscaling challenges in proceedings that involve individual rights. Many jurisdictions allow NGOs to file petitions on behalf of the public interest or large groups of individuals; and in such proceedings, it is generally sufficient to show that there is actual harm or a genuine threat of harm to the group as a whole without proving harm to any specific individual. For example, in *Urgenda v. Netherlands*, a case brought by the NGO Urgenda on behalf of Dutch citizens, the Dutch Supreme Court

¹² See Maximillian Auffhammer et al., “Detection and Attribution of Observed Impacts,” in C. B. Fields et al. (eds.), *Climate Change 2014: Impacts, Adaptation and Vulnerability. Part A: Global and Sectoral Impacts. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge: Cambridge University Press, 2014), pp. 1005–6.

¹³ See M. C. Kirchmeier-Young et al., “Attribution of the Influence of Human-Induced Climate Change on an Extreme Fire Season” (2018) 7 *Earth’s Future* 2 (using an event attribution method and a large ensemble of regional climate model simulations, the authors found that the high fire weather/behavior metrics were made two to four times more likely and that anthropogenic climate change increased the area burned by a factor of seven to eleven).

¹⁴ See Greet Jan van Oldenborgh et al., “Attribution of the Australian bushfire risk to anthropogenic climate change” (2021) 21 *Natural Hazards and Earth System Sciences* 941 (finding that the probability of conditions giving rise to fires increased by at least thirty percent since 1900 as a result of anthropogenic climate change).

¹⁵ Confounding factors must be addressed at all levels of attribution research, but it is easier to account for these factors through statistical analysis when looking at impacts on a broader regional and temporal scale.

¹⁶ UN Declaration on the Rights of Indigenous Peoples, above note 10 at art. 29.

found sufficient evidence of harm where it was “clearly plausible that the current generation of Dutch nationals, in particular but not limited to the younger individuals in this group, will have to deal with the adverse effects of climate change in their lifetime if global emissions of greenhouse gases are not adequately reduced.”¹⁷ Petitioners can thus rely on the statistical probability of harm across broad segments of the population to support their claims in such cases.¹⁸

For proceedings brought on behalf of smaller groups of named individuals, such as the CRC petition, it may be necessary to show that one or more of the named petitioners is harmed or at imminent risk of harm as a result of climate change. The CRC petition focuses on the general impacts of climate change on children, but it also discusses the specific experiences of named petitioners with respect to (i) extreme events such as floods, windstorms, wildfires, heat waves, and droughts; (ii) impacts on “the subsistence way of life” for children from Indigenous tribes; and (iii) increased exposure to diseases such as malaria and dengue fever.¹⁹ This case is similar to that of *Juliana v. United States*, where youth plaintiffs alleged that the US government violated their constitutional rights by failing to take adequate action on climate change, citing impacts such as lost income on a family farm, lost income at a ski resort, and asthma attacks from the increased frequency of forest fires.²⁰ The Ninth Circuit Court of Appeals found that the alleged harms were sufficiently concrete and particularized to survive summary judgment, but it dismissed the case on other grounds, and so there was no decision on the adequacy of the evidence presented to support these claims.²¹

The government respondents in the CRC proceeding have argued that the petitioners only alleged generalized harms and failed to substantiate their

¹⁷ Hoge Raad 13 January 2020 (Urgenda/Netherlands) (Neth.), ¶4.7, <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2020/20200113_2015-HAZA-Co900456689_judgment.pdf>.

¹⁸ A similar approach has been used to establish standing in some US cases. See, e.g., *NRDC v. EPA*, 464 F.3d 1 (D.C. Cir. 2006) (granting standing to the NRDC as a member organization based on the probability that at least one of its members would be injured by pollution); see also *NRDC v. Wheeler*, 95 F.3d 68 (D.C. Cir. 2020) (granting standing to NRDC and the state of New York based on the risk of climate-related harm to coastal assets).

¹⁹ See Communication to the UN Committee on the Rights of the Child, *Sacchi et al. v. Argentina et al.*, ¶¶5–10, September 23, 2019, <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190923_Not-available_petition-1.pdf>.

²⁰ See *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016) (First Amendment Complaint for Declaratory and Injunctive Relief), ¶¶ 23–28, 38, 46.

²¹ Note that in *Massachusetts v. EPA*, the fact that the state represented the aggregate interests of citizens helped it build a strong case for injury.

claims of individual injury.²² (Similar arguments were made by the government defendants in *Juliana*.) This raises an important question about whether and under what circumstances claimants can draw reasonable inferences about individual harm based on regional or community-level impacts. Arguably, such inferences would be more credible where (i) the impact on the individual cannot be fully explained by other factors, and (ii) there are no other tools or data available that would provide stronger proof of the causal nexus between the regional/community-scale impact and individual harm. Consider a petitioner who alleges that her asthma has been exacerbated by the increase in wildfire smoke caused by climate change: she could submit medical documentation of her asthma diagnosis and evidence that wildfires are more frequent due to climate change and then infer that her asthma is (or will be) exacerbated by the wildfire smoke. But her argument would be strengthened if she also submitted medical documentation showing that her asthma was, in fact, exacerbated at the time of the wildfires. Granted, this level of proof is not required in all cases: legal standards and evidentiary requirements will vary depending on the tribunal and claims raised, and it may be unnecessary to prove individual harm with such precision in rights-based cases, particularly those involving communities and the public at large.

Ultimately, there are other factors that may have a greater influence on the evidentiary strength of claims than the question of whether plaintiffs are seeking to defend collective or individual rights. For example, the nature of the alleged injuries is important: an individual that is forced to leave their home due to a long-term trend in sea level rise could potentially establish a more robust causal connection between their injuries and climate change than a community that experienced losses due to a single extreme event. Attribution research is also constantly evolving, particularly with regards to advances in extreme event and impact attribution, and this will likely give greater confidence to statements about attribution of individual harm in future years. Nonetheless, even at this time, many impacts at both the community and individual levels can be attributed to climate change with high confidence, and fairly robust claims can be made about the statistical

²² The government responses in the CRC proceeding are being kept confidential. Our summary of the governments' arguments are based on the Petitioners' Reply to those arguments; see *UN Committee on the Rights of the Child, Sacchi et al. v. Argentina et al.*, Petitioners' Reply to the Admissibility Objections of Brazil, France, and Germany, May 4, 2020, <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2020/20200504_Not-available_reply.pdf>.

probability of harm across large groups, broader geographic areas, and longer time frames.²³

11.3 ADDRESSING MITIGATION AND ADAPTATION OBLIGATIONS

There are at least two types of government obligations that may be the focus of a human rights petition: (i) the obligation to mitigate GHG emissions and other contributions to climate change and (ii) the obligation to adapt to the impacts of climate change.²⁴ Almost all of the human rights petitions filed to date have cited government failures to mitigate emissions as the primary basis for legal action.²⁵ Some of these petitions include allegations of inadequate adaptation measures putting people at risk of harm, but these allegations are typically a small part of the overall case. There are a few petitions where adaptation obligations have featured more prominently alongside mitigation obligations or where they were the sole basis for the legal claim.²⁶ The US tribal petition to the UN Special Rapporteurs is an example of the latter, as it deals exclusively with the obligations of government actors to address the effects of climate-forced displacement on tribes residing on the coastlines of Louisiana and Alaska.²⁷

Both types of claims fall under the same human rights instruments and therefore share common legal elements: petitioners must show that the government has a legal obligation to protect human rights and that it has breached this obligation by undertaking a course of action (or inaction) that has interfered and/or foreseeably will interfere with the petitioners' fundamental rights. Thus, similar to a tort claim, petitioners must prove the existence of

²³ One example of a "high confidence" impact is sea level rise, which clearly poses a risk to coastal property even when accounting for confounding factors such as subsidence and erosion. For a more detailed discussion of impacts and confidence levels, see Burger et al., "The Law and Science of Climate Change Attribution," above note 2 at Part II.

²⁴ See "Climate Change and Human Rights" (2015) UN Environment Programme.

²⁵ See, e.g., "Sacchi et al. v. Argentina et al.," above note 3; see also "La Rose v. Her Majesty the Queen," above note 3; see also "Maria Khan v. Federation of Pakistan et al.," above note 3; see also "ENvironnement JEUnesse v. Canada," above note 3; "Family Farmers and Greenpeace Germany v. Germany," above note 3; "Armando Ferrão Carvalho and Others v. The European Parliament and the Council," above note 3; *Friends of the Irish Environment v. Ireland*, above note 3; "Notre Affaire à Tous and Others v. Total," above note 3; "Friends of the Earth Germany, Association of Solar Supporters, and Others v. Germany," above note 3; see also "Lho'inggin et al. v. Her Majesty the Queen," above note 6; see "Commune de Grande-Synthe v. France," above note 6.

²⁶ See, e.g., "Future Generations v. Ministry of Environment & Others," above note 3; see also "Leghari v. Pakistan," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/ashgar-leghari-v-federation-of-pakistan/>>; see also "Rights of Indigenous People in Addressing Climate-Forced Displacement," above note 6.

²⁷ See "Rights of Indigenous People in Addressing Climate-Forced Displacement," above note 6.

the obligation, a breach, an actual or prospective injury, and causation.²⁸ However, the evidence required to support these elements differs considerably depending on which obligation is at stake.²⁹

11.3.1 *Failures to Mitigate*

For a failure-to-mitigate claim, petitioners must show that they have been injured or are at imminent risk of injury due to the impacts of climate change and that the defendant (typically a government actor)³⁰ contributed to that injury because it failed to control GHG emissions at adequate levels or regulate other activities that cause climate change (e.g., deforestation). Such claims implicate the full scope of attribution science:

- Climate change attribution research provides the foundation for these petitions, as it establishes the link between human activities and changes in the earth's climate system.
- Impact and extreme event attribution research establishes the link between petitioner's injury and global climate change.
- Source attribution research establishes the link between the defendant's conduct and global climate change.

The primary role of attribution science in failure-to-mitigate claims involving government defendants is therefore to establish a causal chain between

²⁸ These elements are closely intertwined and not always treated as separate elements in case documents and decisions (e.g., whether the government has breached its obligation depends on whether its actions will cause injury to human rights). Nonetheless, delineating these elements helps to illustrate how different types of attribution science factor into the resolution of these cases.

²⁹ Foreseeability of harm may also be treated as a separate element in some cases. In the failure-to-mitigate context, the focus is typically on the objective likelihood of harm at the time of the case (i.e., is there reasonable certainty that the government's failure to control emissions will continue to cause harm if the court does not intervene) and so questions about foreseeability are wrapped up in the analysis of injury and causation. But in the failure-to-adapt context, it may be necessary to show that the government ignored foreseeable risks at some point in the past, in which case the question of foreseeability is separate from the question of whether future harm is probable. See discussion in Section 11.2.

³⁰ Failure-to-mitigate claims have also been filed against private companies, including several cases involving rights-based claims. See, e.g., "Milieu et al. v. Royal Dutch Shell plc.," Sabin Center For Climate Change Law, <<http://climatecasechart.com/non-us-case/milieudedefensie-et-al-v-royal-dutch-shell-plc/>>; see also "Youth Verdict v. Waratah Coal," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/youth-verdict-v-waratah-coal/>>; see also "Citizens' Committee on the Kobe Coal-Fired Power Plant v. Kobe Steel Ltd.," Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/citizens-committee-on-the-kobe-coal-fired-power-plant-v-kobe-steel-ltd-et-al/>>.

government conduct and observed impacts of climate change. However, attribution research can also be used in conjunction with forward-looking climate models and projections to strengthen arguments about the likelihood or foreseeability of future harm.

Petitioners have had some success with these types of claims: to date, there have been three major decisions – in the Netherlands, Pakistan, and Colombia – finding that governments violated human rights by failing to undertake adequate measures for the control of GHG emissions at a national scale.³¹ But there are also rights-based petitions that have been dismissed, primarily as a result of concerns about separation of powers and judicial overreach.³² For some cases that were dismissed due to lack of standing, tribunals questioned the evidentiary basis of claims – for example, finding that petitioners could not establish an adequate causal nexus between the government conduct and harm where there were so many other sources that contributed to climate change – but these decisions were issued prior to a full evidentiary trial and were based on legal principles rather than judicial review of scientific evidence.³³ In fact, despite the dismissals, there is growing evidence of a “judicial consensus on climate science” in which “vast judicial agreement exists on the causes, extent, urgency, and consequences of climate change.”³⁴

Even with that consensus, petitioners will have to establish government responsibility for climate-related injuries in each case. Source attribution, in particular, may prove complicated. In a failure-to-mitigate case, petitioners must show that government policies are contributing to climate change (e.g., through direct emissions, fossil fuel exports, deforestation, or failure to adequately engage in international climate negotiations) and that this contribution is unreasonable in light of current knowledge on climate change.³⁵

³¹ See “Future Generations v. Ministry of Environment & Others,” above note 3; see also “Leghari v. Pakistan,” above note 26; see also *Urgenda*, above note 17.

³² See Burger et al., “The Law and Science of Climate Change Attribution”; see also Maria L. Banda, “Climate Science in the Courts: A Review of U.S. and International Judicial Pronouncements” (2020) Environmental Law Institute, <<https://www.eli.org/sites/default/files/eli-pubs/banda-final-4-21-2020.pdf>>; see also “Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council and Others,” Sabin Center for Climate Law, <<http://climatecasechart.com/non-us-case/union-of-swiss-senior-women-for-climate-protection-v-swiss-federal-parliament/>>.

³³ See, e.g., *Juliana*, 217 F. Supp. 3d at 1224; see also “Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council and Others,” above note 32; see also “Armando Ferrão Carvalho and Others v. The European Parliament and the Council,” above note 3.

³⁴ See Banda, “Climate Science in the Courts,” above note 32 at 2.

³⁵ See, e.g., *Urgenda*, above note 17 (focusing on emissions and carbon budgets); see also “Leghari v. Pakistan,” above note 26 (focusing on the implementation of existing

Whether government conduct is “unreasonable” may depend on the historical and projected emissions impact that can be attributed to government policies, whether current policies will generate emission reductions in line with international and/or scientific consensus at the pace at which emissions must be reduced to avert catastrophic climate change (i.e., global and national carbon budgets), whether the government is adhering to international or domestic mitigation commitments, and whether the government is using “all available measures to stop the climate crises.”³⁶

This raises several questions for parties and tribunals: (i) how does one calculate the emissions attributable to government conduct; (ii) is it reasonable to conclude that any emissions contribution will contribute to human rights violations arising from climate change impacts, or do emissions need to cross some threshold of materiality in order to be linked to impacts;³⁷ and (iii) how does one ascertain whether the contribution is unreasonable? Source attribution research provides data to help answer these questions – for example, by estimating national emission contributions based on different types of accounting methodologies³⁸ – but the research cannot provide a definitive answer to normative questions, such as which accounting methodologies are appropriate for use in legal proceedings and what constitutes a “material” or “unreasonable” contribution.³⁹

commitments); see also “Sacchi et al. v. Argentina et al.,” above note 3 at ¶¶203–36 (illustrating how government obligations can be framed with reference to both domestic emissions and participation in international agreements).

³⁶ “Sacchi et al. v. Argentina et al.,” above note 3 at ¶29. Note that the precise language regarding the government’s positive obligation to stop climate change will vary depending on the human rights instrument at issue.

³⁷ See, e.g., “Sacchi et al. v. Argentina et al.,” above note 3 at ¶30. The question of whether emissions impact crosses a threshold of materiality may also appear in cases involving smaller-scale actions, such as specific fossil fuel licensing decisions. See, e.g., *Föreningen Greenpeace Norden v. Norway*, 18-060499ASD-BORG/3 at 20 (23.01.2020) (Borgarting Lagmannsrett), <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2020/20200123_HR-2020-846-J_judgment.pdf> (dismissing petition that sought to enjoin oil and gas licenses because: “[n]either with respect to emissions from combustion after export is it possible to know what emissions the decision will entail, and in any event these will be marginal from a global perspective.”). The question of whether the emissions impact is a “material” or “substantial” contribution to climate change has also arisen in tort cases and rights-based cases involving atmospheric trust claims in the United States. See Burger et al., “The Law and Science of Climate Change Attribution,” above note 2 at 201, 229.

³⁸ Emissions accounting methodologies may vary depending on the accounting timeframe (e.g., historical/cumulative vs. current emissions) and scope (e.g., territorial vs. consumption vs. extraction emissions). See Burger et al., “The Law and Science of Climate Change Attribution,” above note 2 at 135.

³⁹ Source and impact attribution research can be used in conjunction to make arguments about what constitutes a “material” contribution – for example, petitioners could seek to quantify the

Source attribution research can also cut both ways, potentially supporting defendants' claims. Most government defendants can point to the fact that emissions attributable to their policies are relatively small in comparison to overall global emissions or the contributions of countries like China and the United States. However, even contributions that appear small when presented as a proportion of global emissions (e.g., 1 percent of global emissions) can nonetheless have a substantial impact on human rights due to the breadth and magnitude of climate change impacts.⁴⁰

Existing case law and interpretations of human rights law also indicate that governments have an obligation to mitigate their contributions to climate change regardless of whether other actors are contributing to the problem. As noted by the petitioners in the CRC proceeding, the International Court of Justice (ICJ) has explicitly rejected the "others do it too" defense, and the International Law Commission (ILC) has issued guidance clarifying that, where multiple states have contributed to an environmental harm, "the responsibility of each participating State is determined individually, on the basis of its own conduct and by reference to its own international obligations."⁴¹

11.3.2 *Failures to Adapt*

For a failure-to-adapt claim, petitioners must show that they have suffered or will suffer injury due to events that are foreseeable in light of climate change and climate variability and that the government either (i) failed to take reasonable measures to protect petitioners' rights in the face of foreseeable risks (breach of an affirmative obligation) or (ii) undertook a course of action that exacerbated the risks, for example, by increasing the magnitude of

effect of an emissions contribution on sea level rise using existing research – but there is a normative aspect to thresholds of materiality and unreasonableness that is beyond the scope of attribution science.

⁴⁰ E.g., the Dutch government was found to have breached human rights obligations due to emissions impacts in *Urgenda*, and the Netherlands' share of global cumulative CO₂ emissions was 0.72 percent as of 2017. See Hannah Ritchie and Max Roser, "CO₂ and Greenhouse Gas Emissions," Our World in Data, <<https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>>. Moreover, the emissions at issue in the case were only a proportion of total national emissions (specifically, those attributable to the government's failure to implement a policy aimed at reducing emissions 25 percent over 1990 levels by 2020).

⁴¹ See International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, art. 47 at 124–25; cmt 8 at 129 (2001); see also *Case Concerning Certain Phosphate Lands in Nauru* (Nauru v. Austl.), 1992 I.C.J. 240, 258–59, 262 (June 26).

harmful impacts or increasing exposure to risk (breach of a negative obligation).⁴²

In some cases, petitioners may raise both types of claims. For example, the US tribal petition to the UN Special Rapporteurs alleges that the US government and the state governments of Louisiana and Alaska violated the collective and individual rights of Indigenous tribes by (i) undertaking maladaptive activities that contributed to coastal erosion, land loss, and flooding along the coastlines where the tribes reside, thus exacerbating the effects of sea level rise and extreme storms; and (ii) failing to take affirmative measures to protect the tribes from sea level rise, extreme storms, and land loss and, in particular, failing to implement a “relocation governance framework” for these tribes.⁴³ Because petitioners do not need to prove that the government defendant caused or contributed to climate change in a failure-to-adapt case, the causation analysis is quite different from that in failure-to-mitigate cases. Petitioners need not grapple with questions about source attribution or related defenses. Instead, the focus is on the reasonableness of the government’s response to climate change (or lack thereof), which is based, at least in part, on the foreseeability of climate impacts.⁴⁴

The causation analysis also differs in failure-to-adapt claims because petitioners do not need to prove that the specific event or impact giving rise to their injury was actually caused by climate change. It should be sufficient to show that the type of impact or event was or is a foreseeable consequence of climate change.⁴⁵

While the causation analysis in failure-to-adapt cases is somewhat simplified, source attribution research may still factor into these cases as a defense. Specifically, defendants may argue that human activities giving rise to climate change are the proximate cause of the injury and that a government cannot be held liable for failing to prevent harm caused by others. However, as discussed below, human rights case law suggests that government defendants have obligations to prevent known risks associated with both natural and man-made disasters, and so the fact that other parties are also responsible for creating hazards that interfere with human rights does not relieve

⁴² See “Climate Change and Human Rights,” above note 24 at §§1.2, 2.2.(b)(i), & 2.2.(b)(v).

⁴³ See “Rights of Indigenous People in Addressing Climate-Forced Displacement,” above note 6.

⁴⁴ Examples of other factors relevant to this determination include the cost, efficacy, and feasibility of undertaking the adaptation measures sought by petitioners.

⁴⁵ See discussion of ECtHR cases above (showing that governments have an obligation to prepare for foreseeable hazards, including climatological events, regardless of whether such events can be definitively linked to climate change).

There are also now two decisions in Colombia and Pakistan in which courts have found that governments have an obligation to undertake adaptation measures in order to protect fundamental human rights, such as the rights to life and environmental welfare.⁴⁹ In addition, the Inter-American Court on Human Rights (IACHR) has held that governments have a positive obligation to prevent foreseeable environmental harms arising from their conduct, which could provide a basis for relief where governments undertake maladaptive measures that increase environmental risks associated with climate change.⁵⁰ Thus, although the overall body of case law on adaptation obligations and human rights is relatively small, there is reason to be optimistic about the justiciability and outcomes of future cases.

One common element in the ECtHR disaster cases was that the human rights violations were rooted in governmental failures to address foreseeable risks. The governments were aware (or should have been aware) of the likelihood of the disaster occurring as well as the likelihood that people would be exposed to harm as a result of the disaster. Thus, in the failure-to-adapt context, petitioners may need to show that both the climate event and the resulting injury were foreseeable. One potential complication here is that there may be contexts in which unforeseeable injuries arise from foreseeable climate impacts due to confounding factors. The tribal petition addresses confounding factors by characterizing the unlawful government conduct broadly, as encompassing both federal and state maladaptive planning decisions (e.g., those pertaining to oil and gas development on coastlines) and failures to take affirmative adaptation measures.⁵¹

Such questions about the foreseeability of past injury will not feature prominently in all adaptation cases. Where petitioners are primarily challenging the inadequacy of national adaptation policies and seeking improvement to or implementation of those policies as the primary remedy, it is unnecessary for a tribunal to determine whether a particular climate-related risk was foreseeable to the government based on information that was available at some point in the past. Rather, the relevant inquiry is whether future harm is likely to occur as a result of the policy failure – a question that relates primarily to the causation and injury analysis.

⁴⁹ See “Future Generations v. Ministry of Environment & Others,” above note 3; see also “Leghari v. Pakistan,” above note 26.

⁵⁰ See *The Environment & Human Rights*, Advisory Opinion OC-23/17, Inter-Am. Ct. H.R. (ser. A), No. 23, <http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf>.

⁵¹ See “Rights of Indigenous People in Addressing Climate-Forced Displacement,” above note 6.

In sum: attribution research is relevant to failure-to-adapt claims insofar as it can be used to evaluate (i) whether the impacts of climate change pose a “reasonably foreseeable” risk to human rights, necessitating a proactive government response to safeguard those rights; and (ii) whether prior government actions, such as decisions about coastal planning or flood management, were maladaptive because they failed to account for this reasonably foreseeable risk. However, attribution research likely will not feature as prominently in these cases as in failure-to-mitigate cases due to the greater focus on source attribution and contributions to climate change as the basis of government responsibility. Also, in failure-to-adapt cases involving governments’ positive obligations to plan for future climate impacts, forward-looking climate projections may play a bigger role in establishing the foreseeability of harm.

11.4 CONCLUSION

Attribution research plays an integral role in the development and interpretation of legal claims involving human rights, government obligations, and climate change. As detailed in this chapter, the overall body of research is already fairly robust and capable of supporting claims brought on behalf of both communities and individuals, as well as claims related to both mitigation and adaptation obligations. There are still gaps and limitations in the research, but it does not appear that scientific constraints have posed or will pose a major impediment to rights-based litigation. The body of case law is still relatively small, and many petitions are currently underway. Scientific debates may factor more prominently in future trials, particularly those involving the rights of small groups of individuals as opposed to communities or the public interest at large, and novel scientific questions may arise in both the failure-to-mitigate and failure-to-adapt contexts. At the same time, the scope of the research is expanding, and the techniques used are being refined. We can expect that the evidentiary basis for rights-based climate litigation will become increasingly robust in the years to come.

The Evolution of Corporate Accountability for Climate Change

RICHARD HEEDE

From now on we will not be asking you to trust us. We will be showing that you can. And ultimately you will judge.

BP CEO Bernard Looney, February 2020.¹

If you want to be a long-term relevant company that is on the right side of history, you have to be involved in this discussion, because it's the most important discussion of our time." Shell's pace of change "will be linked to the pace of change in society."

Ben van Beurden, October 2018.²

He who can but does not prevent, sins.

Antoine Loysel, 1607.

This chapter traces the evolution of thought on who is responsible for the climate crisis from the early science of the nineteenth century to today's Paris Agreement to oil and gas companies' commitments to reducing the carbon intensity of their supply chains. I discuss the science of attributing the lion's share of historical carbon dioxide emissions since 1750 to individual oil, gas, coal, and cement companies; the industry's climate denial, obfuscation, and greenwashing; and the emergence of litigation holding fossil fuel companies accountable for climate damages. I conclude that fossil fuel companies bear substantial responsibility for the severity of the climate crisis and the decades-long delay in effective action by nations, consumers, commerce, industry, and,

¹ Anamaria Deduleasa and Iain Esau "Winning Stakeholders' Trust a Key Challenge for Oil and Gas Players," *Upstream*, February 29, 2020, <<https://www.upstreamonline.com/low-carbon/winning-stakeholders-trust-a-key-challenge-for-oil-and-gas-players/2-1-764770>>.

² Adele Peters, "Is It Possible for an Oil Company to Help Fight Climate Change?," *Fast Company*, November 1, 2018, <<https://www.fastcompany.com/90249937/is-it-possible-for-an-oil-company-to-help-fight-climate-change>>.

most of all, by oil, natural gas, and coal producers themselves to decarbonize at the scale and speed now required to avert dangerous interference with the climate system.

12.1 INTRODUCTION

The science of climate change grew primarily out of two strands of thought: one, the search for the mechanisms for the observed climate swings, sea level changes, stratigraphy, evolution of life, geologic history of the earth, and glaciations that were coming to light in the 1800s and two, the science of atmospheric physics, the behavior of gases, and the relationship between the atmosphere and the weathering of rocks.

The radiative properties of carbon dioxide (CO₂) were discovered by Eunice Foote in 1856, advanced by John Tyndall,³ and studied by Svante Arrhenius in the 1890s.⁴ Arrhenius, despite his careful work on calculating the atmospheric sensitivity of carbon dioxide, thought that fossil fuels (predominantly coal in the 1890s) had a minor role in CO₂ variability. He dismissed the idea that future fossil fuel use could double the atmospheric CO₂ content: there simply weren't enough recoverable carbon fuels in the world at the time, and that level of production and consumption was, in his day, unthinkable.

The science emerging in the 1900s on the importance of CO₂ was dismissed by the Royal Meteorological Society as having “no appreciable effect on the climate” – foreshadowing disbelief (still alive among climate denialists) that human activities could have any appreciable impacts on Mother Nature – but later confirmed by Guy Callendar in the 1930s.⁵ Confirmation of the predominant role of human emission sources came later.

With respect to the causes of human-caused climate change, this chapter is primarily concerned with the sources of warming and the behavior of greenhouse gases, chiefly carbon dioxide and methane associated with fossil fuel combustion, and secondarily with humanity's impacts on the natural carbon cycle through, for example, deforestation, permafrost melting, ice loss, and albedo changes.

³ Foote published a paper on the heating effect of carbon dioxide in 1856, although, erroneously, John Tyndall is typically credited with discovering the “greenhouse effect” in a series of experiments and papers starting in 1859.

⁴ See Svante Arrhenius, “On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground” (1896) 41 *Philosophical Magazine and Journal of Science* 237.

⁵ See Charles C. Mann, “Meet the Amateur Scientist Who Discovered Climate Change,” *Wired*, January 23, 2018; see also Spencer R. Weart, *The Discovery of Global Warming* (Cambridge, MA: Harvard University Press, 2008).

Early measurements of atmospheric carbon dioxide were sporadic and regional. Reliable global monitoring began in 1958 with Charles Keeling's continuous readings at the Mauna Loa volcano in Hawai'i.⁶ The iconic "Keeling Curve" is one of the most significant scientific accomplishments of the twentieth century, and it helped raise scientific awareness of rising CO₂ concentrations, human impacts on the Earth's atmosphere, and the sensitivity of global temperatures to minor perturbations in the atmospheric concentration of CO₂. While CO₂ concentrations are low (0.04 percent of the atmosphere), the gas is the chief regulator of global temperatures and, once perturbed, is potent enough to awaken an "angry beast."⁷

12.2 SOURCES OF GREENHOUSE GASES

These "minor" perturbations in CO₂ concentration have involved large-scale mobilizations of resources, investment of trillions of dollars, the extraction and combustion of approximately 580 billion tons of fossil fuels since the mid-1700s, and trillion-ton terraforming visible from space for infrastructure, mining, and material movement. Cement production and energy-related carbon dioxide and methane comprise 72 percent of global anthropogenic emissions. Other sources include CO₂ from land use and deforestation (approximately 11 percent); methane from animal husbandry, agriculture, and decomposition of organic wastes (approximately 9 percent); nitrous oxide (approximately 6 percent); and fluorinated compounds (approximately 2 percent).

Now we know that the future Arrhenius couldn't fathom has come to pass: global fossil fuel production in the mid-1890s generated emissions of 1,535 million tons of carbon dioxide (MtCO₂), which by 2018 had risen twenty-two-fold to 33,730 MtCO₂.⁸ Such an explosive expansion of fossil fuel

⁶ See Charles D. Keeling, "The Concentration and Isotopic Abundances of Carbon Dioxide in the Atmosphere" (1960) 12 *Tellus* 200. Keeling also did readings in Antarctica in 1958 and in La Jolla from 1958 onward.

⁷ Wallace S. Broecker, *Fossil Fuel CO₂ and the Angry Climate Beast* (New York: Eldigio Press, 2003).

⁸ See Tom Boden, Bob Andres, and Gregg Marland, "Global CO₂ Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751–2014" (2017) US Department of Energy. Oil, gas, and coal emissions in 1896: 419 MtC (97 percent coal); 2018: 9,535 MtC. In 2018, cement totaled 1,507 MtCO₂. Updated using data from the Global Carbon Project. This "inconceivable" rise in fossil fuel use roughly parallels economic growth, though carbon emissions have gradually "decoupled" from global GDP growth. CO₂ decreased from 0.434 kgCO₂ per \$GDP in 1990 to 0.328 kgCO₂ per \$GDP in 2014. "CO₂ emissions," World Bank, <<https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>> (kg per 2017 PPP \$GDP).

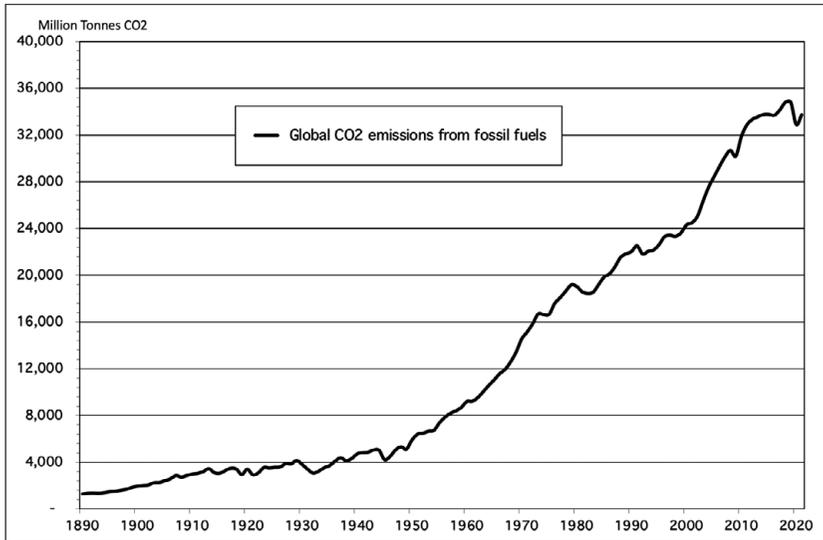


FIGURE 12.1 Global CO₂ emissions from fossil fuel use, cement production, and flaring, 1890

production brought unparalleled prosperity, allowed the global population to grow by 480 percent, and ultimately led per capita carbon emissions to rise from 0.95 tCO₂ in 1896 to 4.5 tCO₂ in 2018. This expansion of energy use vastly improved our access to basic necessities such as shelter, food, sanitation, and well-being. But it also perpetuated economic and racial inequality, environmental injustice, poverty, hunger, disease, and fossil fuel racism,⁹ among a host of other problems (see Figure 12.1).

In the early carbon age, there was little concern for the environmental, societal, or climatic impacts of fossil fuel production and use. It wasn't until the 1950s that global industrialization and environmental change began to be recognized as imperiling humanity's prospects; Harrison Brown's *The Challenge of Man's Future* in 1954 and, later, Rachel Carson's *Silent Spring* (1962) and Club of Rome's *Limits to Growth* (1972) shed light on the clash between unrestrained growth and the planet's ability to sustainably provide food and materials without threatening the web of life on which humans depend. These concerns, which gained prominence in the 1960s, and the awareness of the dangers of unfettered industrialization led to the Earth Day

⁹ See Nikayla Jefferson and Leah Stokes, "Our Racist Fossil Fuel Energy System," *Boston Globe*, July 13, 2020, <<https://www.bostonglobe.com/2020/07/13/opinion/our-racist-fossil-fuel-energy-system/>>.

demonstrations of 1970 and emboldened President Nixon and Congress to pass environmental legislation and create the Environmental Protection Agency.

As Morris Udall (US Congressman from New Mexico) said in 1974, “far-sighted scientists, businessmen, economists, and public servants are beginning to realize that there is a better, safer way than blind, unlimited growth. And that is to limit growth now before the problem reaches crisis proportion.”¹⁰ Udall was speaking of US oil reserves and potential new discoveries and pointing out that exponential growth made the scale of our reserves irrelevant in the long run, chiefly because environmental impacts would limit growth. Indeed, fossil fuel reserves have far exceeded safe climate limits for decades.¹¹

With respect to the threat of climate change, the scientific community as well as the petroleum industry began to issue early warnings in the 1950s. In 1959, Columbia University and the American Petroleum Institute (API) convened a meeting organized for the centennial of Edwin Drake’s discovery of oil at Titusville, Pennsylvania in 1859. Physicist Edward Teller, best known for his role in the Manhattan Project and an “out of the box” thinker on the civilian use of atomic devices for energy production, was asked to comment on “energy patterns of the future.” He warned the audience of 300 leading academics and oil industry executives that fossil fuels “contaminate the atmosphere” and that “when the temperature does rise by a few degrees over the whole globe, there is a possibility that the icecaps will start melting and the level of the oceans will begin to rise.”¹² That seed of recognition of the consequences of fossil fuel use – that their continued use would threaten the viability of companies engaged in the production and distribution of carbon fuels – was thus planted decades ago.

Oil and gas company scientists and trade associations also researched the effects of carbon dioxide emissions and carbon uptake by the oceans. Company executives were duly warned that the continued use of fossil fuels would destabilize the global climate and pose an existential threat to fossil fuel producers. US and international Academies of Science weighed in with commissions and reports studying the severity of the threat of global warming, including, notably, the Charney report (1979), which were preceded and followed by scientific investigations, a warning to Congress by President

¹⁰ For the source of the quotation, see Mason Inman, *The Oracle of Oil: A Maverick Geologist’s Quest for a Sustainable Future* (New York: Norton, 2016).

¹¹ See Richard Heede, “A World Geography of Recoverable Carbon Resources in the Context of Possible Climate Change” (1983) National Center for Atmospheric Research 136.

¹² For the source of the quotation, see Ben Franta, “On Its 100th Birthday in 1959, Edward Teller Warned the Oil Industry about Global Warming,” *The Guardian*, January 1, 2018.

Johnson's Science Advisory Committee, academic studies, international commissions, and so on.¹³ (This is a bare summary; interested readers can follow the thread here.)¹⁴

As the science on the climate threat became incontrovertible, the world responded with the creation of the Intergovernmental Panel on Climate Change (IPCC) in 1988. Scientist Jim Hansen's riveting testimony before the Senate Energy and Natural Resources Committee in June 1988, cleverly timed by Senator Tim Wirth to coincide with a heat wave and conducted with the hearing room's cooling system turned off, finally brought the issue to public attention.¹⁵

12.3 INTERNATIONAL CLIMATE NEGOTIATIONS IN RESPONSE TO GLOBAL WARMING

As diplomats are wont to do with a global problem, an international effort to address climate change was launched in the late 1980s/early 1990s with climate negotiators, analysts, and scientists from most of the world's 196 nations, pursuant to the objectives of the UN Framework Convention on Climate Change (UNFCCC 1992) and focused on the responsibilities and obligations of national governments. This focus on controlling territorial consumption and emissions ignores the world's pan-national carbon producers, discussed below.¹⁶

The Framework Convention defines responsibility for climate change and the burden of mitigating the climate crisis "on the basis of equity and in

¹³ See Jule G. Charney et al., "Carbon Dioxide and Climate: A Scientific Assessment" (1979) National Academy of Sciences 33, <https://www.bnl.gov/envsci/schwartz/charney_report1979.pdf>; see also President's Science Advisory Committee, "Restoring the Quality of Our Environment: Report of the Environmental Pollution Panel" (1965) White House 317; see also William H. Matthews, et al., *Study of Man's Impact on Climate* (Cambridge, MA: MIT Press, 1971), p. 308; see also Weart, *The Discovery of Global Warming*, above note 5.

¹⁴ See, e.g., "Smoke & Fumes: The Legal and Evidentiary Basis for Holding Oil Companies Accountable for Climate Change" (2017) Center for International Environmental Law, <<https://www.ciel.org/wp-content/uploads/2019/01/Smoke-Fumes.pdf>>; see also Neela Banerjee et al., *Exxon: The Road Not Taken* (Brooklyn: Inside Climate News, 2015). And for the consummate history of climate deception and disinformation, see Naomi Oreskes and Erik Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (New York: Bloomsbury, 2010).

¹⁵ See Philip Shabecoff, "Global Warming Has Begun, Expert Tells Senate," *New York Times*, June 24, 1988.

¹⁶ Lee Raymond: "I'm not a U.S. company and I don't make decisions based on what's good for the U.S." Steve Coll, *Private Empire: ExxonMobil and American Power* (New York: Penguin, 2012).

accordance with their *common but differentiated responsibilities* and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”¹⁷ Responsibilities for ameliorating climate harms are thus chiefly accorded to the parties that benefited the most from historical fossil fuel use and emissions. The Framework Convention eventually led to the development of the 2015 Paris Agreement at the twenty-first meeting of the Conference of the Parties (COP). Signatories to the Paris Agreement agreed to submit plans for their Nationally Determined Contributions (NDCs), which would contain commitments to reduce national emissions in accordance with the global commitment to limit the global temperature increase to two degrees Celsius, and, if feasible, “well below” two degrees Celsius above pre-industrial surface temperature by mid-century.

This global initiative, along with the IPCC’s Assessment Reports¹⁸ and Special Report on 1.5°C,¹⁹ are crucial to making progress on reducing still-increasing global emissions toward net zero by 2050, without significant overshoot.

Other analysts have pointed out that nations should take responsibility for consumption-based emissions that occur in countries from which they import goods, services, and energy commodities (whose operational emissions are attributed to the producer nation).²⁰ International agreements, while crucial, have thus far failed to curb emissions (it took a pandemic to peak emissions, if the downturn is sustainable).²¹ The “emissions gap” remains wide, and NDC commitments are falling short of what is required to fulfil the objectives of the Paris Agreement.²²

Can consumers, companies, or state and local governments fill the gap where nations fail?

¹⁷ United Nations Framework Convention on Climate Change, Art. 3, Rio de Janeiro, May 9, 1992, 1771 UNTS.

¹⁸ See “Climate Change 2014: Synthesis Report, Summary for Policymakers” (2014) IPCC 40.

¹⁹ See “Special Report on Global Warming of 1.5°C: Summary for Policymakers of IPCC” (2018) IPCC.

²⁰ See Steven J. Davis et al., “Future CO₂ Emissions and Climate Change from Existing Energy Infrastructure” (2010) 329 *Science* 1330.

²¹ See Corinne Le Quéré et al. “Temporary Reduction in Daily Global CO₂ Emissions during the COVID-19 Forced Confinement” (2020) 10 *Nature Climate Change* 647; International Energy Agency (2022) Global Energy Review: CO₂ Emissions in 2021: Global Emissions Rebound Sharply to Highest Ever Level, IEA, Paris, <<https://www.iea.org/reports/global-energy-review-co2-emissions-in-2021-2Climate/Emissions/IEA/IEAGlobalEnergyReviewCO2Mar22.pdf>>

²² See “The Emissions Gap Report 2019” (2019) United Nations Environment Programme 81.

12.4 NON-STATE ACTORS AND RESPONSIBILITY²³

The concept of responsibility includes private parties as well as national governments.²⁴ Consumers have pursued emission reductions, cutting their consumption of carbon fuels and fossil-based electricity. Electric utilities, airlines, and large companies generate significant emissions of carbon dioxide, and most large public companies measure and report operational emissions using corporate inventory protocols.²⁵ Most Fortune 500 companies and thousands of mid-sized companies report direct and indirect operational emissions to platforms such as CDP and the Global Reporting Initiative, and most publish corporate sustainability reports. Nearly one thousand companies have committed to meet or exceed the Paris Agreement's "well-below 2°C" target and "to pursue efforts to limit warming to 1.5°C."²⁶ Thousands of cities have also committed to climate action. Yet emissions keep rising.²⁷

The emphasis in the greenhouse gas protocol is to report on and thereby acknowledge a degree of responsibility for direct and indirect operational emissions (scope 1 and scope 2, respectively). For fossil fuel companies, in particular, emissions from oil, gas, and coal products sold to and emitted by their worldwide customers (scope 3) are reported voluntarily and, hence, without a commensurate sense of responsibility. Since their carbon fuel

²³ For brevity, this discussion ignores the rich literature on the nature and implications of responsibility for climate change and consequential burden of action by notable philosophers such as Simon Caney, John Broome, Kathleen Dean Moore, Stephen Gardiner, Dale Jamieson, John Nolt, James Garvey, Henry Shue, Steve Vanderheiden, Kristian Høyer Toft, and Sybille van den Hove. Most of this literature is focused on the individual vs. state moral responsibility, or on ancestral vs. current responsibility, and thus skirts discussion of corporate culpability in general and particularly the major carbon producers (with the exception of Shue and Toft).

²⁴ See Claire L. Fyson et al., "Fair-Share Carbon Dioxide Removal Increases Major Emitter Responsibility" (2020) 10 *Nature Climate Change* 836.

²⁵ See Pankaj Bhatia et al., "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" (2004) World Resources Institute & World Business Council for Sustainable Development.

²⁶ See Science Based Targets, <<https://sciencebasedtargets.org/>>; see also aspirational initiatives, e.g., ClimateAction100+, <<https://www.climateaction100.org/>>; CDP, <<https://www.cdp.net/en>>; Global Reporting Initiative, <<https://www.globalreporting.org/>>; see also financial reporting and corporate responsibility groups, e.g., CERES, <<https://www.ceres.org/>>; Task Force on Climate-Related Financial Disclosures, <<https://www.fsb-tcfd.org/>>. See also "Major Risk or Rosy Opportunity: Are Companies Ready for Climate Change?" (2019) CDP 47.

²⁷ See Jonathan Franzen, "What If We Stopped Pretending? The Climate Apocalypse Is Coming," *New Yorker*, September 8, 2019.

products are their largest source of attributed emissions, this, too, is changing, and fossil fuel companies are taking notice.

Corporations have stepped up their game in recent years,²⁸ pushed by the urgency of the IPCC's "1.5°C Report," the Task Force on Climate-Related Financial Disclosures, the keen interest of investors, the potential stranding of billion-dollar reserves, divestment campaigns, campaigns to keep carbon in the ground, virulent demonstrations, and the emergence of Greta Thunberg as humanity's climate conscience.

The fiduciary responsibility of corporations – previously limited to maximizing financial returns to shareholders – has been broadened by Business Roundtable's "Statement on the Purpose of a Corporation," investors such as BlackRock urging the full disclosure of climate-related risks and holding directors to account, the requirements of the Task Force on Climate-Related Financial Disclosures, the divestment decisions of Norway's Sovereign Wealth Fund, corporate reputational concerns, the need to preserve their social license to operate, and the threat of climate litigation, just to name a few of the motivating developments that have helped raise the pressure on oil and gas companies to align with the Paris Agreement.

Other companies, including electric utilities, have stepped up their ambition. What about the fossil fuel companies at the base of the global supply chain for carbon fuels? What responsibilities do they have?

12.5 THE RESPONSIBILITY OF FOSSIL FUEL PRODUCERS

By the mid-2010s, there was little choice for fossil fuel producers but to acknowledge their fundamental responsibilities for the impacts of their carbon fuels and the need to address the climate crisis largely caused by their products. Indeed, BP and Shell acknowledged as much in the 1990s.²⁹ (American companies, in contrast, invested millions of dollars to disinform Congress and the public³⁰ in order to delay action to curb production.) Whether any oil and gas company is fully prepared for the decarbonization of the world's energy economy remains to be seen, but Eni, TotalEnergies, BP, Shell, Repsol, Galp, and Equinor have made substantial commitments, in

²⁸ See David Kiron et al., "Corporate Sustainability at a Crossroads: Progress toward Our Common Future in Uncertain Times" (2020) MIT Sloan & Boston Consulting Group 31.

²⁹ See *Climate of Concern* (Royal Dutch Shell 1991) (28-minute film); see also "The Greenhouse Effect," Royal Dutch Shell (1988), p. 91; see also Robert Bradley, "Beyond Petroleum," BP, 2010; see also John Browne, Stanford University Speech (1997).

³⁰ See Robert J. Brulle, "The Climate Lobby: A Sectoral Analysis of Lobbying Spending on Climate Change in the USA, 2000 to 2016" (2018) 149 *Climatic Change* 289.

alignment with the Paris Agreement, to reduce operational and product-related emissions by mid-century.³¹ Whether leading companies can be trusted to drive decarbonization remains to be seen.³²

Fossil fuel companies extract, refine, and market the carbon fuels that, when used as intended, contribute the largest share (87 percent of all CO₂ from fuels, cement, and land use, and 62 percent overall) of all greenhouse gas emissions that drive atmospheric warming and climate change. Seven-eighths of emissions attributed to carbon producers result from the use of their products – gasoline, diesel, jet fuel, natural gas, and coal – and one-eighth from the extraction, refinement, and delivery of finished fuels.

Oil, natural gas, and coal companies have benefited for decades from hundreds of billions of dollars in government subsidies for fossil fuel development, as well as regulatory preferences such as lax pollution controls, favorable leasing terms for resource extraction on public lands, other taxpayer-funded costs, such as naval protection for shipping lanes, and health costs of energy-related pollution.³³ Fossil fuel companies are the beneficiaries of what economist Nicholas Stern has called the “greatest market failure the world has seen,” whereby the profits have been privatized and the costs and damages have been externalized.

Fossil fuel and cement producers had early knowledge that their products would destabilize the climate and thus bear a moral responsibility to address the impacts caused by the use of their products. Rather than taking action to ameliorate the harms, these companies have continued to invest in additional reserves and production, funded campaigns to disinform the public in order to delay legislative action, and sought to perpetuate the carbon economy — as if the consequences didn’t matter.³⁴

12.6 THE CARBON MAJORS PROJECT: ATTRIBUTING EMISSIONS

On the theory that fossil fuel producers bear substantial responsibility for the adverse impacts of their products,³⁵ the Climate Accountability

³¹ Simon Dietz, Dan Gardiner, Valentin Jahn, & Jolien Noels (2021) How ambitious are oil and gas companies’ climate goals? *Science*, vol. 374:405–408.

³² Dario Kenner and Richard Heede, “White Knights, or Horsemen of the Apocalypse? Prospects for Big Oil to Align Emissions with a 1.5°C Pathway” (2021) *Energy Research & Social Science* 79, art. no. 102049. <<https://www.sciencedirect.com/science/article/pii/S2214629621001420>>.

³³ Geoffrey Supran, Peter Erickson, Doug Koplrow, Michael Lazarus, Peter Newell, Naomi Oreskes, & Harro van Asselt, “Fossil-Fuel Subsidies Must End,” *Scientific American*, vol. 29 (35), August 2020.

³⁴ See Benjamin Franta, “Early Oil Industry Knowledge of CO₂ and Global Warming” (2018) 8 *Nature Climate Change* 1024.

³⁵ See Peter Frumhoff et al., “The Climate Responsibilities of Industrial Carbon Producers” (2015) 132 *Climatic Change* 157.

Institute³⁶ began, in 2004, to investigate how much the largest oil, gas, and coal companies have contributed to global CO₂ and methane emissions and thus to climate change. An extensive database of each company's historical fossil fuel production was created, using company-declared production data, and a methodology to quantify atmospheric emissions was documented and peer-reviewed. The project quantified both direct operational emissions (scope 1) and product-related emissions (scope 3) from each entity's annual fossil fuel production, deducting for net non-energy uses such as petrochemicals, road oil, and lubricants. Initial results were published in 2014.³⁷ Results were then updated to 2017 when published in *The Guardian* and updated to include 2020 production data in Table 12.1.³⁸

We found that the top twenty companies collectively produced the fuels that when used as intended dumped 493 billion tons of CO₂ and methane (GtCO₂e) into the atmosphere from 1965 to 2020, or 35 percent of all global fossil fuel emissions in that period (1.49 trillion tCO₂e, TtCO₂e). Table 12.1 shows company emissions as a percent of global fossil fuel and cement emissions over the same period.

The oil, gas, and coal companies, unsurprisingly, take a dim view of our perspective that they bear substantial responsibility for the climate impacts, costs, and damages caused by the use of their products. While they do not challenge the basic findings (the estimates are based primarily on their own production data, after all), their responses range from “we are fulfilling our customers demand for energy” and “we support climate action/we’re reducing our own carbon footprint” to “people in developing countries should be allowed to have the benefits of clean fuels, too.” What else can they say? That carbon fuels are legally sanctioned products and that they invested heavily in lobbying to perpetuate the carbon economy, restrain renewable energy development, and retain market share?

Suffice it to quote from seventeenth century legal scholar, Antoine Loysel: “He who can but does not prevent, sins.”

³⁶ CAI is an independent research institute focusing on anthropogenic climate change, dangerous interference with the climate system, the contribution of fossil fuel producers' carbon production to atmospheric carbon dioxide, and the risk and disclosure requirements regarding past and future emissions of greenhouse gases. CAI was founded in 2011.

³⁷ See Richard Heede, “Tracing Anthropogenic CO₂ and Methane Emissions to Fossil Fuel and Cement Producers 1854–2010” (2014) 122 *Climatic Change* 229; see also Richard Heede, *Carbon Majors: Accounting for Carbon and Methane Emissions 1854–2010 Methods & Results Report* (Sunnyvale: Lambert Academic, 2019), p. 148.

³⁸ See Matthew Taylor and Jonathan Watts, “Revealed: the 20 firms behind a third of all carbon emissions,” *The Guardian*, October 9, 2019.

TABLE 12.1 *Operational and product emissions attributed to the top twenty major carbon producers, 1965–2020*

Entity	MtCO ₂ e ^a	% of global
1. Saudi Aramco, Saudi Arabia	64,825	4.35%
2. Gazprom, Russia	47,747	3.20%
3. Chevron, USA	44,715	3.00%
4. ExxonMobil, USA	43,649	2.93%
5. National Iranian Oil Co.	39,168	2.63%
6. BP, UK	35,646	2.39%
7. Shell, UK	33,556	2.25%
8. Coal India, India	26,737	1.79%
9. Pemex, Mexico	23,731	1.59%
10. PetroChina / China Natl Petroleum	16,783	1.13%
11. Peabody Energy, USA	16,425	1.10%
12. Petroleos de Venezuela	16,345	1.10%
13. Abu Dhabi, United Arab Emirates	15,967	1.07%
14. ConocoPhillips, USA	15,794	1.06%
15. Kuwait Petroleum Corp., Kuwait	14,813	0.99%
16. Iraq National Oil Co., Iraq	14,219	0.95%
17. TotalEnergies, France	13,610	0.91%
18. Sonatrach, Algeria	13,542	0.91%
19. BHP, Australia	10,554	0.71%
20. Occidental, USA	9,928	0.67%
Top Twenty	517,743	34.73%
Global, 1965–2020	1,490,872	100.00%

^a MtCO₂e: million tonnes carbon dioxide-equivalent. Percent of global fossil fuel and cement emissions, 1965–2020

12.7 THE CARBON MAJORS: ATTRIBUTION AND LEGAL IMPLICATIONS

Attributing source emissions is the first crucial step in attributing climate impacts. In a co-authored 2017 paper, we modeled the rise in atmospheric CO₂ concentration, surface temperature, and sea level attributable to the emissions traced to the leading carbon producers.³⁹ In 2019, we modeled the

³⁹ See Brenda Ekwurzel et al., “The Rise in Global Atmospheric CO₂, Surface Temperature, and Sea Level from Emissions Traced to Major Carbon Producers” (2007) 144 *Climatic Change* 579.

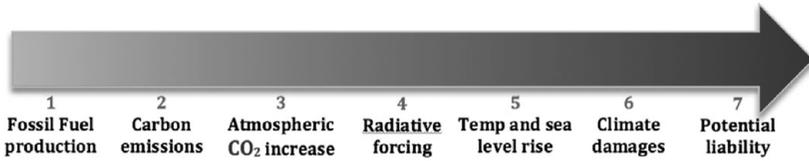


FIGURE 12.2 The arc of CAI's work from attributing emissions to carbon producers, modeling their impact on the global climate, and contributing to efforts to hold companies accountable for climate damages

major companies' impact on the acidification of the world's oceans and vulnerable fisheries.⁴⁰ These climate models account for non-anthropogenic greenhouse gases as well as emissions from other human sources, such as deforestation, carbon from soils, and non-energy sources of methane (rice cultivation, landfills, and animal husbandry) and nitrous oxide.

There are other ways of attributing climate impacts to major carbon producers. In preliminary research using a simple land inundation model, CAI estimated that of the 10,000 km² of land lost to sea level rise from 1980 to 2010, nearly 3,700 km² can be attributed to the twelve largest carbon producers. The largest land loss (approximately 600 km²) is attributed to Saudi Aramco; ExxonMobil's attributed land loss is approximately 380 km².⁴¹ Most of this coastal inundation is in remote, sparsely populated areas, but the preponderance of economic damages are to low-lying buildings, industry, and infrastructure. We have not (yet) calculated the economic losses attributable to carbon producers (see Figure 12.2).

It is far more challenging to link the emissions traced to individual fossil fuel producers to anthropogenic climate damages.⁴² It is not simply a proportional exercise in which each oil, gas, and coal company's historical emissions (e.g., Chevron's 3.0 percent of global CO₂ and CH₄ emissions since 1965) are used to allocate adaption costs or reparations (such as to an Atmospheric

⁴⁰ See Rachel Licker et al., "Attributing Ocean Acidification to Major Carbon Producers" (2019) 14 *Environmental Research Letters* 1.

⁴¹ Preliminary calculations of estimated land loss attributed to emissions traced to major carbon producers. In the CIESIN database, global SLR of 1 m equates to 421,174 km² of inundated land; 1 mm equates to ~421 km². See Richard Heede, "Carbon Producers' Tar Pit: Dinosaurs Beware" (2017) Institute for New Economic Thinking 16, <<https://www.ineteconomics.org/uploads/papers/Heede-PathToAccountability-18Oct17.pdf>>.

⁴² See Michael Burger and Jessica Wentz, "Holding Fossil Fuel Companies Accountable for Their Contribution to Climate Change: Where Does the Law Stand?" (2018) 74 *Bulletin of the Atomic Scientists* 397; see also Michael Burger et al., "The Law and Science of Climate Change Attribution" (2020) 45 *Columbia Journal of Environmental Law* 57.

Recovery Trust Fund)⁴³ to fossil fuel companies. As discussed above, other parties contribute to emissions and thus bear some responsibility for climate change, including individual consumers (both living and dead)⁴⁴ as well as nations, airlines, corporations, and electric utilities, to name a few. Fossil fuel emissions are the major, but not the sole, contributor to anthropogenic climate change; deforestation, animal husbandry,⁴⁵ agriculture, soil loss, desertification, the thermal impacts of our cities and highways, and even albedo changes must be accounted for in considering how to allocate damages among contributing parties, whether defendants or not.

As a first step toward allocating climate damages to carbon producers, we analyze estimated global GDP losses from anthropogenic climate damages out to 2050 totaling \$99 trillion and allocate climate reparations of \$5.5 trillion to the twenty largest oil, gas, and coal producers based on their atmospheric CO₂ and methane contributions from 1988 to 2018, after accounting for non-energy contributions, other gases, and other responsible parties.⁴⁶

These results are of interest to climate litigators, Loss & Damage proponents, human rights commissions, financial analysts, insurers and lenders, shareholders, regulators, scientists, and fossil fuel company executives and boards. CAI's work is cited in several climate lawsuits against major carbon producers in the United States and internationally, as well in human rights investigations.⁴⁷ The science of detection and attribution is improving rapidly,⁴⁸ and we can with increasing confidence link emissions to higher degrees of risk and higher incidences and degrees of damages. In other words, we can better link emissions to human interference with the climate system – the human fingerprint on rising climate damages.⁴⁹ For more on attribution science and climate litigation, see Michael Burger, Jessica Wentz, and Daniel Metzger's chapter in this volume (Chapter 11).

⁴³ As proposed by Mary Christina Wood and Dan Galpern, "Atmospheric Recovery Litigation: Making the Fossil Fuel Industry Pay for Damages to the Atmosphere from Carbon Pollution" (2015) 45 *Environmental Law* 259.

⁴⁴ See Henry Shue, "Responsible for What? Carbon Producer CO₂ Contributions and the Energy Transition" (2017) 144 *Climatic Change* 591.

⁴⁵ See Shefali Sharma, "Milking the Planet: How Big Dairy Is Heating up the Planet and Hollowing Rural Communities", IATP, June 29, 2020, <<https://www.iatp.org/milking-planet>>.

⁴⁶ Marco Grasso and Richard Heede, "Time to Pay the Piper: Fossil Fuel Companies' Reparations for Climate Damages: A Proposal" (in preparation).

⁴⁷ See Joanna Setzer and Rebecca Byrnes, "Global Trends in Climate Change Litigation: 2020 Snapshot" (2020) LSE 30. Isabella Kaminski "Indonesian islanders sue cement producer for climate damages," *The Guardian*, 20 July 2022. <https://www.theguardian.com/world/2022/jul/20/indonesian-islanders-sue-cement-holcim-climate-damages?>

⁴⁸ See Friederike Otto et al., "Towards an Inventory of the Impacts of Human-Induced Climate Change" (2020) *Bulletin of the American Meteorological Society*.

⁴⁹ See Kerry Emanuel, "Why It's Time to Stop Calling These Hurricane Disasters 'natural,'" *Washington Post*, September 19, 2017.

Fundamentally, however, fossil fuel producers have failed to “clean up their mess” and are morally obliged to limit future emissions and impacts in line with the science. As Henry Shue puts it:⁵⁰

Obviously, this responsibility to future generations does not fall on carbon producers any more than it does on anyone else. But it also does not fall on them any less. And more than most of us they have the political influence, the wealth, and the technical expertise to go beyond avoiding future harm and compensating for past harm and to make positive contributions to the creation of an energy regime that will be safe for people to live with. The time has come for the major carbon producers to face the reality of the unsafe products they persist in marketing and the safer world they could help to create. Otherwise, they risk turning themselves into enemies of humanity.

12.8 CONCLUSION

Some entities are more responsible than others, and it is my contention that oil and gas and coal producers bear substantial responsibility, not only for climate damages and adaptation costs but also for a moral (and perhaps legal) mandate to accelerate the decarbonization of the global energy economy. Some companies are reacting positively to this challenge: Repsol, the Spanish oil and gas major, committed to net zero emissions by 2050 across its full supply chain⁵¹ and other majors are moving in that direction, led by BP,⁵² Royal Dutch Shell,⁵³ Eni, and Equinor.⁵⁴ Their ambitions, however, may not be sufficient.⁵⁵

⁵⁰ Shue, “Responsible for What? Carbon Producer CO₂ Contributions and the Energy Transition,” above note 43 at 591.

⁵¹ See “Repsol 2050 Net Zero Emissions Commitment,” Repsol, December 2, 2019, <www.repsol.com/en/press-room/press-releases/2019/repsol-will-be-a-net-zero-emissions-company-by-2050.cshhtml>.

⁵² See “BP Sets Ambition for Net Zero by 2050, Fundamentally Changing Organisation to Deliver,” BP, February 6, 2020, p. 11; see also Mike Coffin, “BP’s Net Zero Ambition: Deciphering the Code,” Carbon Tracker Initiative, February 14, 2020, <<https://carbontracker.org/bps-net-zero-ambition/>>.

⁵³ See “Shell’s Ambition to Be a Net-Zero Emissions Energy Business,” Royal Dutch Shell, April 16, 2020, <www.shell.com/energy-and-innovation/the-energy-future/shells-ambition-to-be-a-net-zero-emissions-energy-business.html>; see also Katherine Dunn, “Shell Becomes the Largest Global Energy Company to Commit to a Net-Zero Emissions Goal by 2050,” *Fortune*, April 16, 2020, <<https://fortune.com/2020/04/16/net-zero-emissions-shell-oil-industry-gas/>>; See also “Eni’s strategy against climate change,” *Eni*, <<https://www.eni.com/en-IT/net-zero/strategy-climate-change.html>>.

⁵⁴ See “Equinor’s Climate Roadmap: Equinor Sets Ambition to Reduce Net Carbon Intensity by at Least 50% by 2050,” *Equinor*, February 6, 2020, p. 23, <<https://www.equinor.com/en/how-and-why/climate.html>>.

⁵⁵ Dietz et al., “How Ambitious Are Oil and Gas Companies’ Climate Goals?” *Science*, 2021, 374:405–408, above note 31; Kenner and Heede, “White Knights, or Horsemen of the Apocalypse?” note 32 above.

The writing is on the wall. Carbon emissions must, if we are to preserve global civilization as we know it, decline rapidly to net zero by mid-century. This requires a massive transformation of the global energy system, the decommissioning of plants, drilling platforms, pipelines, refineries, mines, boilers, vehicles, aircraft – all manner of carbon infrastructure – and the creation and deployment of a new (though less massive) infrastructure to capture, store, transport, and permit the use of emerging renewable energy systems. It also requires the investment of trillions of dollars and the deployment of ingenious, efficient new systems.⁵⁶ This transition should not only be the burden of the nations of the world and their taxpayers but also, in substantial part, the fossil fuel companies that have willfully prolonged this transformation.

In this writer's view, this transition has been inevitable for decades,⁵⁷ and we have squandered precious time, skirted our responsibilities, and shifted the costs to our children. Major fossil fuel companies understand their role and the existential importance of leading the transition to a low-carbon economy. It is my hope that the companies – and countries – that lead will prosper and that the laggards will get out of the way.

⁵⁶ See Amory Lovins, "Reinventing Fire: Bold business solutions for the new energy era" (2011) Rocky Mountain Institute.

⁵⁷ See Myles Allen, "Liability for Climate Change" (2003) 421 *Nature* 419; see also Myles R. Allen et al., "The Case for Mandatory Sequestration" (2009) 2 *Nature Geoscience* 813.

Providing Evidence to Support Strategic Climate Enforcement and Litigation

REINHOLD GALLMETZER*

13.1 INTRODUCTION

Courts are critical – but often overlooked – components of the global response to the climate emergency. Courts are crucial because judicial proceedings are particularly apt to address long-term challenges, such as climate change, where the most severe impacts will only be felt by the next generations. Constitutionally guaranteed independence and impartiality releases judges from the pressures of short-term political gain or special interests' lobbies. At the same time, judgments are legally binding and enforceable. In many instances, addressing climate change through courts is also legally uncontroversial because they focus on violations of existing law, even if applied to different contexts.

To make more and better use of courts to address the climate emergency, a few hurdles need to be overcome. Notwithstanding recent examples of successful strategic climate litigation and law enforcement, laws and regulations that could be used to address some of the key causes of climate change have still not been enforced sufficiently for this purpose. This applies, for instance, to illegal deforestation, the direct and illegal harm caused by the extraction and use of fossil fuels, and to methane emissions from oil and gas, from coal mining and from landfills. Enquiries with prosecution and police authorities suggest that this is mostly because they do not have access to the high quality information and support that would enable them to trigger and conduct effective proceedings with the means available to them. Similarly, the authorities indicated that NGOs not only need to bring more strategic climate

* Appeals Counsel, Office of the Prosecutor (OTP) of the International Criminal Court, and Founder and Chairperson of CCCA. The views expressed in this chapter are not necessarily those of the OTP.

litigation cases, but they must also do so based on strong evidence. Judicial climate action – whether enforced through criminal, administrative, constitutional, or civil courts – can only be successful if it is based on relevant and probative evidence. Generally, this evidence must establish that a person (natural or legal) engaged in illegal conduct or caused an illegal harm. The lack of access to high quality information establishing those facts prevents police, prosecutors, and courts from fully exploiting their collective potential to enforce laws capable of addressing the climate emergency.

This problem can be fixed. Recent developments in information and communication technology have created new and unprecedented possibilities for private organizations and individuals to generate, access, verify, and disseminate information. This allows NGOs and private citizens to trigger and support judicial proceedings. In fact, even if they do not have investigative powers like a government authority, they can still employ some information collection and analysis techniques more effectively than government authorities. This is because, collectively, they have more people to carry out such tasks, more immediate and direct access to certain kinds of information, more diverse expertise, and the ability to share relevant information swiftly and across borders without being restricted by jurisdictional limitations or narrow procedural rules. If mobilized in a coordinated and strategic way, NGOs and private citizens can bring stronger and more frequent cases before judicial authorities.

The Center for Climate Crime Analysis (CCCA) – to which the author of this chapter belongs – is a group of prosecutors and law enforcement professionals aiming to harness the collective potential of investigative NGOs and experts to support climate action. By collecting and analyzing all necessary information in collaboration with a broad and diverse network of partners, and by sharing that information with the competent law enforcement authorities or advocacy organizations, CCCA seeks to support and scale up judicial and other advocacy action against illegal activities related to climate change.

The following sections will identify the under-enforcement of laws relevant to discrete sources of greenhouse gas (GHG) emissions as the underlying problem; demonstrate how recent developments in information and communication technology (ICT) and related sociological developments enable a proposed solution; show how, through coordinated action, investigative NGOs, expert organizations, and private citizens can effectively support climate relevant law enforcement, litigation, and advocacy action; and illustrate the practical application of the proposed solution on the basis of a case study focusing on illegal deforestation and its drivers.

13.2 THE PROBLEM

While most GHG emissions are legal, a significant share results from, or is associated with, conduct that violates existing laws. National law enforcement authorities are therefore already equipped with the necessary statutory authority to effectively address some of the driving causes of climate change. For instance, virtually every country around the world criminalizes or otherwise outlaws, in one way or another, conduct that causes large-scale environmental damage or environmental degradation where it directly impacts the health and the lives of people.

Currently, however, national laws are inadequately enforced in these areas, resulting in a law enforcement gap. This prevents national law enforcement authorities from fully exploiting their vast collective potential to address some of the causes of climate change. While some observers suspect that this gap may be the result of a lack of political will to enforce the law more rigorously, this is not the real reason for the relatively low number of climate relevant cases, especially not in functioning democracies. Instead, the law enforcement gap in climate relevant cases is primarily the result of the following factors.

First, for any form of law enforcement or litigation to be successful, it must be based on credible and reliable evidence through which the allegations can be substantiated to the required standard of proof. No matter how ingenious an applied legal theory may be, legal action will fail unless the underlying facts are proven. In practice, however, the competent authorities often lack access to the high quality information and support that would enable them to conduct effective investigations and proceedings with the means available to them. This is particularly the case where some or all the required information can only be obtained by investigating conduct that occurred abroad. While law enforcement authorities could obtain such information through mutual legal assistance from foreign authorities, the underlying proceedings are often lengthy, cumbersome, and ineffective.

Second, national law enforcement authorities must frequently balance competing priorities with the limited means available to them. This means that 'hard' cases or cases based on fact-patterns or legal theories that fall outside the general practices of an authority, even if strategically significant, fail to get the attention they deserve.

And third, there is not enough coordination among national law enforcement authorities to address the illegal causes of climate change. While the authorities of different countries are well coordinated and cooperate effectively in some areas – for instance in combating terrorism or organized

crime – no such coordination is apparent in the fight against the illegal causes of climate change.

Efforts by investigative NGOs to trigger law enforcement action in areas such as environmental destruction do not achieve the desired result. This is because the quantity and quality of the information provided by them is often not enough for the law enforcement authorities to overcome the above challenges. Many NGOs conduct investigations with the aim of supporting public advocacy, instead of legal enforcement, which applies strict standards of proof. Their investigations are also often limited to specific facts that do not cover all aspects that need to be established in a legal case. NGOs, further, do not always readily cooperate with each other or share information. However, there is now an opportunity to break this deadlock by making effective use of the collective potential of investigative NGOs and private individuals to generate, preserve, and collect information and to strategically use that information to support climate enforcement and litigation.

13.3 ENABLING TECHNOLOGICAL AND SOCIOLOGICAL DEVELOPMENTS OF THE PROPOSED SOLUTION

Recent developments in ICT have created new and unprecedented possibilities for citizens to communicate and to generate, access, verify, and disseminate information. This empowers private citizens and other non-state actors to build legal actions, which can significantly enhance the role of law enforcement in addressing the illegal causes of climate change. The paragraphs below illustrate the relevance of these technological developments for these purposes.

The International Telecommunication Union estimated that, in 2019, about 4.1 billion people used the Internet. The percentage of mobile-broadband subscriptions was particularly high, including in developing countries and in the Least Developed Countries.¹ This transforms billions of people from passive recipients of information into active participants in a globally interconnected information community. Virtually every person who has access to the Internet can share information and ideas, and every person with a smartphone can preserve information by taking pictures or videos or by communicating through social media or other technological means.

¹ See 'Measuring Digital Development: Facts and Figures' (2019) ITU <<https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf>>.

Tailor-made, online applications such as Witness² or the Eye Witness Project³ assist citizens in preserving information such that it can be used by law enforcement as evidence.

People are also more connected. Not only can they share information and ideas, but they can also coordinate their actions. The experiences of open-source investigation platforms, such as Bellingcat⁴ or the Citizen Evidence Lab,⁵ have shown that people are willing to lend their talent, expertise, and free time to participate in investigative projects that they believe are socially beneficial and that are coordinated by a steering body. This form of expert-led social crowd-sourcing is an immense resource for law enforcement. It not only enables law enforcement to access expertise that it does not possess or often cannot afford, but it also allows for investigations to be conducted in real time – as opposed to official *ex post facto* investigations – and through global citizen participation. Thus, instead of being confined to a small number of official investigators that have specific but limited skills and resources, information may be generated, collected, and verified through thousands of persons who have immediate access to information and who have a broad range of relevant expertise.

Similarly, civil society organizations, scientific and educational institutions, health professionals, media organizations, and private sector corporations are increasingly active in collecting and publicizing information that is relevant to fighting climate change simply because this is consistent with their organizational or corporate sustainability objectives. During the annual RightsCon⁶ meetings, many of these organizations and corporations present their approaches and applications – some based on cutting edge technology – to generate, access, verify, and disseminate information. These entities harbour a huge amount of talent, expertise, and commitment. They represent invaluable sources of information, and are ideal first responders, because they often have access to information and the ability to preserve information long before government officials can conduct an official inquiry. In addition, they often have relevant expertise to verify information. Cooperation with these entities taps into a vast pool of information and expertise that is currently unavailable to most law enforcement entities. Law enforcement authorities increasingly appreciate the potential that cooperating with civil society organizations has for supporting their own work. Some have therefore issued guidelines on how

² See Witness, <<https://www.witness.org/>>.

³ See EyeWitness, <<https://www.eyewitness.global/>>.

⁴ See Bellingcat, <<https://www.bellingcat.com/>>.

⁵ See Amnesty International: Citizen Evidence Lab, <<https://citizenevidence.org/>>.

⁶ See RightsCon, <<https://www.rightscon.org/>>.

civil society organizations should proceed when preserving and collecting information.⁷

Developments in ICT have also revolutionized the types of information that can be made available to law enforcement. While in the past, most communication took place orally – either face-to-face or over the phone – today people increasingly communicate in writing or by sharing other forms of documentary information. For instance, by the end of 2019, some 2.95 billion people worldwide communicated through social media – which includes social networks, chat apps, blogs, forums, business networks, and photo-sharing platforms.⁸ Unlike oral interactions, this form of communication is generally preserved. Because most of it is publicly available or otherwise accessible through the crowd, it can be a vital source of information for law enforcement, provided that it is lawfully obtained and properly verified and analyzed.

13.4 SEIZING THE OPPORTUNITY TO SUPPORT AND SCALE CLIMATE ENFORCEMENT AND LITIGATION

There is a need – and an opportunity – to bridge the gap between the many investigative NGOs or individuals with access to information or expertise and law enforcement authorities and advocates who have the power to enforce the law or to advocate for it. If done effectively, providing the relevant actors with high quality information to support their work can strengthen and scale climate relevant enforcement and litigation.

CCCA has set out to do exactly that.⁹ It uses its law enforcement expertise to strategically support, advise, and coordinate existing efforts by NGOs, scientific/expert organizations, and private citizens fighting climate change in order to generate, preserve, and collect information that is relevant, probative, and admissible in court. CCCA then conducts legal and forensic analyses of the information and prepares case files to share with competent law enforcement or regulatory authorities or with NGOs in support of strategic climate litigation and advocacy. These authorities or NGOs are thus provided with information and analysis that would otherwise not be available to them or only at a substantial cost.

⁷ See Eurojust & Office of the Prosecutor of the International Criminal Court, “Documenting international crimes and human rights violations for criminal accountability purposes – Guidelines for civil society organisations”.

⁸ See ‘Number of Social Network Users Worldwide from 2010 to 2023’, Statista, <<https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>>.

⁹ See Center for Climate Crime Analysis (CCCA), <<http://www.climatecrimeanalysis.org/>>.

CCCA is guided by the following core principles:

Focus on affected communities: Each CCCA project focuses on the communities affected by climate crime and human rights violations and actively involves them throughout the process. As part of its case selection process, CCCA assesses the affected communities' needs and interests and their willingness to cooperate. CCCA also does a community risk assessment and develops a strategy to minimize community risk resulting from their cooperation with CCCA.

Network approach: At each phase of a case, CCCA cooperates with organizations and individuals who have access to relevant information or expertise. CCCA's law enforcement experts advise, support, and coordinate the activities of these organizations, thereby building strong cases together. This has a force multiplier effect. First, it enhances the effectiveness and impact of the investigations conducted by CCCA's partners. CCCA achieves this by focusing on collecting information, consolidating information from different groups, providing legal analysis of the information, and using CCCA's expertise and connections to put the right case files before the right authorities or litigation groups. Second, CCCA's approach empowers law enforcement authorities and advocacy organizations to pursue their mandates, including to address climate change.

Innovative investigative techniques and alternative forms of evidence: CCCA explores innovative investigative techniques and relies on alternative forms of evidence, including scientific evidence, cutting edge technological evidence (such as remote sensing satellite data), and modern open-source investigation techniques. Members of the affected communities provide valuable lead information or documentary/electronic evidence and assist in the collection and analysis of evidence on the ground. While victim testimonials collected by NGOs are effective in public advocacy, judges rarely rely on privately gathered statements to establish criminal or other responsibility. Witness-based investigations also present greater risks to victims and investigators, and they are more expensive. CCCA therefore prioritizes other forms of evidence and generally does not rely on victim testimonials.

Legality: CCCA strictly operates within the framework of national laws. Although information from legitimate 'whistle-blowers' can be properly accepted, the solicitation or knowing acceptance of illegally obtained information is not consistent with CCCA's approach.

Flexibility and pragmatism to maximize impact: While CCCA uses criminal law investigation and analysis techniques, it does not only promote criminal prosecution. CCCA strategically chooses and creatively promotes both legal and non-legal mechanisms to maximize the impact and benefits for the climate and the protection of human rights. By using criminal law's stringent standards for evidence and proof, CCCA's case files can be used for all forms of judicial or regulatory enforcement, civil litigation, and other

forms of advocacy. This means that the enforcement of 'hard law' through courts and regulatory authorities is combined with efforts to persuade corporate actors to better manage legal and reputational risks or comply with their corporate climate, human rights, or sustainability standards.

13.5 CASE STUDY: ILLEGAL DEFORESTATION AND ITS DRIVERS

The above approach has numerous potential climate-relevant applications. These include the targeting of GHG emissions generated by deforestation and forest degradation. The following case study examines both the underlying situation and the impact that an evidence-based approach can have.

13.5.1 *Situation Analysis*

Deforestation and forest degradation are major climate concerns. The Intergovernmental Panel on Climate Change, in its recent report on Climate Change and Land,¹⁰ estimated that deforestation accounts for about 12 to 15 per cent of global GHG emissions. It recommends the urgent reduction of deforestation and forest degradation as a key mechanism to achieve the Paris Agreement's primary objective of limiting the global temperature increase to well below two degrees Celsius. It further found that preserving existing tropical forest coverage is the most cost-effective way to achieve this objective through land use. It also poses the least competing land pressures, has additional positive impacts on the human rights of Indigenous people, and preserves high biodiversity ecosystems.

Most tropical deforestation is illegal: Reports from the World Bank,¹¹ the United National Environmental Program (UNEP), and INTERPOL,¹² indicate that up to 90 per cent of logging in key producer countries of tropical timber is illegal. These organizations all argue that law enforcement plays a critical role in addressing illegal deforestation. The experience of Brazil bears out this thesis: a combination of government policies with enforcement

¹⁰ See 'Special Report on Climate Change and Land: Summary for Policymakers' (2020) IPCC.

¹¹ See 'Justice for Forests: Improving Criminal Justice Efforts to Combat Illegal Logging' (2012) The World Bank 2, n. 2, and n. 10.

¹² See C. Nellemann et al. (eds.), 'A Rapid Response Assessment: Green Carbon, Black Trade – Illegal Logging, Tax Fraud and Laundering in the World's Tropical Forests' (2012) UNEP-INTERPOL 6, 13, and 49; see also C. Nellemann et al. (eds.), 'The Rise of Environmental Crime: A Growing Threat to Natural Resources, Peace, Development and Security' (2016) UNEP-INTERPOL 51.

actions by prosecutors generated a positive response by the soy and beef industries – the main drivers of deforestation – which, in turn, resulted in a reduction of tropical deforestation in Brazil by 70 per cent within ten years.¹³ Unfortunately, recent policy changes and the slowing of enforcement action have led to a significant increase in the rate of deforestation in Brazil. In fact, the Brazilian organization MapBiomas has noted that approximately 90 per cent of the current deforestation in the Amazon is not authorized and, thus, is illegal.¹⁴

Deforestation is linked with other illegal activities. Deforestation is also often associated with other illegal activity: 50 to 90 per cent of deforestation in tropical countries is, for example, associated with organized crime. This can include violent offences like attacks on local or Indigenous communities, their leaders, and environmental or human rights defenders to gain access to land and prevent accountability for illegal deforestation. It can also include slave labour or financial offences such as corruption, fraud, and tax evasion.¹⁵ These offences provide additional options for accountability and advocacy, regardless of whether the deforestation can be proven to be ‘illegal’ under the relevant domestic environmental or forestry laws. For example, the US Department of Treasury recently issued Global Magnitsky Act sanctions against a corrupt network responsible for illegal logging in Cambodia.¹⁶

Local laws are often not effectively enforced. Enforcement in tropical forest countries is not currently effective at addressing this illegal deforestation, for a variety of reasons. It may be the result of a lack of resources or weak governance in some states hosting major tropical forests. And even when there is some enforcement, this is often not sufficient to prevent continued illegal deforestation (for example, fines are not paid, and strong local political support and profit motives undermine impact).

Foreign enforcement and advocacy can complement local efforts. Approximately 70 to 80 per cent of tropical deforestation is linked to commodity agriculture, including beef, soy, palm oil, and timber. Much of this is for export markets or is financed by international investors, insurers, or lenders. Regulators and law enforcement authorities from foreign countries (i.e., countries other than those where deforestation takes place) have the tools to target commodities derived from illegal deforestation, including legislation prohibiting the import of illegally logged timber (in the United States,

¹³ Doug Boucher, ‘How Brazil Has Dramatically Reduced Tropical Deforestation’ (2014) 5 *The Solutions Journal* 66.

¹⁴ See Mapbiomas, <<http://alerta.mapbiomas.org/>>.

¹⁵ See Nellemann et al. (eds.), ‘The Rise of Environmental Crime’, above note 11.

¹⁶ See ‘Treasury Sanctions Corruption and Material Support Networks’, US Department of the Treasury, 9 December 2019, <<https://home.treasury.gov/news/press-releases/sm849>>.

European Union, Australia, and Japan), legislation requiring due diligence in the foreign operations of multinationals (in France and under development in other European jurisdictions), the authority to impose sanctions on entities and individuals linked with human rights violations and corruption (in the United States, Canada, and United Kingdom, in the European Union and under development in Australia), and money-laundering and proceeds of crime legislation. Investors, banks, other financial enterprises, and customers may also have other obligations from internal social or environmental policies, sector-specific due diligence requirements, or external standards such as the OECD Guidelines for Multinational Enterprises. Actions by these external actors are an important step in addressing the chain of incentives, costs, and risks (financial, legal, and reputational) of illegal deforestation.

But foreign actors lack the information necessary to act. CCCA's enquiries with national and international law enforcement authorities indicate that this law enforcement gap results from a lack of access to high quality information and support that would enable them to conduct effective enforcement proceedings. But this absence of effective proceedings is not reflective of a general lack of willingness by foreign enforcement authorities or a lack of tools that they could use if they had the relevant information. Similarly, international commodity traders and investors have declared the objective to ensure that their clients and supply chain be deforestation free – a policy whose enforcement is contingent on the availability of information linking their clients and supply chain to deforestation.¹⁷

Traditionally, NGOs have not been able to fill this need. NGOs, especially those based in countries where illegal deforestation is taking place, have access to important information. But, in practice, NGOs have often been unable to provide foreign authorities with the sufficient quantity and quality of information that they need to act. NGOs often do not coordinate their action; they lack awareness of what information is required to trigger enforcement action; they may be unaware of the relevant authorities; or they may face competing urgent demands and be unable to prioritize building case files for external enforcement or advocacy. And public authorities in the countries where illegal deforestation is taking place often do not see it as part of their job to encourage foreign enforcement actions, even if they are aware of those options and have the capacity to pursue them.

¹⁷ See 'Unilever Launches €1bn Climate and Nature Fund, Targets Net-zero Emissions by 2039', *Edie*, 14 June 2020; see also 'Investor Statement on Deforestation and Forest Fires in the Amazon', CERES, <<https://www.ceres.org/sites/default/files/Investor%20statement%20on%20deforestation%20and%20forest%20fires%20in%20the%20Amazon.pdf>>.

13.5.2 *Potential Impact of the Evidence-Based Approach*

The above analysis reveals a gap: important evidence, materials, or existing findings by local authorities identifying illegal conduct are not generating their maximum potential impact. As a result, potentially influential enforcement options and advocacy targets are being under-utilized.

To generate, collect, and analyze all relevant information establishing underlying illegal conduct, supply chains, and financial structures, CCCA cooperates with multiple organizations. These include local grassroots organizations, organizations with national reach, international NGOs, and domestic law enforcement authorities. By rolling out a relatively high number of cases and by employing a variety of enforcement, litigation, and advocacy actions in relation to each case, CCCA intends to reduce deforestation in key tropical forest areas. It aims to do so by effectively cutting off those corporations who act illegally from the international market. They will find it significantly more difficult to sell their products or find international investors, lenders, and insurers. As a result of the activities of CCCA and its many partners, international trading partners will either be legally barred from trading or otherwise dealing with illegal suppliers in deforestation areas, or they will be persuaded to cut ties with their partners due to the financial costs or legal and reputational risks. The illegal actors in the deforestation area, on the other hand, will be incentivized to refrain from further illegal deforestation and related activities in order to stay in business.

As criminal prosecutors and law enforcement experts, CCCA sees on a daily basis that law enforcement – and, more important still, the realistic threat of being subject to law enforcement – has a unique ability to repress, disrupt, and deter the conduct of individuals and organizations. This is particularly true for business actors who generally take a rational approach to assessing risks and considering those risks as part of their decision-making.

13.6 CONCLUSION

Climate change is the defining issue of our time. There is no silver bullet solution to the climate emergency. Instead, it requires an unprecedented and coordinated response from governments, scientific institutions, businesses, NGOs, and many others. The judicial branch of government and law enforcement are a critical component in the global response to the climate emergency. However, to efficiently mobilize and support the judicial branch of government, NGOs, and private citizens must be more strategic in coordinating their action.

Technological developments enable NGOs and concerned citizens to strategically trigger and support legal proceedings by collecting and providing relevant and probative information that establishes the necessary factual foundation for these proceedings. CCCA harnesses this potential to make effective use of the information in judicial climate action and related initiatives. At a time when many political institutions in parts of the world appear paralyzed in the face of the unprecedented complexity of the climate emergency, the decisions of independent and impartial courts are a key component to addressing this unprecedented challenge.

The Case for Climate Visuals in the Courtroom

KELLY MATHESON

Documenting is about conveying experiences.

Franco Viteri, Kichwa Leader, Sarayaku

A substantial evidentiary record documents that the [US] federal government has long promoted fossil fuel use despite knowing that it can cause catastrophic climate change, and that failure to change existing policy may hasten an environmental apocalypse.¹

Judge Hurwitz, 9th Circuit Court of Appeals writing for the majority
in *Juliana v. United States*

14.1 THE CASE FOR URGENT AND CREATIVE ACTION

Climate change is the overarching crisis that not only prevents solutions to all of the world's entrenched human rights tragedies – war, disease, migration, and poverty – but also exacerbates these global struggles. The unrelenting exploitation of fossil fuels devastates land, water, communities, and planetary life support systems. In turn, our changing climate threatens every one of our basic human and constitutional rights.

In June 2019, Philip Alston,² in his role as the UN Special Rapporteur on extreme poverty and human rights, released a compelling call to

¹ *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

² The United Nations Human Rights Council appointed Mr. Alston as the Special Rapporteur on extreme poverty and human rights in June 2014. See “Mr. Philip Alston,” United Nations Human Rights, <<https://www.ohchr.org/EN/Issues/Poverty/Pages/PhilipAlston.aspx>>; see also “Philip Alston,” NYU Law, <<https://its.law.nyu.edu/facultyprofiles/index.cfm?fuseaction=profile.biography&personid=19742>>.

action.³ He reported on the catastrophic consequences of climate change for human rights, highlighting that billions of people will struggle even if warming is limited to the Paris target of 1.5 degrees Celsius above pre-industrial levels.⁴ According to science, this political target is too high to protect humanity.⁵ Estimates from Alston's report conclude that millions of people will face malnutrition due to devastating drought and many more will have to choose between starvation and migration. Five hundred million people will likely be exposed and vulnerable to water stress and 4.5 billion could be exposed to heat waves. The year 2017 alone saw 18.8 million people displaced across 135 countries – nearly twice the number displaced by conflict – as a result of disasters made more severe and frequent by climate change. And this figure is poised to rise significantly in the decades to come.

That is climate change by the numbers.

Alston went on to underscore that if we fail to find and implement urgent and extraordinary solutions to this urgent and extraordinary challenge, “we risk a ‘climate apartheid’ scenario where the wealthy pay to escape overheating, hunger, and conflict while the rest of the world is left to suffer.” His overarching advice to the human rights community was clear: “The community as a whole . . . needs to step up and engage determinedly and creatively with climate change.”

Heeding Alston's call to action, and with an understanding that litigation is only one important part of the overall strategy needed restore the health of our atmosphere, this chapter briefly explores how the climate litigation community could ensure that the climate numbers move in the right direction by creatively deploying visual evidence to help secure courtroom decisions that manifest in landmark change.

³ See “UN Expert Condemns Failure to Address Impact of Climate Change on Poverty,” United Nations Human Rights, <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24735&LangID=E>>; see also Report of the Special Rapporteur on extreme poverty and human rights, “Climate Change and Poverty,” UN Doc A/HRC/41/39, June 25, 2019, <<https://digitallibrary.un.org/record/3810720>>.

⁴ Paris Agreement to the United Nations Framework Convention on Climate Change, Art. 2, 1(a), December 12, 2015, TIAS No. 16-1104.

⁵ The science shows that staying well below 1.5°C, with a return to 350 ppm/1°C or less by the end of the century, will be necessary to avoid irreversible feedbacks in the climate system. See James Hansen et al., “Young People's Burden: Requirement of Negative CO₂ emissions” (2017) 8 *Earth System Dynamics* 577; see also Ben Haley et al., “350 ppm Pathways for the United States” (2019) Evolved Energy Research, <<https://static1.squarespace.com/static/571d109bo4426270152febe0/t/5cd3a78f1ee7700012c7443/1557374885630/350+PPM+Pathways+for+the+United+States.pdf>>.

14.2 THE CASE FOR USING VISUAL EVIDENCE TO SHOW THE UNOBSERVABLE AND UNIMAGINABLE

On November 29, 1945, only a week into the trial, the . . . prosecution introduced an hour-long film titled “The Nazi Concentration Camps.” When the lights came up in the Palace of Justice all assembled sat in silence. The human impact of this visual evidence was a turning point in the Nuremberg trial. It brought the Holocaust into the courtroom.⁶

Screengrab from the film “*Nazi Concentration Camps*”
© US Department of Defense



Some abuses are too incomprehensible for the human mind to accept as true merely because they cannot be readily observed. General Dwight D. Eisenhower understood this. From the moment Eisenhower witnessed, first-hand, the horrors of the Nazi concentration camps in April of 1945, he ordered American troops to film the liberation of the camps. In doing so, Eisenhower sought to document the extent of Nazi atrocities, defend against general public and media perceptions that these were propaganda stories or exaggerations of the truth, and provide visual evidence to help build a watertight case for a potential international military tribunal.

⁶ See “We Will Show You Their Own Films’: Film at the Nuremberg Trial,” US Holocaust Memorial Museum, <<https://encyclopedia.ushmm.org/content/en/article/we-will-show-you-their-own-films-film-at-the-nuremberg-trial>>. For information on the screengrab from the documentary film, see *Nazi Concentration and Prison Camp* (shown at the Nuremberg Trials, November 29, 1945). The image, taken at the Nordhausen Slave Labor Camp, shows a man being freed and evacuated for treatment in Allied hospitals. Found at 25 minutes 50 seconds. To watch the full documentary played during the trials, see “Nazi Concentration Camp – Film Shown at Nuremberg War Crimes Trial,” YouTube, March 13, 2013, <https://www.youtube.com/watch?v=_pQJ4zONPD0&t=191s&bpctr=1589919377>.

In October of 1945, Justice Robert H. Jackson took a leave from the US Supreme Court to serve as the Chief Prosecutor for the Nuremberg trials. While the meticulous paper records kept by the Nazis formed the backbone of the case brought against the twenty-three accused, Jackson, like Eisenhower, understood the important impact graphic images would have over written documents. In his opening statement, Jackson promised the panel of judges, and the world, that the prosecutorial team would not only prove their case with documents but with visual evidence too. And they did. The prosecution followed their opening statement by showing six reels, reflecting 6,000 feet of film footage, shot by American and British cameramen during the camps' liberation.⁷ Not only does this footage still inform our understanding of the Holocaust today, but historians also firmly believe this visual evidence was a turning point in the Nuremberg trials.⁸

14.3 THE CASE FOR CLIMATE VISUALS IN THE COURT OF PUBLIC OPINION

More than any other issue [climate change] exposes the deepest workings of our minds, and shows our extraordinary and innate talent for seeing only what we want to see and disregarding what we would prefer not to know.

George Marshall, Founder, Climate Outreach Information Network

Social scientists specializing in the emerging field of climate communications understand what Eisenhower and Jackson knew – visual evidence can explain the unimaginable. They appreciate that visuals can debunk propaganda, rally public support, accelerate learning, and motivate implementation of needed policy, technological, and lifestyle changes.⁹

However, today's social scientists seeking to shed light on the serious threats posed by climate change face a far more perplexing challenge than

⁷ The Department of Defense originally requested the film footage for the potential Military Tribunal. Hollywood film director George Stevens assembled the graphic Allied footage from the liberation of twelve camps in Austria, Belgium, and Germany: Leipzig, Penig, Ohrdruf, Hadamar, Breendonk, Hannover, Arnstadt, Nordhausen, Mauthausen, Buchenwald, Dachau, and Belsen. The six reels, lasting approximately two hours, reflected 6,000 feet of the 80,000 feet shot by the Americans and British cameramen during the liberation of the camps. See John J. Michalczyk, "Film as Visual Documentation at the Nuremberg Trials," in *Filming the End of the Holocaust: Allied Documentaries, Nuremberg and the Liberation of the Concentration Camps* (London: Bloomsbury Academic, 2014), pp. 65–112.

⁸ For more information on the use of film footage in the Nuremberg trials, see *ibid.*

⁹ Individuals can make a difference by reducing their personal greenhouse gas emissions. The Earth Institute at Columbia University outlines thirty-five simple changes. See Renee Cho, "The 35 Easiest Ways to Reduce Your Carbon Footprint," Earth Institute at Columbia University, December 27, 2018, <<https://blogs.ci.columbia.edu/2018/12/27/35-ways-reduce-carbon-footprint/>>.

Eisenhower and Jackson did in exposing the deeds of the Third Reich. Communications specialists need to convey the slow and incremental,¹⁰ yet urgent and irreversible degradation inflicted by climate change on our everyday lives and basic rights. This task is much more difficult than conveying the mass, graphic, and acute violence implemented under the Nazi regime.

Motivated by this visual challenge, the early 2000s produced a plethora of research about how communications could effectively educate people about the causes and dangers of climate change and, in turn, encourage civic action and involvement. In 2005, Yale launched its pioneering program on Climate Change Communication.¹¹ George Mason University followed with its own center in 2007.¹² That same year, James Balog founded the Extreme Ice Survey (EIS). EIS captures time-lapse footage of receding glaciers, dying coral reefs, and deteriorating forests to reveal how quickly climate change is dramatically impacting the planet.¹³ In 2016, Climate Visuals, a project of Climate Outreach, launched the world's first evidence-based photography resource.¹⁴ Through research, social scientists questioned how to best communicate the risks of a global problem with less certainty and day-to-day

¹⁰ Unlike the Holocaust-era images showing piles of corpses, unfathomable injuries, and skeletal human beings almost dead from starvation that easily convey acute horror, the ecological and human rights impacts caused by climate change tend to progress in slow motion. Watching climate change affect our world is similar to watching a child grow. A parent who is with their child daily will not notice the child's slow, incremental growth. A grandparent, on the other hand, that only gets to see their grandchild once a year finds the child's changes obvious and stark. Similarly, it may be impossible to see the shoreline eroding until – one day – a storm made more severe by climate change washes the homes – now closer to the water – away.

¹¹ See Yale Program on Climate Change Communication, <<https://climatecommunication.yale.edu/>>.

¹² See “Our Mission,” George Mason University Center for Climate Change Communication, <<https://www.climatechangecommunication.org/>>.

¹³ The EIS team places cameras on glaciers, in forests, and underwater at coral reefs. The cameras take one photo every hour, yielding approximately 8,000 frames per camera, per year. EIS then combines these images into compelling, time-lapse videos that reveal how climate change transforms large regions of our planet. For more information, see “Extreme Ice Survey – a program of Earth Vision Institute,” EIS, last accessed 17 September 2020 <<http://extremeicesurvey.org/>>; and watch *Chasing Ice* and *Chasing Coral*, available for screening via different platforms depending on the region. For the US access, see Netflix. For more information, see *Chasing Ice*, <<https://chasingice.com/>>; and *Chasing Coral*, <<https://www.chasingcoral.com/>>.

¹⁴ See Climate Visuals, <<https://climatevisuals.org/>>; see also Climate Outreach, <<https://climateoutreach.org/>>.

immediacy than most other, more familiar problems, yet that also poses far graver implications. To date, however, the vast majority of climate communications work has focused on advancing public understanding of how climate change already affects our lives, rather than assisting the courts in understanding their essential role in flattening the climate curve.

Conventional litigators may argue that there is not a pressing need to present courts with visual evidence of climate change because judges around the world consistently treat the climate science introduced in strategic litigation as valid and authoritative. Judges describe the evidence of human-induced climate change as “copious,” “compelling,” “substantial,” and a “fact of life.”¹⁵ Judges find that “the unprecedented rise in atmospheric carbon dioxide levels stemmed from fossil fuel combustion and will wreak havoc on the Earth’s climate if unchecked.”¹⁶ Moreover, fossil fuel use “can cause catastrophic climate change, and that failure to change existing policy may hasten an environmental apocalypse.”¹⁷ Based on the scientific evidence, judges consistently and definitively conclude that the climate is warming, that human activity is driving the observed and anticipated changes, and that those changes will have a variety of adverse impacts across the globe. Yet, ultimately, the courts routinely dismiss many of the strategic climate cases brought to protect our basic human and constitutional rights on standing, justiciability, or legislative displacement grounds.¹⁸ Understanding that the overarching scientific evidence of global climate change is commonly accepted by courts, litigators should also consider focusing their attention on cultivating a robust evidentiary record that (i) ensures courts expressly recognize the personal injuries that result from climate change and (ii) demonstrates the viable solutions that can address the climate emergency. Building this record is essential as injury and redressability appear to be far less tangible to the courts.

This chapter now turns to the question of whether environmental human rights litigators – building on the research of climate change communications experts – should corroborate the incontrovertible scientific evidence¹⁹ with

¹⁵ See Maria L. Banda, “Climate Science in the Courts: A Review of U.S. and International Judicial Pronouncements” (2020) Environmental Law Institute, <<https://www.eli.org/sites/default/files/eli-pubs/banda-final-4-21-2020.pdf>>.

¹⁶ *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

¹⁷ *Ibid.*

¹⁸ See Banda, “Climate Science in the Courts,” above note 15 at 10.

¹⁹ This chapter focuses on how visual documentation can be leveraged to demonstrate environmental harm and the violation of human and constitutional rights. This chapter does not address how visuals could be used to help prove other aspects of rights-based climate cases

robust visual evidence showing courts exactly how unchecked atmospheric warming will continue to violate our common rights enshrined in constitutions across the globe. And, if so, how?

14.4 CASE NOTES: VISUAL EVIDENCE IN THE COURTROOM

The persuasive oral rhetoric of lawyers is increasingly being replaced by compelling visual media displays presenting a range of digital evidence in a convincing and credible manner.

Frederic Lederer, Director, Center for Legal and Court Technology,
William and Mary Law School

While Nuremberg marks the first moment that cinematic evidence convinced the world of an unimaginable truth, the first known use of film as courtroom evidence took place in 1928. In *United States v. Feather River Lumber Co.*, the prosecutor presented moving pictures depicting the aftermath of a forest fire in Northern California to help prove that the Feather River Lumber Company negligently destroyed timber in the Plumas National Forest when one of its railroad engines started a fire.²⁰ The film footage admitted showed the burnt forest and fallen stands of timber three years after the fire. The District Court relied on these images, along with other evidence, to find Feather River Lumber Company liable for degrading natural resources and award damages to the US government.

Since *Feather River*, the worth of images to serve as evidence of human and environmental rights violations has endured the test of time. Images have – and always will – excel at showing the aftermath of destruction, whether it be the destruction of human life or the shared natural resources that we all depend upon for our survival. As the methods to capture visual evidence grow, so do the opportunities to leverage visuals for accountability and justice. To explore how visual evidence has, and could be, leveraged in rights-based climate litigation moving forward, this section examines three Case Notes from the Sinangoe and Sarayaku communities of Ecuador, as well as the Native Village of Kipnuk in Alaska.

(e.g., what governments knew, legislative displacement, redressability). However, legal teams could certainly introduce visuals to support these aspects of a case as well.

²⁰ See *United States v. Feather River Lumber Co.*, 23 F.2d 936 (N.D. Cal. 1928); see also *Feather River Lumber Co. v. United States*, 30 F.2d 642 (9th Cir. 1929).

14.4.1 Kofan Indigenous People of Sinangoe v. Ecuador Ministry of Mining²¹

The high-Andean peaks of the Cayambe-Coca Ecological Reserve²² in Ecuador safeguard the headwaters of the majestic Aguarico River – a major tributary of the Amazon River that is vitally important to dozens of Indigenous communities and the ancestral home of the Kofan people of Sinangoe.²³ In 2017, the Kofan established the Guardia Indígena (Indigenous Guard), training dozens of community members in GPS mapping, photo and video documentation, and the use of drones and camera traps to protect their territory from outsiders illegally entering their lands to extract natural resources like gold, timber, and wildlife.

In early 2018, the Guards heard the low hum of a motor while patrolling along densely forested mountain trails. Instead of approaching, they flew a drone to investigate. The drone captured the unexpected: images of illegal gold-mining activity on the banks of the Aguarico River. Upon further investigation, the Kofan learned that, in December 2017, the Ecuadorian government began granting new gold mining concessions in the headwaters of the river. The government granted these claims without notifying or consulting with the community of Sinangoe, despite the government's knowledge that mining would directly impact the Kofan community, the river they depended on, their land, and their way of life. The situation escalated when the miners began operating without the required permits and illegally mined outside of the concessions' boundaries. In the months that followed, the Indigenous Guard methodically gathered relevant, reliable, and trial-ready visual evidence, illustrating exactly how the illegal mining operations affected their ancestral lands for use in a lawsuit against the Ecuadorian government.

By June 2018, armed with a watertight evidentiary record, including irrefutable and convincing visual documentation, the Kofan took their case to court.

²¹ See *Ai Cofán de Sinangoe v. El Ministerio de Minería, La Agencia de Regulación y Control Minero (ARCOM), El Ministerio del Ambiente (MAE), La Secretaría Nacional del Agua (SENAGUA), La Procuraduría General del Estado (PGE)* [October 22, 2018] Sala Unica de la Corte Provincial de Justicia de Sucumbíos, Juicio No: 2133201800266.

²² Also known as the Cayambe-Coca National Park, this protected area is located along the Equator, about twenty-four miles from the capital city of Quito. The park encompasses an area of 996,090 acres.

²³ For more information about the A'i Kofan and their groundbreaking monitoring and legal efforts, visit the websites for Alianza Ceibo, an Indigenous-led Ecuadorian organization working toward the defense of Indigenous territory, cultural survival, and the building of viable solutions-based alternatives to rainforest destruction at <<https://www.alianzaceibo.org>>; and for Amazon Frontlines, an organization that defends Indigenous rights to land, life, and cultural survival in the Amazon rainforest at <<https://www.amazonfrontlines.org/>>.



The mining site along the Aguarico River, upriver from the Kofan community of Sinangoe in the Ecuadorian Amazon, as seen by a drone

© Amazon Frontlines and Alianza Ceibo

As part of the case, the Kofan needed to prove that the mining operations adversely impacted their territory. Inside the courtroom, their legal team systematically walked through the array of thoughtfully curated visual evidence. They introduced drone footage and satellite imagery into the evidentiary record to show how mining operations rapidly expanded over time and, in turn, how the scar along the once-pristine riverbank broadened with every passing week.²⁴ They submitted photos and video footage collected on cell phones to show how heavy machinery flattened the forest and compacted the soil. The cell phone images also demonstrated how the extractive activities increased the sedimentation levels of the Aguarico River, making it unsuitable for drinking, bathing, and fishing. The legal team then augmented the imagery of the actual mining site with maps that showed the proximity of the extractive operations to the Kofans' territorial boundaries. The maps helped convey to the court how the mining activity directly and adversely impacted the community's natural and cultural resources.

On October 22, 2018, the Kofan won a landmark legal battle that nullified fifty-two mining concessions that had been granted by the Ecuadorian

²⁴ In addition to presenting visual evidence in court, field visits were conducted for both the regional and provincial hearings, bringing the judges and legal teams to the mining area. With the use of the drone and 3D goggles, the judges were able to see in real time the impacts of mining on the land and the river.

government in violation of the Kofans' right to consultation.²⁵ This decision protected the headwaters of the Aguarico River and freed more than 32,000 hectares of primary rainforest from the devastating environmental and cultural impacts of gold mining. Specifically, the Provincial Court of Justice of Sucumbíos found that the government failed to consult with the Kofan prior to authorizing the mining concessions; denounced the mining operations for having violated Indigenous rights to water, food, and a healthy environment; and canceled all mining concessions laying at the foothills of the Andes. The historic ruling, upheld by Ecuador's highest court – the Constitutional Court – on January 27, 2022, invoked the precautionary principle²⁶ and cited the rights to nature embedded in Ecuador's Constitution while finding that the government violated those rights.²⁷ It also orders authorities to implement restoration measures at the site.

While the Kofan built a strong record consisting of many sources of evidence, the community's ability to strategically leverage visual evidence guaranteed that all levels of Ecuador's judiciary had only one legitimate choice: to conclude that mining operations adversely impacted Kofan territory.²⁸ Not only does this case demonstrate how present-day tools to capture visual evidence of environmental destruction have dramatically improved since the days of the *Feather River* case nearly a century ago, it also serves as a concrete case study of how visuals can help prove the link between harm to the forest and harm to community well-being. Finally, the decision, affirmed and strengthened on by Ecuador's Constitutional Court, serves as inspiration for Indigenous nations worldwide facing similar struggles, and it will galvanize the fight to protect Indigenous lands for years to come.

²⁵ See *AI Cofán de Sinangoe v. El Ministerio de Minería, La Agencia de Regulación y Control Minero (ARCOM), El Ministerio del Ambiente (MAE), La Secretaría Nacional del Agua (SENAGUA), La Procuraduría General del Estado (PGE)*, above note 22.

²⁶ The precautionary principle is a general principle of environmental and international law. It provides that if there is a strong suspicion that a certain activity may have environmentally harmful consequences, it is better to pause the activity, review the scientific evidence, and determine what measures could be put in place to avoid the hazardous and often irreversible impacts before allowing the activity to go forward.

²⁷ See Republica del Ecuador, Constituciones de 2008, October 20, 2008, Title II, Ch. One, Art. 10, <<https://pdba.georgetown.edu/Constitutions/Ecuador/english08.html>>.

²⁸ To learn more about the legal and non-legal strategies utilized by the Kofan, see *AI Kofan*, <<https://www.alianzaceibo.org/alianza/aikofan/>>; and *Amazon Frontlines*, <<https://www.amazonfrontlines.org/chronicles/>>.

14.4.2 Kichwa Indigenous People of Sarayaku v. Ecuador²⁹

The Indigenous community of Sarayaku sits deep within the Amazon Rainforest, along the banks of Ecuador's Bobonaza River and in the heart of one of the most biologically diverse places on Earth. Encircled with natural beauty, the Sarayaku follow their ancestral way of life – hunting, gathering, and farming within their territory. Sarayaku land possesses natural resources that cannot be readily seen. Hidden beneath the surface lay vast oil reserves that Ecuador's government and fossil fuel corporations had been eyeing for exploitation for decades.

In 1996, the Ecuadorian government granted the Argentinian energy giant, Compañía General de Combustibles S.A. (CGC),³⁰ rights to explore for oil in Sarayaku territory. This decision was made in direct violation of a 1992 legal agreement in which the Ecuadorian government legally recognized Sarayaku territory and guaranteed the community's freedom from intruders. Despite the agreement, with the protection of Ecuador's armed forces, the CGC entered Sarayaku lands in 1999. Without permission, the company began opening trails through the forest, building heliports, destroying sacred sites, and burying over 3,000 pounds of explosives in the forest to facilitate seismic exploration. This forced entry led to various confrontations between the Sarayaku, the company, and Ecuador's armed forces, culminating in threats against the Sarayaku leaders and violence against community members.

This illegal invasion of Sarayaku territory, and subsequent trespass by CGC, ignited a decade-long legal battle between the Sarayaku and the state of Ecuador.³¹ At the heart of this rights-based case was whether the community of Sarayaku consented to oil exploration on its land and whether the state of Ecuador threatened the personal integrity of community members when it provided CGC with protection during the forced entry. As with every

²⁹ See *Kichwa v. Ecuador*, Merits, Reparations and Costs, Judgment, ¶ 58, Inter-Am. Ct. H.R. (ser. C) No. 245 (June 27, 2012).

³⁰ PETROECUADOR (the State Oil Company) and a consortium made up of Compañía General de Combustibles S.A. ("CGC") and Petrolera Argentina San Jorge S.A. have agreed to a contract for the "exploration and exploitation of hydrocarbons in Block No. 23." The consortium is commonly referred as "CGC," and Block No. 23 is 200,000 hectares and includes territory held by the Sarayaku, Jatun Molino, Pacayaku, Canelos, Shami, and Uyumi communities with the Sarayaku holding around 65 percent of the block. See John Kelly, "Kichwa Indigenous People of Sarayaku v. Ecuador" (2017) 40 *Loyala of Los Angeles International and Comparative Law Review* 1469.

³¹ See Mario Melo, "Sarayaku before the Inter-American Human Rights System: Justice for the People of the Zenith and their Living Forest" (2019) *Dejusticia*, <<https://www.dejusticia.org/wp-content/uploads/2016/11/Sarayaku-before-the-Interamerican-Human-Rights-System.pdf>>.

adversarial process, the stories differed. Fortunately, a courageous young filmmaker from the community, Eirberto Gualinga, captured images on camera that helped prove the Sarayaku had the truth on its side.

To complement the traditional forms of evidence submitted to the Inter-American Court of Human Rights (IACHR) – testimony, documents, technical reports – the Sarayaku also submitted visual evidence to corroborate and contextualize several of the community's core legal claims.

First, during the company's exploration of the land, CGC flew helicopters into the dense jungle to drop off company workers. Eirberto captured one of the landings with his camera. As the helicopter arrived on the riverbank, the video shows CGC workers stepping out and being met by a group of women from the community. The women peacefully – yet expressly – demand respect of their territory and that the oil workers leave.³² Further, they clearly explain that the community, as a whole, has repeatedly told the head of CGC that the company is not allowed on Sarayaku land.³³



CGC employees landing in Sarayaku territory

© Eirberto Gualinga

The community further communicated its dissent to the corporate and military presence by taking peaceful action. During an assembly, the Sarayaku

³² See Videotape: Soy Defensar de la Selva (Eriberto Gualinga 2002), <<https://www.youtube.com/watch?v=nnLvVNsUmnY&t=13s>>, helicopter landing from 5 min. 23 sec. to 6 min. 46 sec.

³³ See *ibid.*, the community explaining to CGC employees is not welcome on Sarayaku land, from 6 min. 46 sec. To 7 min. 53 sec.

people declared a state of emergency, halted their daily lives, divided into groups, and spread out to six locations along the boundary of their territory, establishing “Peace and Life Camps.” They set up the camps to mark their borders, peacefully protest, and dissuade CGC and the Ecuadorian military from entering Sarayaku territory. Video of the camps shared with the court corroborated witness testimony explaining the reasons that camps were set up and the calm, communal, and peaceful character at the sites.³⁴

To help prove that the Ecuadorian government interfered with the community’s rights to freedom of movement, the Sarayaku introduced video showing military checkpoints and Ecuadorian soldiers blocking the Bobonaza River – the community’s primary transportation route.³⁵ In the video, soldiers are seen stopping and searching boats at the checkpoint, resulting in a basic invasion of privacy in addition to the restrictions on movement. Additional admitted footage depicted damage to the land caused by exploration activities, including trash dumps, flaring, oil spills, and deforestation. The sum of footage ultimately helped prove direct environmental harm caused by the occupation.³⁶

While strategic litigation will never be won on video evidence alone, the video evidence played at least two key roles in protecting over 330,000 acres of primary Amazon rainforest that shelters the community of Sarayaku and serves as a critical carbon sink³⁷ for the global community. First, the images painted a vivid picture of violations faced by the Sarayaku, thereby contextualizing the myriad rights violations perpetrated by the company in collaboration with the government during the invasion. Second, the video evidence substantiated a number of the core legal claims at the center of the case.

The IACHR issued its final, unanimous decision in June 2012, finding that Ecuador violated the Sarayaku’s rights to property, life, physical, mental and moral integrity, fair trial, and judicial protection.³⁸ In the judgment, the court

³⁴ See *ibid.*, the peaceful nature of the camps from 13 min. 38 sec. to 14 min. 19 sec.

³⁵ See *ibid.*, blocking of and checkpoints on the river from 8 min. 2 sec. to 8 min. 48 sec.

³⁶ See *ibid.*, damage to the environment from 10 min. 46 sec. to 11 min. 04 sec.

³⁷ A carbon sink is an area of forest [or other ecosystems] that is large enough to absorb large amounts of carbon dioxide from the Earth’s atmosphere and therefore reduce the effect of global warming. See “Carbon Sink,” *Cambridge Dictionary*, <<https://dictionary.cambridge.org/dictionary/english/carbon-sink>>.

³⁸ See *Kichwa v. Ecuador*, Merits, Reparations and Costs, Judgment, ¶ 58, Inter-Am. Ct. H.R. (ser. C) No. 245, (June 27, 2012).

ruled that governments must consult with Indigenous communities throughout the Americas prior to implementing activities that affect their land, recognized the existence of collective rights as opposed to individual rights, and further enshrined a right to cultural identity in law.³⁹ This monumental judgment was not only a victory for the Sarayaku but was also a major step forward in the fight to safeguard Indigenous rights and the climate-stabilizing forests they defend.

14.4.3 Kanuk v. State of Alaska

In 2011, Nelson Kanuk, a sixteen-year old native Alaskan from the village of Kipnuk, alongside five other young plaintiffs, brought suit against the state of Alaska, arguing that the Public Trust Doctrine codified in Alaska's Constitution imposes an affirmative fiduciary obligation on the state of Alaska to manage shared natural resources, including the atmosphere, for the common good.⁴⁰ They further argued that this constitutional obligation requires the state to reduce greenhouse gas emissions to slow the rate of climate change in order to ensure that the plaintiffs and future generations can inherit a viable atmospheric resource and other protected resources of the state that secure a livable future.⁴¹

When litigants bring action against governments, they usually must file a standing declaration.⁴² Standing declarations are the heart of many human rights cases brought against governments.⁴³ The declarations, written by the plaintiffs, tell the powerful human story behind the lawsuit.

³⁹ Ibid.

⁴⁰ See *Kanuk v. Alaska Dept. of Nat. Resources*, 335 P.3d 1088 (Alaska 2014). See also Constitution of Alaska, Art. VIII, §§ 1, 2, 3, 4 and 6. The constitutional public trust doctrine provides that the state holds public trust resources, including, but not limited to, waters (surface, subsurface, and atmospheric), fish, wildlife, air (atmosphere), the climate system, the sea and the shores of the sea, submerged and submersible lands, beaches, forests, grasslands, grasslands, and tundra in trust for public use.

⁴¹ See *Kanuk v. Alaska Dept. of Nat. Resources*, 335 P.3d at 1091.

⁴² Standing is the determination of whether a specific person, group of persons, or organization is the proper party to bring a particular matter to court for adjudication. In many judicial systems, this means that the plaintiff must show they were, or are likely to be, "sufficiently and personally injured" as a result of a legal wrong. In the United States, a plaintiff must show that they have suffered an "injury-in-fact" that is "traceable to the challenged action of the defendant," where the court can provide redress with a favorable decision. See *Lujan v. National Wildlife Fed'n*, 110 S. Ct. 3177 (1990).

⁴³ Julia Olson, Executive Director and Chief Legal Counsel for Our Children's Trust and Lead Counsel for *Juliana v. United States*.



Nelson in the film *TRUST Alaska*

© Our Children's Trust and WITNESS

In his legally sworn statement to the court, Nelson explained why climate change was personal for him. He wrote, “climate change has adversely affected me and impacted my life by delaying the onset of winter. For example, in Kipnuk, the snow used to start falling earlier than it does now. Also, the sea ice starts forming later than in the past and melts earlier in the spring. Although this might not seem to be too significant, it is critically important for me, my village, and our way of life.”⁴⁴ Nelson’s statement went on to detail how the late freeze and early thaw causes dangerous flooding and rapid erosion, threatening his home and limiting the availability of food and water sources, jeopardizing his community’s subsistence lifestyle.

Many of Alaska’s government officials responsible for protecting the state’s shared natural resources denied or simply ignored the scientific fact that a warming climate results in grave harm to native communities – despite abundant documentation to the contrary. Understanding that personal stories can change minds and knowing that legal documents all too often do not get read by the people who should consider them, Nelson, together with Our Children’s Trust, WITNESS, and iMatter, produced an eight-minute film, *TRUST Alaska*,⁴⁵ using his standing declaration as the shooting script. The film brings the black and white, Times New Roman legal text to life.

In the award-winning film, audiences have the opportunity to meet Nelson, a young Yup’ik firefighter and Native Olympic athlete, who learned how climate change was affecting his community and felt he could best help by sharing his story. Staying true to the facts in his declaration, Nelson shows

⁴⁴ Declaration of Standing, Nelson Kanuk (August 2011) for *Kanuk v. Alaska Dept. of Nat. Resources*, 335 P.3d 1088 (Alaska 2014).

⁴⁵ See “Stories of Trust Calling for Climate Recovery: TRUST Alaska (Our Children’s Trust, WITNESS, & iMatter 2011), <<https://www.ourchildrenstrust.org/short-films>>.

viewers his small village, introduces his family, and takes audiences on a family boat trip to pick berries while describing how he lives a subsistence lifestyle. He explains that the main problem facing the northern parts of the world is that winter comes later and later. This results in increased flooding due to warmer temperatures, increased erosion due to permafrost melt, and intensified storms because the sea ice forms later in the season and is unable to provide a natural barrier for coastal communities. This, in turn, leads to the loss of homes, communities, cultures, and a way of life.

Nelson's film was the third in a ten-part series called *Stories of TRUST: Calling for Climate Recovery*.⁴⁶ Each film shows how the lives of other youth plaintiffs from across the United States are harmed by climate change. These plaintiffs, and the NGOs they collaborated with, did not produce the films to be submitted as evidence in the cases they brought. Instead, the films propelled a strategic communications plan, developed specifically to support the goals of the strategic litigation and the broader TRUST Campaign.

Nelson's film screened all over the world – in classrooms in his home state of Alaska, in gymnasiums packed full of students in other US states, during keynote presentations by committed environmental human rights lawyers, and at convenings with Indigenous leaders from around the world. As film festivals across the globe showed Nelson's film on the big screen, festival juries recognized the magnitude of his story with awards. The film also reached key decision-makers. After viewing his story, State Congressional Representatives invited Nelson to present in front of the Alaskan State Legislature. Then-head of the US Environmental Protection Agency, Lisa Jackson, wrote asking for copies of his film. Shortly after, *TRUST Alaska*, along with four other films from the series, were hand-delivered to President Obama in the Oval Office.

What began as an Alaskan story to complement human rights-based climate litigation soon grew into a gold-star communications campaign with international recognition and influence. In many ways, the TRUST Campaign laid the foundation that we collectively stand upon today, advancing our understanding that a healthy atmosphere is an inherent human right.

Unexpectedly, the film also reached the Alaska Supreme Court. The Alaska Inter-Tribal Council (AITC) is an Indigenous-led nonprofit organization that advocates in support of Tribal governments throughout the state. AITC submitted an Amicus Curiae brief⁴⁷ in support of the youth, describing how

⁴⁶ Ibid.

⁴⁷ An amicus curiae brief is a written submission to a court in which an amicus curiae (literally a "friend of the court": a person or organization who/which is not party to the proceedings) can

Alaskan Natives are particularly impacted by a warming climate. As part of the submission, AITC included Nelson's film. Although the film could not serve as direct evidence given that it was edited for external communications purposes, it could provide context and ground the court in the fundamental constitutional rights at stake.

While the Alaska Supreme Court fell short of granting the youth their desired legal remedies, the court issued important rulings that moved rights-based climate law forward and opened the door for the next round of litigation in Alaska. The court wrote that the youth "make a good case . . . that the atmosphere is an asset of the public trust, with the State as trustee and the public as beneficiary." The court seemingly agreed with the youth that the state of Alaska has obligations to combat climate change, calling the science of anthropogenic climate change "compelling" and citing numerous climate science studies and reports. The court also stated that the atmosphere and the ecosystems it protects should be subject to constitutional protections, even without the court's legal declaration that the atmosphere is part of the public trust. Nonetheless, the Court ruled that it could not order the relief requested by the plaintiffs because the "underlying policy" choices regarding the state's response to climate change were not the Court's to make "in the first instance."⁴⁸

Respecting the Court's guidance, 16 young Alaskans filed a new suit against the state of Alaska in 2017. Their opening complaint explained to the Court that the state had already enacted underlying climate policy "in the first instance" that, at its heart, affirmatively promotes fossil fuels. The youth, together with their legal team, then explained how this pro-fossil fuel policy violates their fundamental rights under the due process, equal protection, and public trust provisions of Alaska Constitution.⁴⁹

In a three-to-two split decision, a narrow majority of the Alaska Supreme Court ultimately declined to order the youth's requested relief for "prudential reasons." However, the Court again provided guidance for future rights-based climate claims in Alaska and wrote a powerful dissent.

The dissent recognizes a "right to a livable climate – arguably the bare minimum when it comes to the human rights to which the Alaska Constitution is dedicated."⁵⁰ In the words of Supreme Court Justice Ruth Bader Ginsberg, "Dissents speak to a future age . . . the greatest dissents do

set out legal arguments and recommendations in a given case. 'Amicus Curiae Brief,' ECCHR, <<https://www.ecchr.eu/en/glossary/amicus-curiae-brief/>>.

⁴⁸ *Kanuk v. Alaska Dept. of Nat. Resources*, 335 P.3d at 1098.

⁴⁹ *Sagoonick v. State of Alaska*, 503 P.3d at 805; Our Children's Trust at <<https://www.ourchildrenstrust.org/alaska>>.

⁵⁰ *Sagoonick*, 503 P.3d at 805.

become court opinions and gradually over time their views become the dominant view. So that's the dissenter's hope: that they are writing not for today, but for tomorrow." It the youth of today, who courageously share their stories with our courts, that set the stage, for tomorrow. It is the youth of today, hand-in-hand with human right litigators, that will succeed in securing constitutional rights to a climate system capable of sustaining humanity.

14.5 THE CASE FOR CLIMATE VISUALS IN SUPPORT OF RIGHTS-BASED STRATEGIC LITIGATION

I am a generalist judge. And so, I'm heavily dependent upon the briefs that are filed and upon the arguments that are made.

Justice Breyer, Associate Justice, US Supreme Court

A striking characteristic of human memory is that pictures are, remarkably, remembered better than words.⁵¹ This once-intuitive, and now scientifically proven, fact has propelled the use of visual evidence dating back as far as the *Feather River* case in 1928. Since then, and as the Case Notes above illustrate, lawyers have supplemented their briefs and oral arguments with robust visual evidence to help judges appreciate the complexities of a case and the consequences of their decisions.

As noted by former US Supreme Court Justice Stephen Breyer, enhancing judicial understanding is an essential part of any litigator's work. When answering a direct question about the breadth of the public trust doctrine – one of the key legal issues under consideration in *Kanuk v. State of Alaska* – in US federal law, Justice Breyer responded, "I don't know."⁵² He then eloquently explained that since judges are "generalists," they must rely on legal scholars and practitioners to inform the courts' understanding of how to interpret and apply the law in relation to changing global circumstances. Tasked with the responsibility of conveying the facts of a case clearly and linking the facts to the law, lawyers would be remiss if they failed to consider how visual evidence may strengthen cases and, in turn, secure justice and accountability for clients – and in the case of climate litigation – for the world.

⁵¹ See Cheryl L. Grady et al., "Neural Correlates of the Episodic Encoding of Pictures and Words" (1998) 95 *Proceedings of the National Academy of Sciences of the United States of America* 2703.

⁵² See "American Society of International Law: Keynote & Address by Justice Stephen Breyer," YouTube, April 5, 2016, <https://www.youtube.com/watch?v=UB6GrD3zL-Q&feature=emb_logo>, at 46 min. 15 seconds.

This is especially true given the current technological landscape. Today, the opportunities to use visual evidence to help secure legal accountability for human rights violations are more accessible as a result of the advance of new technologies, especially the proliferation of the camera. The number of smartphone/camera-ready users surpassed three billion in 2020 and is forecast to reach nearly four billion by 2021.⁵³ The mass adoption and usage of drones for aerial photography is still in its infancy, but drone development is rapidly underway due to significant investments pouring into this promising industry. The number of satellite-based monitoring applications and technologies publicly available has also exploded in recent years.⁵⁴ In turn, it is not surprising that courtroom environments – one of the last bastions of oral tradition – are morphing into cinematic display environments in an effort to better communicate with judges.⁵⁵ To date, however, the use of visuals in the emerging field of rights-based climate litigation has been limited, despite the strong potential to leverage visuals for meaningful results. To illustrate the potential of visuals in climate litigation, Section 14.5.1 will consider how the legal team representing the survivors of Australia’s devastating bushfires could curate and present visual evidence as part of their recently filed climate case.

14.5.1 Bushfire Survivors for Climate Action Incorporated v. Environment Protection Authority⁵⁶

Just before the fiftieth anniversary of Earth Day, survivors of Australia’s 2019/2020 bushfire crisis took legal action to force the New South Wales

⁵³ See S. O’Dea, “Number of Smartphone Users Worldwide from 2016 to 2021,” Statista, August 20, 2020, <<https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>>.

⁵⁴ At the time of writing, examples of satellite imagery providers include but are not limited to: Airbus Geostore; Bing Maps; Eagleview; Google Earth Engine and Google Earth Pro; HERE WeGo Satellite; Hexagon Geospatial; Landsat 8; Mapbox Satellite Live; Maxar Imagery Mosaics; MODIS, NAIP; Nearmap Orthographics; Newarmap; OpenAerialMap; Planet Basemaps; Sentinel-2; Vexcel Imaging; and Zoom.Earth. See @mouthofnorrison, Twitter, January 2, 2020, 3:59 PM, <<https://twitter.com/mouthofnorrison/status/1212840820019208192/photo/1>>.

⁵⁵ See Michael E. Heintz, “The Digital Divide and Courtroom Technology: Can David Keep up With Goliath?” (2002) 54 *Federal Communications Law Journal* 567.

⁵⁶ See “Bushfire Survivors for Climate Action Incorporated v. Environment Protection Authority,” Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/bushfire-survivors-for-climate-action-incorporated-v-environment-protection-authority/>>. On April 20, 2020, Bushfire Survivors for Climate Action brought a civil enforcement proceeding to compel the New South Wales Environmental Protection Authority to regulate greenhouse gas emissions. The plaintiffs, represented by the New South Wales Environmental Defenders Office, are Australians who allege that they have been harmed by bush fires made likely or more intense by climate change. According to news reports, the case was brought under the

Environmental Protection Authority (NSW EPA) to address climate change. The case, *Bushfire Survivors for Climate Action Incorporated v. Environment Protection Authority*, seeks to compel the NSW EPA to develop policies and guidelines to regulate greenhouse gas emissions and sustain a safe climate. If the NSW EPA fights the case, the list of emblematic, visual evidence that could – and may – be curated for the proceedings is long. Visuals could be used to show the

- extent of property damage by submitting photos and video of a selection of the over 5,900 buildings, including over 2,800 homes lost, before and after the fires;
- vast ecological damage to the millions of acres scorched by introducing video footage captured by a drone and corroborated by both satellite imagery and on-the-ground photos and videos from the burnt areas;
- loss of biodiversity by submitting a series of photos of animal carcasses, showing the array of animals that perished in the fires or footage from infrared-equipped drones that located injured wildlife in the aftermath of the Australian wildfires;⁵⁷
- intense smoke and air pollution stemming from the fires by showing photos and videos of smoke plumes, visible degradation of air quality in the major cities near the fires, and/or satellite imagery of the smoke as seen from space as it drifted across the Pacific Ocean;
- the myriad of physical injuries sustained by survivors – from burns to eye irritation to respiratory problems from exposure to smoke, hazardous gases, and particulate matter – by introducing photos of injuries and videos of respiratory problems;
- triggers leading to mental health problems by submitting corroborating material showing the experiences survivors endured (e.g., being trapped in high-risk areas, the trauma of emergency evacuations along blocked roads, or watching unprecedented firestorms from temporary shelters on beaches, boats, or in empty fields);
- pollution in the aftermath of the fires by sharing photos and videos of the ash that landed on school playgrounds and in backyards, or washed up on beaches;

New South Wales Protection of the Environment Operations Act 1997, which requires the Environmental Protection Authority to “develop environmental quality objectives, guidelines and policies to ensure environment protection.”

⁵⁷ See Cody Melissa Godwin, “How to Find Stricken Kangaroos in Australian Wildfires,” BBC, March 3, 2020.

- damage to water supplies from the destruction of infrastructure or the growth of cyanobacteria (commonly known as blue-green algae) by submitting visuals of melted water pipes, fallen trees on or over freshwater catchments, and the growth of cyanobacteria and plankton blooms; and
- the price tag to the Australian economy and livelihoods by showing damaged infrastructure such as burnt businesses, scorched pastures, razed vineyards, and killed livestock.

Depending on the precise rights violations the plaintiffs need to prove – from loss of property to loss of life, or loss of livelihoods to loss of health – the ideas in this non-exhaustive list could be used as direct or corroborative evidence to prove material facts, to contextualize or corroborate expert reports, or supplement *Amicus Curiae* briefs. And, this is just one short list of visuals for one case.

14.6 CLOSING ARGUMENT

The least we can do is: not look away. Not justify. Not erase. Not brush aside. Not make something “normal” that is not. And: nurture and defend our free, democratic constitution. Because only that is what will protect us from terror and insanity.⁵⁸

Willem-Alexander, King of the Netherlands

When presented with the horrifying visual evidence of the Holocaust, many of us cover our eyes, driven by the human desire to avoid experiencing pain and discomfort. I cannot help but wonder if we are doing the same with respect to our changing climate. But looking away will not make the problem disappear.

I live in the Netherlands. The warehouse where Anne Frank spent twenty-five months in forced hiding in a small attic is a ten-minute walk from my front door. Within fifteen minutes by bike, I can arrive at Muiderpoort, the station where hundreds of onlookers quietly witnessed the heavily guarded trams overflowing with people on their way to Nazi concentration camps, yet said nothing. Spring 2020 marked the seventy-fifty anniversary of the end of World War II, an ominous reminder that we must face global challenges with a fierce and unwavering commitment to human rights.

⁵⁸ King of the Netherlands, “Speech on King Willem Alexander on National Remembrance Day,” May 4, 2020, <<https://www.royal-house.nl/documents/speeches/2020/05/04/speech-by-king-willem-alexander-national-remembrance-day-4-may-2020>>.

Complex political problems require complex solutions. Video evidence alone will certainly not solve the climate crisis. However, as demonstrated through the Case Notes here, the strategic and effective use of visual evidence matters. So perhaps, in response to Alston's call to step up and engage determinedly and creatively with climate change, it is time to bring climate visuals into the courtroom to ensure that judges, and society at large, cannot look away, justify, erase, brush aside, or make "normal" something that is decidedly not.

The Story of Our Lives

Narrative Change Strategies in Climate Litigation

LAURA GYTE, VIOLETA BARRERA, AND LUCY SINGER*

Narratives are about invisible power. How perceptions, belief systems and ideology shape the way people define what is ‘right’ and what is ‘wrong’.

Phumi Mtetwa, Just Associates (JASS)¹

This chapter examines the role that stories and narratives can play in the development of climate litigation strategies. Section 15.1 covers an introduction to thinking on narratives, the way they work to support or challenge the status quo, and some helpful definitions. Section 15.2 looks at some examples of successful reframings of narratives in campaigns. Section 15.3 draws on the existing literature on narratives in climate litigation to highlight some dominant narratives that are problematic and some new narratives that are being deployed. This chapter concludes with a suggested checklist for considering narratives in climate litigation strategy and case work and pointers to additional resources and networks.

15.1 INTRODUCTION

Narratives are not something that happen ‘over there’, they are part of us and we are part of them. We can challenge or reinforce narratives on a daily basis. We see powerful damaging narratives at work in the COVID-19 response, and in systems of oppression that perpetuate inequality. We can use this knowledge to guide us now and as we move into the future.²

* The authors would like to thank Isabel Crabtree-Condor, knowledge broker at Oxfam and coordinator of Narrative Power and Collective Action, and James Turner of Glimpse Collective for their generous sharing of time and expertise to inform this chapter.

¹ Isabel Crabtree-Condor, *Narrative Power and Collective Action* (Oxford: Oxfam, 2020), p. 12.

² *Ibid.* at 9.

Narrative knowledge and framing know-how can help ensure that climate litigation not only achieves an outcome within the case but also works on a deeper level to connect with people and shift power, helping to transform underlying ideas, norms, and systems. The scale and speed at which a just transition needs to be implemented far outpaces the timelines of litigation – to secure 1.5 degrees, climate advocates need to build political power and lots of it.

So, how can cases be designed so that, in addition to securing a legal result, they achieve greater, quicker impact by working to strengthen and diversify the climate justice movement? Where can the cases connect to new emerging stories and narratives that are able to motivate and engage more people, and where can litigation be part of shifting the dial on what is considered common sense and on what people believe is possible? And also, importantly, how can litigators avoid playing into damaging dominant narratives that are constraining collective global action?

15.2 WHAT IS A NARRATIVE CHANGE STRATEGY?

Story, as it turns out, was crucial to our evolution Opposable thumbs let us hang on; story told us what to hang on to.

Lisa Cron³

Storytelling and deploying narratives are not new – in many ways, they are instinctual, and different approaches and practices happen in many different spaces. The power of storytelling in fostering change is an area of professional focus across many disciplines. Oxfam and On Think Tanks collaborated on a project to interview diverse people from across the globe about their role in challenging and reshaping narratives, as part of Oxfam's work on protecting and opening civic space. The people interviewed come from different sectors and disciplines – from activism to the arts and strategy to science and marketing. They shared their knowledge, ideas, tips, and tactics from their lived experience in the anthology *Narrative Power and Collective Action*.⁴

The conversations started in the anthology on the power of narrative and collective action for positive change continue beyond it. With respect to designing litigation and case strategies, joining this conversation can foster greater consciousness of how the story/ the case tells and the narratives it

³ Lisa Cron, *Wired for Story: The Writer's Guide for Using Brain Science to Hook Readers from the Very First Sentence* (New York: Random House, 2012).

⁴ See Crabtree-Condor, *Narrative Power and Collective Action*, above note 1.

engages can reinforce or disrupt the status quo and thus contribute to, or disrupt, the efforts of the wider climate movement.

The conversations contained in the anthology underscore that narratives are a form of power that can mobilize and connect, as well as divide and isolate. Social, public, or dominant narratives help to legitimize existing power relationships, prop them up, or make them seem natural.⁵ Narrative frames also ‘structure for the audience the cause of social problems and prescribe which actors should or should not act to address them’.⁶ Section 15.2 will look at some concrete examples of how movements have tackled dominant narratives and established new narratives.

Below are some definitions from allies working in this field (Frameworks Institute and The Narrative Initiative):

Narrative change: ‘A narrative reflects a shared interpretation of how the world works. Who holds power and how they use it is both embedded in and supported by dominant narratives. Successful narrative change shifts power as well as dominant narratives.’⁷

Frames: ‘Sets of choices about how concepts are presented: what to emphasise, where to start, how to explain it, what to leave unsaid. The way information is framed has dramatic effects on what people think, feel and are willing to do.’⁸

Stories: ‘In a story, something happens to someone or something. Typically, a story has a beginning, middle and end. Stories transmit a society’s ideas, beliefs, behaviours, humour, style and trends from one person to another, that collectively create the culture we live in. **Stories are told.**’⁹

Narratives: ‘Narratives permeate collections or systems of related stories. They have no standard structure, but instead are articulated and refined repeatedly as they are instantiated in a variety of stories and messages. **Narratives are understood.**’¹⁰

Deep narratives: ‘Deep narratives are characterized by pervasiveness and intractability. They provide a foundational framework for understanding

⁵ Ibid.

⁶ Lissy C. Friedman et al., ‘Tobacco Industry Use of Personal Responsibility Rhetoric in Public Relations and Litigation: Disguising Freedom to Blame as Freedom of Choice’ (2015) 105 *American Journal of Public Health* 250, 250.

⁷ ‘Narrative Change: A Working Definition (And Some Related Terms)’ (emphasis in original), The Narrative Initiative, 15 May 2019.

⁸ ‘Framing 101’, Frameworks Institute, <<https://www.frameworksinstitute.org/tools-and-resources/framing-101/>>.

⁹ ‘Narrative Change: A Working Definition (And Some Related Terms)’ (emphasis in original), above note 7.

¹⁰ ‘What Is a Narrative?’, The Narrative Initiative, <<https://narrativeinitiative.org/what-is-narrative/>>.

both history and current events, and inform our basic concepts of identity, community and belonging. Just as narratives permeate collections of related stories, so too do deep narratives permeate collections of related narratives. It is difficult to connect with audiences directly at the level of deep narrative, but higher level narratives can provide a way in.¹¹

This is powerful because narratives trigger emotions – hope, empathy, fear, guilt – which are hugely influential in terms of how a person will respond to an issue. Will they support climate action or feel excluded or demotivated – or even antipathy?

For the purpose of this chapter, there are four key relevant learnings from the Narrative Power and Collective Action collaboration to highlight, though there are many more beyond these as well.

First, who tells the story and who shares the story are critical considerations. Whose existence and experience is elevated? Who needs to see themselves in the story? Who needs to share the story for it to be credible – trust and legitimacy are key. Can the story be told in a different way that better connects with people and their lived experience? For climate litigation, this involves reflecting with allies on the potential claimants and spokespeople for a case, as well as on the facts it will present.

Second, the strategies deployed in climate litigation will be asymmetrical relative to those strategies supporting a currently dominant narrative. Climate litigators can't meet, for example, the narrative strategies deployed by populists or climate change deniers like for like, so climate litigators need to examine how to bridge movements; short circuit power with humour, culture, and hope; cut through the noise; and foster connections. Litigators can draw on the skills of climate communicators in the movement to construct communication strategies that make the best use of the moment created by litigation to drive narratives that will motivate people to support climate action.

Third, reacting to the dominant narrative can backfire and reinforce the dominant message as well as lock litigators into an existing power dynamic. Instead, litigators can aim to 'flip' the narrative and drive a new narrative that does not need to be seen as related.

Fourth, with respect to narratives, climate advocates have to walk the talk. Advocates cannot challenge a narrative that the climate movement is (at least in the Global North) urban, white, and elite if that contains a painful element of truth. Similarly, what they do is the message. So, if advocates want to say

¹¹ Ibid.

that climate action is for everyone, then the climate movement needs to genuinely reflect that. The movement needs to be that new narrative as well.¹²

The Narrative Initiative's practical Four Baskets tool is helpful for thinking about the capacities and processes needed to create, implement, and continually strengthen narrative change projects. The most helpful narratives should be identified by climate movements working together in a particular context, with climate litigators joining as a part of that movement. Climate litigation can then consciously be considered in terms of how it can support and achieve impact across the following four ingredients the Narrative Initiative identifies: (1) create (articulate the new narrative as well as the old dominant narrative that advocates are trying to shift away from); (2) translate (identify the audiences that need to adopt this narrative and find ways to express the narrative that are meaningful to them); (3) drive (move the narrative into the public domain by designing effective narrative interventions, while mapping the channels and tools that will be used); and, finally, (4) observe (map where the new narrative is being adopted).¹³

15.3 NARRATIVE CHANGE IN CAMPAIGNS FOR ACTION

You can pay a whole team of publicists to come up with a slogan, or you can give a few kids a spray can and some cardboard and boom, you have one that really connects with people.

Elena Mejía Julca, feminist, rapper and youth collective leader, Peru

15.3.1 *Ley Pulpin, Peru*¹⁴

Narratives supporting the status quo in Peru and undermining social change include narratives like 'people are poor because they want to be, they don't make an effort' and, in relation to activists, 'they are all corrupt and get into this work to get a good salary and live off people's poverty'. These formed part of the backdrop to a movement of youth activists in Peru challenging a new law, the *Ley Pulpin*, which was promoted as something that would benefit young workers, but analysis of the legislation showed that it was in reality more

¹² See Krizna Gomez and Thomas Coombes, *Be the Narrative: How Changing the Narrative Could Revolutionize What It Means to Do Human Rights* (Oxford: Just Labs & Fund for Global Human Rights, 2019).

¹³ See Rachel Weidinger, 'Four Baskets: Necessary Capacities for Narrative Change', The Narrative Initiative, 30 July 2020.

¹⁴ Isabel Crabtree-Condor, 'Elena Mejía Julca: The Creative Activist', On Think Tanks, 28 October 2020.

about deregulation and obtaining cheap labour from young workers. A movement led by young people came together to challenge the law. In Elena's words:

When we took to the streets there were some amazing placards, people can be super creative making catchy slogans. Someone came up with 'Cholo, pero no barato'. Everyone understood this new narrative, there were more placards saying this and people started using the phrase. It unified the message and cut through the noise. The 'Cholo pero no barato' framing has a lot of cultural baggage – a deep connection to Peru's history. But those meanings are not static. A great thing about working with young people is you see them appropriating words. When people are really living the issue, they take ownership of the creative process. It's their fight and that's where the impressive creativity flows.¹⁵

Together, the new slogan and stories engaged new positive narratives of pride in young Peruvian workers.

15.3.2 *Even It Up: Economic Inequality*

Even it Up is a campaign against extreme economic and social inequality, which threatens to reverse progress on eradicating poverty. It was launched in 2014 and is Oxfam's 'biggest ever worldwide campaign'. Robust independent evidence made the link between inequality and poverty clear; however, talking about economic inequality quickly engages deep narratives that are explicitly deployed to maintain the status quo in many economies. The most fundamental of these is the narrative that economic inequality is inevitable. Linked narratives are that extreme wealth is aspirational, that wealth trickles down without state intervention, that wealth or poverty always reflect effort or skills, and that people are poor as a result of their own actions.

The campaign recognized the many positive narratives that could also be engaged through work on economic inequality and that being able to engage these would be critical to building pressure and political will and ultimately securing policy change (on progressive taxes, on work and wages, and on quality health and education for all). So, the campaign looked at how it could communicate its messages to support existing but less dominant narratives, including that extreme inequality hurts everyone, that high levels of economic inequality are the result of political and economic choices, and that people can demand change.

¹⁵ Ibid.

15.3.3 Human Stories

The book *Narrative Power and Collective Action* includes an interview with Aidan Miller of Cast from Clay, who references the organization's research findings that emotion plays an important role not only in how the majority of the population form their (small p) political views but in how policymakers form their political views as well. Strong facts and policy arguments are not enough, on their own, to motivate people to take action. Evoking something deeply human in audiences and finding stories to which people can relate and which create empathy can help connect more people and make alternative ideas seem relatable and possible.

Even it Up launched with an extensive research report¹⁶ that informed a range of communications, including a flagship film called *Hard work. Fair reward?* The film tells the story of Lan, who works long hours in a factory in Vietnam producing shoes for global fashion brands. She makes 1,200 pairs per day but doesn't earn enough to buy one pair for her son. She's forced to live far away from her two young children. Through the film, we learn that a garment worker in Vietnam often earns less than eight dollars a day, whilst a CEO of a top fashion brand earns almost 16,000 dollars a day. Lan's life and working conditions powerfully connect with a different narrative – that high levels of economic inequality are the result of structural problems rather than an individual lack of effort on the part of those trapped in poverty. The film engaged people's instinctive feeling that there is something wrong with such extreme levels of inequality.

The campaign also used simple, powerful statistics to expose the scale of extreme inequality and drive new narratives. The first statistic used for the launch of the campaign was that 'at the start of 2014, Oxfam calculated that the richest 85 people on the planet owned as much as the poorest half of humanity'.¹⁷ These simple, stark figures cut through the noise and have been widely repeated and adopted. Oxfam published an updated key statistic in an annual report on economic inequality, published each year ahead of Davos, an elite gathering. Each year the new statistic was widely anticipated and shared, helping to drive the campaign on extreme economic inequality.

¹⁶ See 'Even It Up: Time to End Extreme Inequality' (2014) Oxfam, <https://www-cdn.oxfam.org/s3fs-public/file_attachments/cr-even-it-up-extreme-inequality-291014-en.pdf>.

¹⁷ Ibid. at 8.

Through the combined efforts of many national and global campaigns, the narrative that extreme economic inequality hurts us all, stymies poverty eradication, and results from political and economic choices rather than being an inevitability has been adopted by many. Increasingly, there are specific actions to address it. This includes, for example, action in the United Kingdom on tax havens that enable multinational corporations to avoid paying taxes on profits generated in developing countries, which could, if paid, be used to fund quality healthcare and education. Yet there is still a long way to go to translate words into action at a global level, and Oxfam continues to work with allies on the campaign.

15.4 NARRATIVES IN CLIMATE LITIGATION

You can have the best policy argument, with the best facts and evidence, but in the end it's the best story that wins.

Aidan Muller, *Cast from Clay*

Shifting or changing sticky narratives that maintain the status quo requires collaboration and creative collective action at a scale not seen before.¹⁸ Climate activists working at different levels need to explore together which new narratives have the potential to shift power on this issue. This could be achieved by amplifying existing narratives or forging new ones that connect geographies and realities. Working in collaboration means exploring the ideas that different actors can bring to the table and testing out different approaches to see what resonates with those with whom we want to connect.

In this section, we draw on existing excellent and in-depth analyses of narratives in climate litigation,¹⁹ along with current climate litigation,²⁰ to draw out some common themes within narratives identified as damaging and

¹⁸ See Crabtree-Condor, *Narrative Power and Collective Action*, above note 1.

¹⁹ See Kim Bouwer, 'Lessons from a Distorted Metaphor: The Holy Grail of Climate Litigation' (2020) 9 *Transnational Environmental Law* 1; see also Ezra M. Markowitz and Azim F. Shariff, 'Climate Change and Moral Judgment' (2012) 2 *Nature Climate Change* 243; see also Jacqueline Peel and Hari M. Osofsky, 'A Rights Turn in Climate Litigation?' (2018) 7 *Transnational Environmental Law* 37; see also Grace Nosek, 'Climate Change Litigation and Narrative: How to Use Litigation to Tell Compelling Climate Stories' (2018) 42 *William and Mary Environmental Law and Policy Review* 733; see also Chris Hilson, 'Climate Populism, Courts and Science' (2019) 31 *Journal of Environmental Law* 395.

²⁰ See Joana Setzer and Rebecca Byrnes, 'Global Trends in Climate Litigation: 2020 snapshot' (2020) Grantham Research Institute on Climate Change and the Environment.

currently dominant, as well as within positive narratives with the potential to drive change. This body of work provides a solid foundation with which to connect climate litigation with the broader narrative work of the climate movement.

The literature fleshes out the psychological barriers to public support for climate action (Nosek), the relationship of climate action to morals and values (Markowitz and Shariff), the partisan nature of people's responses to climate action (Peel and Osofsky), and populist narratives on climate change (Hilson). They set out how, by circumventing the partisan political divides that have typically pervaded support for climate action,²¹ litigation and the narratives used in climate change litigation can act as a unifying force in 'influencing public debate and social norms'.²²

15.4.1 Damaging Narratives

One pervasive narrative is that climate change is a global phenomenon and, as individuals, everyone is 'exposed to messages that hold [us] accountable for causing environmental damage as an unintended side effect of [our] behaviour and lifestyle'.²³ By making every individual responsible in this way, the narrative can have the opposite effect in that no one is truly accountable for the creation of climate change.²⁴ As such, the biggest polluters²⁵ are 'let . . . off the hook'²⁶ for their culpability, as individuals will instead burden themselves with guilt.

A second narrative is the idea that climate change 'will most negatively affect individuals who live in faraway places [for people living in affluent places], or who will live in the future or both'.²⁷ This uncertainty around future time scales can also inspire a form of 'wishful thinking'²⁸ in that

²¹ See Hari M. Osofsky and Jacqueline Peel, 'Energy Partisanship' (2016) 65 *Emory Law Journal* 695, 695.

²² Nosek, 'Climate Change Litigation and Narrative', above note 19 at 737.

²³ Markowitz and Shariff, 'Climate Change and Moral Judgment', above note 19 at 244.

²⁴ See Nosek, 'Climate Change Litigation and Narrative', above note 19 at 791.

²⁵ See Paul Griffin, 'The Carbon Majors Database: CDP Carbon Majors Report 2017' (2017) Carbon Disclosure Project.

²⁶ Mary Annaise Heglar, 'I Work in the Environmental Movement. I don't Care If You Recycle.', *Vox*, 4 June 2019.

²⁷ Anthony Leiserowitz et al., 'Climate Change in the American Mind: Americans' Global Warming Beliefs and Attitudes in May 2011' (2011) Yale University & George Mason University.

²⁸ See Jacqueline Peel and Hari M. Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge: Cambridge University Press, 2015), p. 52.

individuals hope that the negative impacts of climate change might not be as severe as predicted. This narrative can also be used to reinforce an 'us vs. them' mentality, letting one group off the hook whilst 'othering' another group that is blamed or ignored.

There are many more – that climate is an elite concern, that climate action is anti-jobs, and the range of local values and beliefs used to undermine collective climate justice action.

15.4.2 *Challenging Negative Climate Change Narratives*

Litigation in itself can be a key mechanism to combat the climate change narrative that no one is truly accountable. As a result 'of the adversarial nature of lawsuits and standing requirements, plaintiffs must identify who to blame for a particular action and how that action has harmed them. Thus, lawsuits might be particularly well suited to apportioning blame for climate change, thereby motivating the public to support corrective action'.²⁹

The anti-tobacco movement is an example of previous movements that have successfully challenged this narrative of 'blamelessness'.³⁰ The anti-tobacco movement successfully reframed the narrative to suggest that tobacco companies and governments had not only been aware of the risks of smoking but knowingly created these risks.³¹ This narrative can be applied to climate change litigation to support the idea that climate change was intentionally created and therefore constitutes a 'wrong that demands to be righted'.³² Indeed, 'the public is likely to react more forcefully given that climate change, as with tobacco in the past, has involved governments and industry continuing with the status quo despite long term knowledge of the risks'.³³ The anti-tobacco movement also successfully framed the narrative that second-hand smoking 'was claiming innocent lives'³⁴ and, as a result, could apportion this blame to tobacco companies and governments. This type of narrative approach can be seen in the 'knowing deception' framing of the New York Attorney General's prosecution of Exxon for deceiving investors about the true cost of climate change and in the framing of the inquiry of the Philippines'

²⁹ Nosek, 'Climate Change Litigation and Narrative', above note 19 at 754–55.

³⁰ See Markowitz and Shariff, 'Climate Change and Moral Judgment', above note 19 at 244.

³¹ Nosek, 'Climate Change Litigation and Narrative', above note 19 at 766.

³² Markowitz and Shariff, 'Climate Change and Moral Judgment', above note 19 at 243.

³³ Hilson, 'Climate Populism, Courts and Science', above note 19 at 395–98.

³⁴ Nosek, 'Climate Change Litigation and Narrative', above note 19 at 791.

Commission on Human Rights into the responsibility of the Carbon Majors for the human rights impacts of climate change currently happening in the Philippines.

The Youth Climate Movement³⁵ and the worldwide striking of school children for climate action have been pivotal in influencing the general public and driving home the reality that climate change will have implications for everyone, everywhere. With respect to climate change litigation, it has been argued that ‘communicators should adopt techniques that increase individuals’ affinity and identification with future generations (for example, focusing specifically on identifiable future others such as one’s children), which can diminish interpersonal distance, decrease social discounting, limit egocentric biases and enhance intergenerational beneficence’.³⁶ Global cases that have successfully engaged an ‘innocent victim’ and youth focus include *Juliana*³⁷ and *Future Generations*.³⁸

Whilst the story being told is clearly important, ‘who is doing the communicating’ is equally important, as evidenced above.³⁹ Hilson highlights the potential of harnessing some of these approaches, like a narrative style of communication, and bringing cases ‘by a claimant that can be seen as representing the people’.⁴⁰ Climate cases will evoke stronger support when knowledgeable and ‘trusted members of a person’s cultural group’⁴¹ are heard, ‘who can help to build acceptance of a particular issue through “vouching” for information and showing it fits with the groups pre-existing worldview’.⁴² One can look to *Saúl Luciano Lliuya v. RWE*, the Carbon Majors petition in front of the Philippines’ Commission on Human Rights, and *Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council and Others* as examples of climate litigation where the claimants both represent trusted members of a group not easy to dismiss as part of a Northern climate elite bubble and also of cases that tell a very clear story about the impacts of climate change that are happening right now.

³⁵ See, e.g., Global Climate Strike, <<https://globalclimatiestrike.net/>>.

³⁶ Markowitz and Shariff, ‘Climate Change and Moral Judgment’, above note 19 at 245.

³⁷ See *Juliana v. United States*, 46 ELR 20175 (D.Or. 2016).

³⁸ See Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala de Casación Civil, abril 5, 2018, M.P.: L.A. Tolosa Villabona, Expediente 11001-22-03-000-2018-00319-01 (Colom.).

³⁹ Chad J. McGuire and Devon Lynch ‘Competing Narratives of Climate Change’ (2017) 19 *Environmental Practice* 218.

⁴⁰ Hilson, ‘Climate Populism, Courts and Science’, above note 19 at 89.

⁴¹ Osofsky and Peel, ‘Energy Partisanship’, above note 21 at 723.

⁴² *Ibid.*

Peel and Osofsky also identify the economic case and disaster resilience as positive narratives to develop in order to overcome energy partisanship. Hope, pride, and gratitude are underscored by Markowitz and Shariff as narratives that can generate enthusiasm for climate activism.

Climate litigators, in collaboration with others in the climate movement, can build on this work and draw upon new learning from other activists globally to achieve the most advocacy impact from each climate case filed.

15.5 LEARNING AND ACTIONS FOR CLIMATE LITIGATION

- It's clear that coordination and collaboration will be key to designing successful climate litigation with strong narrative strategies. Litigation needs to be integrated into national and global climate justice campaigns and movements, so that there's a shared theory of change and a shared understanding of the key dominant narratives and the new narratives that need to be driven.
- Climate litigators can join the conversation in *Collective Power and Narrative Action*. Part I of the book contains a link to sign up for a mailing list to receive part II in an email and invitations to join virtual conversations on different dimensions of narrative power and collective action, including identity, race, climate, filmmaking, fake news, brands, and more. People are also invited to share ideas for topics they would like to talk and learn more about.⁴³
- In designing climate litigation and considering other legal issues, litigators need to consider how the litigation will play in the court of public opinion and which narratives it will help to drive. What story does the framing tell? Who has the legitimacy and trust to tell that story, and how does that relate to the position of the claimant in the case? If an NGO is involved in the case, how are they working with the people directly affected by the issues?
- Once the litigation is running, like in all climate campaigns, litigators need to draw on creative communications and activism, drawing on the expertise of the full range of people with expertise on narrative change – social scientists, creatives, filmmakers, storytellers, marketing gurus, big data analysts, academics, think tanks, and more. Can visuals, film, art, music, memes, or humour communicate more effectively than more traditional methods?

⁴³ See Crabtree-Condor, *Narrative Power and Collective Action*, above note 1.

- Significant resources are needed to co-create narratives and share the learning on this fast enough and wide enough to secure the greatest impact over the next few years. Existing models for this include JustLabs and Narrative Power and Collective Action. How can funders support access to communications support for litigators? How can litigators collaborate to share channels and resources to drive new narratives?

PART IV

The Climate Emergency on Trial

Human Rights and Climate Litigation around the World

Courts, Climate Action, and Human Rights

Lessons from the *Friends of the Irish Environment v. Ireland Case*

VICTORIA ADELMANT, PHILIP ALSTON, AND
MATTHEW BLAINEY

In a July 2020 decision said to have set “a precedent for courts around the world,” the Irish Supreme Court invalidated the government’s climate strategy.¹ *Friends of the Irish Environment v. Government of Ireland & Ors* (hereafter *FIE*) is indeed a landmark decision: though Irish courts are particularly cautious and deferential to the executive, litigants succeeded in convincing the Supreme Court to quash the government’s inadequate climate policy.

The 2015 Climate Action and Low Carbon Development Act, which established Ireland’s commitment to transitioning to a low-carbon and environmentally sustainable economy by 2050, required the government to publish a National Mitigation Plan specifying the measures to be taken to achieve this objective. The government’s Plan, published in 2017, was wholly inadequate. It outlined vague measures, deferred action in the hope that “future technologies” would come to the rescue and, crucially, envisaged increased greenhouse gas emissions.² Ireland’s Climate Change Advisory Council assessed that the measures were “unlikely to deliver” the necessary transition.³ Friends of the Irish Environment (FIE), a prominent civil society group, sought judicial review of the Plan, arguing that it was *ultra vires* and violated fundamental rights enshrined in the Constitution and the European Convention on Human Rights (ECHR), including the rights to life, bodily integrity, and a healthy environment.

¹ David Boyd, quoted in Brendan Montague, “Historic win for Climate Case Ireland,” *The Ecologist*, August 5, 2020, <<https://theecologist.org/2020/aug/05/historic-win-climate-case-ireland>>.

² See National Mitigation Plan, Department of Communications, Climate Action & Environment, July 2017, <<https://static.rasset.ie/documents/news/national-mitigation-plan-2017.pdf>>.

³ See Annual Review 2019, Climate Change Advisory Council.

Though the High Court had found the Plan to be *intra vires* and refused to engage with the fundamental rights arguments on account of the “considerable discretion” that the government enjoyed in this “policy” area, the Supreme Court reversed this decision less than a year later.⁴ Noting that the Act required the Plan to “specify” measures to achieve the low-carbon transition, the court found that the Plan did not give a sufficiently “realistic level of detail.” The Plan was found to be *ultra vires* and was quashed.⁵

But from a rights perspective, the judgment was actually a major setback. FIE had hoped for an authoritative judicial declaration that the Irish government had a duty, arising from international human rights and constitutional rights law, to do more to reduce greenhouse gas emissions. The litigants had taken some inspiration from *Urgenda* and indeed invoked the Dutch judgment repeatedly in their submissions. But the Supreme Court’s response on this score was deeply disappointing. The decision was based on a narrow question of statutory interpretation, and the human rights arguments were not merely dismissed but belittled. FIE was not granted standing to pursue any rights-based claims, and the court made unhelpful and gratuitous additional comments denying that a right to a healthy environment could be derived from the Constitution.⁶

This was a climate case that failed to obtain a favorable ruling on human rights claims. But despite and because of these disappointments, *FIE* nonetheless holds valuable lessons for litigants. The Supreme Court’s approaches to the issues of standing, deference, regional human rights jurisprudence, the right to the environment, and the choice between multiple grounds for claims may offer important insights into how to approach such issues in the future. This case highlights vital questions which litigants need to confront.

16.1 DEFERENCE AND HUMAN RIGHTS ARGUMENTS

FIE was the first and highest-profile case concerning the general adequacy of the Irish government’s climate action to go through the courts. Against the background of Irish courts’ conservatism, the long-held perception that climate change is “public policy more than [a] legal issue,” and the High Court

⁴ See *Friends of the Irish Environment v. Ireland* [2019] IEHC 747, 748 (H. Ct.) (Ir.) (hereinafter “*FIE* High Court decision [2019]”)

⁵ See *Friends of the Irish Environment CLG v. Government of Ireland, Ireland and the Attorney General* [2020] IESC 49, §6.45 (S.C.) (Ir.) (hereinafter “*FIE* Supreme Court decision [2020]”).

⁶ For a more detailed critique, see Victoria Adelmant, Philip Alston, and Matthew Blainey, “Human Rights and Climate Change Litigation: One Step Forward, Two Steps Backwards in the Irish Supreme Court” (2021) 13 *Journal of Human Rights Practice* 1.

judge's characterization of the "significant policy content" of FIE's case, it was unclear how the Supreme Court would respond to the questions of justiciability and discretion.⁷ The government had successfully convinced the High Court that the Plan's creation was an "exercise of discretion" in "the pursuit of policy," and the judge agreed that it was "not part of the function of the court to second-guess the opinion of Government on such issues."⁸ The government argued again in the Supreme Court that the Plan "simply represents policy" and was therefore not amenable to judicial review and that the court would assume a policy-making role if it accepted FIE's arguments.⁹

Counsel for FIE accordingly took a cautious approach, emphasizing that the government has wide discretion as to how emissions are to be reduced. They took care to distinguish their demands from those in *Urgenda*: they were not asking the court to prescribe the content of a new Plan or to order specific emission reductions. And, vitally, they insisted that they were asking a legal question.

The court took seriously the government's claims that climate litigation invites judicial activism. It expressed hesitance in relation to FIE's rights arguments and the separation of powers, noting, "there clearly is a risk of the distinction between rights based litigation, on the one hand, and political or policy issues, on the other becoming blurred in cases such as this."¹⁰ But it nonetheless rejected the government's non-justiciability arguments.

This confirmed a "legal transition" away from an understanding of climate change as being solely a matter for politics, with the Irish Supreme Court joining many other courts around the world in refusing to treat climate action as a "no-go area" in which courts have no role to play.¹¹ That the case concerned the complex policy issue of climate mitigation did not change the fact that "there is legislation." The Act stipulated that the Plan needed to fulfil certain requirements, and the question of whether the Plan complied with those requirements was clearly "a matter of law." The court pointed specifically to the statute's provision that the Plan must "specify" how Ireland's

⁷ Jacqueline Peel and Hari Osofsky, *Climate Change Litigation* (Cambridge: Cambridge University Press, 2015), p. 316. For a more detailed analysis of the High Court's judgment, see Philip Alston, Victoria Adelmant and Matthew Blainey "Litigating Climate Change in Ireland" (2020) NYU School of Law, Public Law Research Paper No. 20-19.

⁸ FIE High Court decision (2019), above note 4, at 112, 92, and 97 (H. Ct.) (Ir.)

⁹ See FIE Supreme Court decision (2020), above note 5 at §6.4 (S.C.) (Ir.).

¹⁰ *Ibid.* §7.12.

¹¹ See Laura Burgers, "Should Judges Make Climate Change Law?" (2020) 9 *Transnational Environmental Law* 55; see also *Thomson v. Minister for Climate Change Issues* [2017] NZHC 733 (H. Ct.) (N.Z.).

low-carbon transition would be achieved, stating that this specificity requirement was “clearly justiciable.”¹²

But, in focusing particularly on this provision, the court effectively took a shortcut. It answered the justiciability question with reference to one precise statutory requirement; it then considered the *vires* issue first and, upon finding the Plan to be *ultra vires* on the basis of that provision because it did not “specify” measures in sufficient detail, stated that “any consideration of the further rights based issues which arise on this appeal would be purely theoretical.”¹³ Many of the difficult questions about fundamental rights and climate change, which had been argued on appeal, were thus sidestepped. FIE had made convincing arguments about causation, noting the real and genuine threat to life and that the Plan increased the risk of such harm. This seemed successful during the hearing: when the government’s counsel argued that FIE could not prove that implementing the Plan would cause rights violations, the justices’ questions highlighted the government’s mischaracterization and simplification of the issue. There was fruitful discussion during the hearing about the relative significance of Ireland’s emissions globally; and the justices engaged with temporal complexities in questioning at what point damage would have to occur before rights could be deemed violated. But these questions went unanswered in the judgment.

Sidestepping FIE’s rights arguments in this way also served to sanitize the issue. The case started from the position that both parties accepted the scientific facts that deaths and other risks would arise from increased emissions, and it ended with a judgment centering around the meaning of the word “specify.” What the Irish government did wrong, according to the court, was to create a Plan that was not clear enough. It was condemned for failing to enable a reader to understand how the transition objective would be achieved but not for its shameless decision to publish a Plan under which emissions would increase.

The *FIE* case therefore raises vital strategic questions. In more conservative jurisdictions, litigants invoking rights will often be well advised to opt for a “safer” approach by bringing non-rights claims, particularly questions of statutory interpretation, alongside rights claims. Grounding claims in legislation as well as rights provisions will increase the likelihood of more traditionally deferential courts finding inadequate climate policies to be unlawful. Indeed, though there has been a proliferation of rights-based claims in climate

¹² See *FIE* Supreme Court decision (2020), above note 5 at §6.24 & §6.27

¹³ *Ibid.* §9.5.

cases, rights arguments are generally used to “prop up” other claims; very few cases are yet argued solely on a rights basis.¹⁴

This was visible here: *FIE* won, but on the basis of a narrow statutory provision, not its rights-based claims. Commenting on the boundaries of claimed rights, Chief Justice Clarke noted that “in an appropriate case, it may well be that constitutional rights might play a role in environmental proceedings” and might “give rise to specific obligations on the part of the State.” But these questions were “to be addressed in cases where they truly arise.”¹⁵ The court’s approach was to start with the question with which it felt more comfortable, decide upon that basis, and deem the rest “purely theoretical.” The “trickier” rights arguments could be circumvented in favor of “safer” grounds. It is easier to insist that the court is not infringing on the executive nor breaching the separation of powers when the question concerning climate policy is one of technical statutory interpretation. This was also seen in the case regarding the Heathrow airport expansion in the United Kingdom, which initially raised rights-based claims against the government’s policy to permit the building of a third runway but was ultimately decided on the basis of an interpretation of the Planning Act and the Strategic Environmental Assessment Directive.¹⁶

All of this may suggest that where litigants seek authoritative statements of states’ legal duties to reduce greenhouse gas emissions based on fundamental rights provisions, they may need to take a somewhat riskier approach. Bringing a variety of claims based on rights and on statutes may increase the likelihood of findings of justiciability and of illegality. But litigants may need to adopt bolder strategies in bringing cases that only make rights-based claims, in order to prevent courts from sidestepping the rights claims by choosing to decide on the basis of the “easier” grounds.

The *FIE* case holds another important lesson for litigants in this area: it was a glaring reminder of the need for rights-based climate litigation strategies to take a multilevel approach. At first instance, Justice MacGrath had declined to rule on the ECHR claims because the Strasbourg Court had not yet decided a case concerning climate change. As Irish courts were to follow rather than

¹⁴ See Jacqueline Peel and Hari Osofsky, “A Rights Turn in Climate Change Litigation?” (2018) 7 *Transnational Environmental Law* 37; see also Annelisa Savaresi and Juan Auz, “Climate Change Litigation and Human Rights: Pushing the Boundaries” (2019) 9 *Climate Law* 244.

¹⁵ *FIE* Supreme Court decision (2020), above note 5 at §8.17.

¹⁶ See *R (on the application of Friends of the Earth Ltd and others) v. Heathrow Airport Ltd* [2020] UKSC 52.

anticipate the ECtHR, it was “not for the domestic court to declare rights under the Convention.”¹⁷

Litigants are to be commended for their careful invocation of Strasbourg case law on environmental disasters or pollution within domestic cases challenging climate mitigation policies. But this task is fraught with difficulties. First, the court’s environmental jurisprudence has quite consistently afforded a wide margin of appreciation to states.¹⁸ Second, states’ failures to take steps to prevent mudslides, or to evacuate an area before releasing water from a reservoir, represent fact patterns quite removed from the polycentricity of climate change.¹⁹ The principles and conceptions of risk and obligation arising from these cases are promising, but their facts may be unhelpful. As the Irish Supreme Court noted, these cases might be understood as “confined to situations where the pollution concerned ‘directly and seriously’ creates an imminent and immediate risk.”²⁰ Indeed, a Swedish court found that Articles 2 and 8 ECHR were not infringed by the selling of coal power plants because the damage had not yet occurred: the mere “risk of damage” was insufficient.²¹ And the Swiss Federal Court dismissed Article 2 and 8 claims in relation to inadequate climate policy by finding no “present” or immediate danger to the plaintiffs; the consequences of climate change would occur only in the future.²² The Irish Supreme Court justices in *FIE* also questioned the necessary level of proximity between the effects and the Plan, as well as the required degree of imminence of the risk.

The Dutch Supreme Court is, therefore, clearly an outlier in holding that the absence of a clear answer from the ECtHR did not prevent it from providing an opinion on the scope of the state’s obligations. The Irish High Court’s refusal to preempt Strasbourg is representative of a crucial issue: there is a pressing need for the ECtHR to provide guidance to state parties as to the applicability of Convention rights to climate mitigation measures. Regional

¹⁷ *FIE* High Court decision (2019), above note 4 at §139.

¹⁸ See Sumudu Atapattu, “Climate Change under Regional Human Rights Systems,” in Sebastien Duyck et al. (eds.), *Routledge Handbook of Human Rights and Climate Governance* (London: Routledge, 2018), pp. 128–44. See especially *Hatton v. United Kingdom*, 37 EHRR 611 (2003).

¹⁹ See *Budayeva v. Russia*, 15339/02 Eur. Ct. H.R. at §129 (2008); see also *Kolyadenko v. Russia*, App. Nos. 17423/05 *inter alia*, §157 (2012).

²⁰ *FIE* Supreme Court decision (2020), above note 5 at §5.11.

²¹ See *PUSH Sverige, Faltbiologerna and others v. The Government of Sweden* [Stockholm District Court] 2017 T 11594-16 (Swed.).

²² See *Verein KlimaSeniorinnen Schweiz et al v. Federal Department of the Environment, Transport, Energy and Communications (DETEC)* [Federal Administrative Court] May 5, 2020, 1C_37/2019, §5.4 (Switz.).

human rights courts have been at the forefront of developing environmental rights; they must, soon, take up the challenge of climate change.²³ Litigants seeking authoritative statements from domestic courts on the human rights implications of weak climate policy, such as FIE, will benefit hugely from legitimization from the ECtHR.

Litigation in domestic courts must therefore be complemented by efforts within regional and international monitoring mechanisms and courts. These bodies can help to clarify and reinforce the scope of states' rights obligations. Cross-references among human rights bodies – such as the Human Rights Committee's reference in its General Comment on the right to life to the IACtHR's statement that there is an “irrefutable relationship” between the environment and the ability to effectively enjoy human rights – could help bolster states' duties to reduce emissions.²⁴ Legal strategies that take seriously the need to address regional and international human rights mechanisms can thereby help create an “increasingly coherent . . . body of law” in this area and assist domestic climate litigation.²⁵

There is also a need for caution in invoking rights jurisprudence from outside the relevant jurisdiction. Counsel for FIE relied quite extensively on *Urgenda* in making its Convention claims, effectively urging the Irish courts to follow the Dutch courts' approach. But this may, with hindsight, have served to “scare off” this more traditional court, so wary of judicial activism. FIE had worked to distinguish its case from *Urgenda* in relation to the relief sought, in light of likely skepticism from the Irish courts as to the propriety of courts ordering the government to reduce emissions by a particular percentage point. But its reliance on *Urgenda*'s reasoning in relation to its rights claims may have left these claims vulnerable to the government's attack that these rights arguments could not apply within the Irish constitutional order. Irish judges display a preference for looking predominantly to common law systems, and the difference between Irish dualism and Dutch monism also played a role during the hearing. A better approach may have been not to invoke *Urgenda*, instead focusing on convincing the Irish courts on their own terms. Litigants must be prepared to make forceful and convincing arguments as to why courts must not ignore human rights arguments and the urgency of such consideration in the climate change context. Now is the time to be frank: in shying

²³ See Atapattu, “Climate Change under Regional Human Rights Systems,” above note 18.

²⁴ See UN Human Rights Committee, General Comment no. 36 on article 6 of the International Covenant on Civil and Political Rights, on the right to life, UN Doc. CCPR/C/GC/36, at ¶ 62 (2018).

²⁵ “The Status of Climate Change Litigation: A Global Review” (2017) UN Environment Programme 26.

away from grappling with such issues, courts are failing to engage with the most pressing rights issue of the century.

16.2 THE RIGHT TO A HEALTHY ENVIRONMENT AND DEVELOPING THE LAW IN CLIMATE CHANGE LITIGATION

As part of its challenge to the Plan on human rights grounds, FIE asserted that the right to a healthy environment should be recognized as a derived right under the Irish constitution. Although the right had previously been recognized in dicta of the High Court,²⁶ this case presented the first opportunity for the Supreme Court to consider this issue. The Court ultimately concluded that the right did not warrant recognition, primarily on the basis that its content and scope were “impermissibly vague.”²⁷

This finding may have resulted from the way in which the case was argued. When asked to explain how the right to a healthy environment affected the case, counsel for FIE conceded that it would not add anything beyond the protection offered by the rights to life and bodily integrity.²⁸ Similarly, when pressed regarding the precise content of the right, counsel did not rely on the extensive body of jurisprudence from jurisdictions that had considered this issue, instead referring to the relationship between human dignity and a healthy environment and suggesting that the right covers much of the same ground as the rights to life and bodily integrity. While this was likely a strategic decision informed by a desire to rely on accepted rights in a historically conservative court, these submissions enabled the court to easily sidestep recognizing the right. In outlining its reasons for refusing to do so, the court observed that “the beginning and end of this argument stems from the acceptance by counsel for FIE that a right to a healthy environment, should it exist, would not add to the analysis in these proceedings, for it would not extend the rights relied on beyond the right to life and the right to bodily integrity whose existence is not doubted.”²⁹

Climate change litigants seeking recognition of the right to a healthy environment must therefore be cognizant of the need to articulate what the right entails and the specific impact that it will have in the case before the court. Jurisprudence of other courts concerning the right will assist in this task, as will the analytical reports regarding states’ human rights obligations in

²⁶ *Merriman v. Fingal County Council* [2017] IEHC 695 (H. Ct.) (Ir.).

²⁷ *FIE* Supreme Court decision (2020), above note 5, §8.11.

²⁸ *Ibid.* §8.10.

²⁹ *Ibid.*

relation to the environment developed by the UN Special Rapporteur on human rights and the environment.³⁰

More broadly, the court's decision regarding the right to a healthy environment raises the issue of legal innovation in climate change litigation. As Fisher and her co-authors have noted, climate change is a unique, polycentric problem that "requires a 'break' in the continuity of existing legal practices and doctrinal 'business as usual,'" particularly for adjudicative processes.³¹ In light of this challenge, litigants should not be reluctant to urge courts to innovate and develop the law in response to the threat posed by climate change. Where they do so, they should be ready to acknowledge that they are asking the bench to break new ground rather than work within the confines of existing doctrine. Such an approach will likely be met with strong resistance from judges and opposing parties, each of whom will raise arguments regarding the need for legal certainty and stability that are invariably used to justify adherence to precedent or existing practice.

But these arguments need to be responded to by cogent reasoning by way of rebuttal. To begin with, arguments in favor of legal certainty and stability are inherently grounded in a desire to uphold the rule of law. But the protection of fundamental human rights, the ability to obtain a remedy when harm is suffered, and the need for states to comply with international obligations are arguably equally important.³² When courts refuse to adapt legal doctrine in response to climate change, the risk of human rights violations increases, those who have suffered harm are left without access to a remedy, and states are permitted to disregard their climate commitments. Taken together, these outcomes seriously undermine the rule of law rather than maintain it, and litigants should not hesitate to draw the attention of judges to the practical consequences of their decisions. Moreover, the role of precedent in fostering legal certainty is often overstated. Both parties to any litigation will present the court with reams of authorities that they claim support their position and will often argue extensively over the correct interpretation of the same precedent, such that the final outcome can be impossible to predict. Litigants should

³⁰ See, e.g., John Knox and David Boyd, "Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment," UN Doc. A/73/188 (2018).

³¹ Elizabeth Fisher et al., "The Legally Disruptive Nature of Climate Change" (2017) 80 *Modern Law Review* 174.

³² See Tom Bingham, *The Rule of Law* (New York: Penguin Books, 2011), pp. 37–110.

therefore be prepared to argue that the proposition that legal certainty is guaranteed by respect for precedent is only a part of the overall picture.³³

It is also important to recall that respect for precedent is not intended to be absolute. Although the precise test for overruling precedent will vary and can change over time,³⁴ courts in many jurisdictions are reluctant to follow existing precedent if there has been a change in underlying social conditions.³⁵ Given that an adequate response to the climate crisis will require societal transformation on a historically unprecedented scale,³⁶ climate change is arguably a paradigmatic example of an underlying social condition that justifies departure from precedent. In making this argument, litigants can point to cases where courts have developed legal doctrine in response to changing attitudes toward nonmarital relationships and homosexuality³⁷ or formulated a new test for causation in asbestos litigation.³⁸ Historical examples of instances where courts played an active role in protecting the environment may assist in persuading courts to take a more active role.³⁹ Because most human rights-based cases in domestic legal systems will arise in a constitutional context, arguments that suggest that courts should give less weight to constitutional precedents may also be effective.⁴⁰

The Irish court's refusal to recognize the right to a healthy environment is perhaps the most retrogressive aspect of its decision, and it is a clear example of a court failing to take the opportunity to develop legal doctrine in response

³³ See E. W. Thomas, "A Return to Principle in Judicial Reasoning and an Acclamation of Judicial Autonomy" (1993) 23 *Victoria University of Wellington Law Review* 11.

³⁴ See James Lee, "Fides et Ratio: Precedent in the Early Jurisprudence of the United Kingdom Supreme Court" (2015) 21 *European Journal of Current Legal Issues*, <<https://webjcli.org/index.php/webjcli/article/view/410/521>>; see also William Eskridge Jr., "Overruling Statutory Precedents" (1988) 76 *Georgetown Law Journal* 1361; see also Matthew Harding and Ian Malkin, "Overruling in the High Court of Australia in Common Law Cases" (2010) 34 *Melbourne University Law Review* 519.

³⁵ See James Moore and Robert Oglebay, "The Supreme Court, Stare Decisis, and the Law of the Case" (1943) 21 *Texas Law Review* 514; see also Benjamin Cardozo, *Nature of the Judicial Process* (New Haven: Yale University Press, 1921), pp. 150–52.

³⁶ See Philip Alston, "Report of the Special Rapporteur on Extreme Poverty and Human Rights," UN Doc. A/HRC/41/39 at ¶7 (2019).

³⁷ See Michael Willemssen, "Justice Tobriner and the Tolerance of Evolving Lifestyles: Adapting the Law to Social Change" (1977) 29 *Hastings Law Journal* 73.

³⁸ See Steven Wasserman et al., "Asbestos Litigation in California: Can It Change for the Better?" (2007) 34 *Pepperdine Law Review* 893.

³⁹ See *Attorney General v. Birmingham Corporation* [1858] 4 K&J 528 and *MC Mehta v. Union of India* [1998] 6 SC 63, cited in Lord Carnwath, "Judges and the Common Laws of the Environment: At Home and Abroad" (2014) 26 *Journal of Environmental Law* 177.

⁴⁰ See Oona Hathaway, "Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System" (2001) 86 *Iowa Law Review* 656.

to climate change. The judgment provides a timely reminder of the need for litigants to make arguments that outline why doing so is both necessary and especially appropriate in climate change litigation.

16.3 STANDING IN CLIMATE CHANGE LITIGATION

Contrary to the approach adopted in the High Court, the Supreme Court held that FIE did not enjoy standing to bring rights-based claims, in essence because it is a corporate entity that does not itself enjoy the protection of the rights it sought to assert.⁴¹

As a preliminary matter, the court's holding highlights the importance of choosing prospective plaintiffs carefully in rights-based climate litigation. Although some prominent environmental NGOs have been able to commence such cases,⁴² others have suffered a fate similar to FIE.⁴³ Environmental organizations contemplating climate litigation should therefore give careful consideration to naming individuals as plaintiffs, particularly if there is any risk that courts will construe the applicable standing rules unfavorably.

Even if an appropriate individual can be found, there is still a risk that standing will be an issue for those seeking to initiate rights-based litigation in common law jurisdictions. This is because public law standing rules tend to require plaintiffs to show that they have suffered a particularized, concrete injury in order to challenge the relevant law or government action. Given those most likely to be affected by climate change have often not yet suffered any particular harm or loss, these rules can prove to be an insurmountable barrier. Litigants might therefore consider arguing in favor of a more progressive approach to standing in climate cases. Several specific arguments can be made.

First, a more liberal standing regime in climate cases will serve to uphold the rule of law by ensuring that those most affected are able to challenge inadequate government action that is almost certain to result in a violation of

⁴¹ See *FIE* Supreme Court decision (2020), above note 5 at §7.22.

⁴² See HR 20 december 2019, 41 NJ 2020, m.nt. J.S. (Urgenda/Netherlands) (Neth.) (“Urgenda v. Netherlands”); *Greenpeace Nordic Ass’n v. Ministry of Petroleum and Energy* [2018] Case No. 16-166674TVI-OTIR/06.

⁴³ See “Tout comprendre sur l’audience de l’Affaire du Siècle au tribunal,” *L’Affaire du Siècle*, January 19, 2021, <<https://laffairedu siecle.net/tout-comprendre-sur-laudience-de-laffaire-du-siecle-au-tribunal/>>.

their rights in the future.⁴⁴ In the absence of such a regime, there is a high likelihood that such groups will be left without a remedy until it is too late to be meaningful. As Limon argues, legal disagreements regarding links between global warming and irreparable harm are unlikely to convince “the Inuit of North America who every year see their lands eroding, their houses subsiding, their food sources disappearing.”⁴⁵ Lord Diplock’s famous observation that “it would be a grave lacuna in our system of public law if a pressure group . . . or even a single public spirited taxpayer, were prevented by outdated technical rules of locus standi from bringing the matter to the attention of the court to vindicate the rule of law and get the unlawful conduct stopped”⁴⁶ would likely carry particular weight with a court in this context.

Second, traditional approaches to standing are particularly harmful to those most likely to be affected by climate change, who often lack the time, resources, or expertise necessary to commence litigation.⁴⁷ A liberal standing regime would enable NGOs to litigate on behalf of those who are not well placed to do so themselves. These organizations will be better equipped to present relevant arguments to a court and will have more resources and greater access to experts who can provide the necessary expert evidence.

Third, many jurisdictions have already moved toward open standing regimes, particularly in relation to environmental cases. In Canada, rules permit public interest standing,⁴⁸ while in the United Kingdom, courts are assumed to have a particular responsibility to develop standing principles that meet the needs of modern society.⁴⁹ The Philippines Supreme Court has authorized citizen suits brought by any citizen on behalf of others, and similar approaches have been adopted in Latin America, where both constitutional and statutory provisions allow courts to expand standing in environmental cases to those who cannot prove a direct injury.⁵⁰

⁴⁴ See Elizabeth Fisher and Jeremy Kirk, “Still Standing: An Argument for Open Standing in Australia and England” (1997) 71 *Australian Law Journal* 374.

⁴⁵ Marc Limon, “Human Rights and Climate Change: Constructing a Case for Political Action” (2009) 33 *Harvard Environmental Law Review* 468.

⁴⁶ *R (NFSE) v. IRC* [1982] AC 617, at 644.

⁴⁷ See Fisher and Kirk, “Still Standing: An Argument for Open Standing in Australia and England,” above note 44 at 375.

⁴⁸ See Gwendolyn McKee, “Standing on a Spectrum: Third Party Standing in the United States, Canada, and Australia” *Barry Law Review* 16(1) (2011) 129.

⁴⁹ See *AXA General Insurance Ltd v. HM Advocate* [2012] 1 AC 868.

⁵⁰ See Erin Daly and James May, *Global Environmental Constitutionalism* (Cambridge: Cambridge University Press, 2014), p. 131.

Fourth, open standing may improve government decision-making in relation to climate change.⁵¹ If members of the legislature and the executive know that courts will scrutinize their emissions-related decisions, they may be motivated to take more effective action.

Each of these arguments is likely to be met with the familiar response that an open standing regime would be contrary to the separation of powers. But courts can use a number of legal mechanisms to address these concerns, including the political question doctrine,⁵² adverse costs orders, and their inherent power to dismiss claims that are vexatious or an abuse of process.⁵³ They can also develop criteria for assessing the bona fides of NGOs taking advantage of open standing rules, including by evaluating their qualifications and experience and requiring them to file evidence that demonstrates that they have a mandate from those they claim to represent.⁵⁴ Moreover, open standing may actually enhance rather than diminish the democratic legitimacy of judicial oversight of legislative and executive action in relation to climate change. Democratic governance is predicated on the notion that people have the right to participate in public life and the way in which society is governed.⁵⁵ Granting standing in climate cases can facilitate this process by allowing citizens to participate in important decisions regarding an existential threat to society, thereby increasing the range of inputs into democratic decision-making processes concerning this issue. This is particularly pertinent in the context of modern democracies, as traditional assumptions that legislative bodies are truly representative are undermined by the pervasive influence of lobbyists and the level of dysfunction currently exhibited by many legislatures.⁵⁶

The oft-raised argument that standing rules prevent courts from considering hypothetical legal arguments is also less convincing in the context of climate change. Courts can require parties to file evidence that provides factual underpinnings for their legal arguments and, due to the rise of class action

⁵¹ See Fisher and Kirk, "Still Standing: An Argument for Open Standing in Australia and England," above note 44 at 375.

⁵² See Aparna Polavarapu, "Expanding Standing to Develop Democracy: Third-Party Public Interest Standing as a Tool for Emerging Democracies" (2016) 41 *Yale Journal of International Law* 140.

⁵³ See Matthew Groves, "The Evolution and Reform of Standing in Australian Administrative Law" (2016) 44 *Federal Law Review* 168.

⁵⁴ See Peter Cane, "Open Standing and the Role of Courts in a Democratic Society" (1999) 20 *Singapore Law Review* 44.

⁵⁵ See Fisher and Kirk, "Still Standing: An Argument for Open Standing in Australia and England," above note 44 at 381.

⁵⁶ See Polavarapu, "Expanding Standing," above note 52 at 139.

regimes in many jurisdictions, can draw on a growing body of jurisprudence that analyzes how to make use of common evidence to prove harm to a wider group of people.

Strict standing rules are, in at least some respects, a relic of an earlier era. Climate change challenges the foundations on which these rules are based and necessitates a new and more responsive approach from courts. Litigants in future cases should not hesitate to make arguments that outline why such an approach is appropriate.

16.4 CONCLUSION

FIE is yet another example of a failed attempt to have courts declare inadequate climate strategies a violation of human rights in the way that the *Urgenda* litigants achieved. However, this Irish judgment yields some important lessons. *FIE*'s success in having the Plan quashed is undoubtedly a victory to be celebrated. But the multiple ways in which the Supreme Court's judgment fails to engage, or takes steps backward, with respect to the human rights arguments leave much to be desired. This disappointing result raises questions as to whether litigants should adopt a "safer" approach of pursuing many grounds for their claims; it provides lessons as to how litigants might approach issues such as standing and the right to a healthy environment; it highlights the urgency of making strategic use of regional and international mechanisms in addition to domestic courts for climate cases; and it lays bare the need for litigants to be up front about the necessity of innovation in legal reasoning when it comes to climate change.

Closing the Supply-Side Accountability Gap through Climate Litigation

MICHELLE JONKER-ARGUETA*

Governments are planning to produce about 50% more fossil fuels by 2030 than would be consistent with a 2°C pathway and 120% more than would be consistent with a 1.5°C pathway.¹

Aren't They Accountable?

Fossil fuel suppliers² have consistently escaped accountability for climate change by leaning on domestic policies void of supply-side measures to mitigate climate pollution. They also hide behind a wall of impunity and pose legal defenses that presuppose a fossil fuel market driven by demand only. These actions defy basic economic principles and climate science and contravene customary international law, human rights obligations, and the climate change legal regime.

Despite the scientific consensus that climate change is the existential crisis of our time,³ governments continue to push for the expansion of fossil fuel exploration, extraction, and production. These measures not only fail to address the crisis but also impede meaningful action to curb greenhouse gas emissions and safeguard the human rights at stake, including the right to life, the right to health, the right to a healthy environment, and intergenerational rights.

* The author expresses her gratitude to Greenpeace International General Counsel, Kristin Casper, for her input and guidance.

¹ Joana Depledge et al. (eds.), "The Production Gap: The Discrepancy between countries' planned fossil fuel production and global production levels consistent with limiting warming to 1.5°C or 2°C" (2019) Stockholm Environment Institute et al., <<http://productiongap.org/>>.

² The term "fossil fuel suppliers" encompasses the parties that explore, extract, produce, and supply fossil fuels.

³ See "Carbon Offsets Are Not Our Get-out-of-jail Free Card", UNEP, June 10, 2019.

As the youth rise in protest⁴ and activism⁵ to take back their future, courts around the world are being approached to help fill the impunity gap and close the convenient loopholes created by political compromise and corporate lobbies. Despite significant setbacks in court, some rulings are contributing to real progress toward achieving this goal. The latest of such cases is from the Supreme Court in Norway. Although it was a loss for the plaintiffs, the decision is in some respects a step in the right direction and a warning to the fossil fuel industry. This is because, for the first time, the Supreme Court held that greenhouse gas emissions from Norwegian fossil fuel products that are combusted outside its borders (“exported emissions”) must be taken into account when analyzing the climate impacts of fossil fuel extraction and production.

This chapter discusses the efforts to close the supply-side accountability gap using as an example the Norwegian climate case (*People v. Arctic Oil*). First, it provides an overview of the case for supplier accountability for exported emissions, referring to previous work by analysts and legal scholars and to jurisprudence from around the world. Then, it examines the push for supply-side accountability in the context of the *People v. Arctic Oil* case and other cases. Finally, the chapter concludes with an analysis of principles that can be applied in legal battlegrounds and beyond.

17.1 THE CASE FOR SUPPLY-SIDE ACCOUNTABILITY

This section examines the supply-side accountability gap and why it matters. Climate science has confirmed that anthropogenic greenhouse gas emissions cause climate change. The Intergovernmental Panel on Climate Change (IPCC) has found that “human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a *likely* range of 0.8°C to 1.2°C. Global warming is *likely* to reach 1.5°C between 2030 and 2052 if it continues to increase at current rate. (*high confidence*).”⁶ Already, at the current level of warming, climate-fueled extreme weather events are negatively affecting human health, taking human lives, and causing serious and irreversible harm to the environment.

⁴ See, e.g., Shuk-Wah Chung, “5 Young Activists That Have Inspired Us This Year,” Greenpeace, December 20, 2018.

⁵ See Allegra Kirkland, “Two Generations of Climate Activists Dish about Making Powerful People Uncomfortable,” *Teen Vogue*, September 27, 2019.

⁶ Valérie Masson-Delmotte et al., “Global Warming of 1.5°C: Summary for Policymakers” (2018) Intergovernmental Panel on Climate Change (IPCC) (hereinafter “IPCC 1.5°C Report (2018)” (emphasis in original)).

Because of the seriousness of the risks associated with climate change and the harms that are already occurring, urgent action is needed to cut carbon emissions. However, current actions (which are “overwhelmingly” focused on addressing fossil fuel demand)⁷ are not enough. The UNEP Emissions Gap Report has found year after year that current actions are insufficient as emissions have consistently risen – “even if all unconditional Nationally Determined Contributions (NDCs) under the Paris Agreement are implemented, we are still on course for a 3.2°C temperature rise.”⁸

More fossil fuels have already been found than the world can afford to burn.⁹ “Carbon emissions from oil and gas in *operating* fields and mines globally would push the world beyond 1.5C of warming and make it impossible to meet our global obligations under the Paris Agreement . . . even if global coal use were phased out overnight, and cement emissions were drastically reduced.”¹⁰ Fossil fuel supplying governments continue to expand the exploration, extraction, and production of fossil fuels despite the fact that these actions do not comply with the goals of the Paris Agreement.¹¹

This difference between planned fossil fuel production and the climate goals is called the production gap.¹² According to the UN, “in aggregate, countries’ planned fossil fuel production by 2030 will lead to emissions . . . that [are] 53% more than would be consistent with a 2C pathway and . . . 120% more than would be consistent with a 1.5C pathway. This gap widens significantly by 2040.”¹³ Analysts expect that, in 2040, “production levels [will] reach 110% and 210% higher than those consistent with the 2C and 1.5C pathways.”¹⁴ This global production gap is even larger than the already significant global emissions gap because curbing fossil fuel production continues to go unaddressed in both the legislature and the judiciary.¹⁵ This is the supply-side accountability gap.

⁷ See Fergus Green and Richard Denniss, “Cutting with Both Arms of the Scissors: The Economic and Political Case for Restrictive Supply-Side Climate Policies” (2018) 150 *Climatic Change* 73.

⁸ “The Emissions Gap Report 2019” (2019) United Nations Environment Programme.

⁹ *Ibid.* 8 (internal citations omitted).

¹⁰ Jeff Gailus et al., “Oil, Gas and the Climate: An Analysis of Oil and Gas Industry Plans for Expansion and Compatibility with Global Emissions Limits” (2019) Global Oil and Gas Network.

¹¹ Greg Muttitt and Sivan Kartha, “Equity, Climate Justice and Fossil Fuel Extraction: Principles for a Managed Phase Out” (2020) 20 *Climate Policy*.

¹² See Depledge et al. (eds.), “The Production Gap,” above note 1 at 13.

¹³ *Ibid.* at 4.

¹⁴ *Ibid.* at 14.

¹⁵ See *ibid.* at 4; see also Muttitt and Kartha, “Equity, Climate Justice and Fossil Fuel Extraction,” above note 11.

In this lacuna in accountability, every major international oil company has approved “new oil and/or gas projects that are not Paris Agreement compliant.”¹⁶ Energy analysts at the UN “predict that investment in fossil fuel exploration, extraction and delivery infrastructure could remain at about USD 1 trillion annually through 2040.”¹⁷ As a result of increased investment, “global annual oil and gas production is on a trajectory to rise 7% between 2019 and 2024.”¹⁸

It is now clear that the demand-side focus of policymakers is not generating the reductions in greenhouse gas emissions needed to avoid the worst impacts of climate change, and the lack of supply-side accountability is only making the situation more dire. If industry expansion were stopped, oil and gas production would fall by 13 percent in five years and 30 percent in ten years.¹⁹

As more money and resources are poured into fossil fuel infrastructure, fossil fuel prices decrease, consumers become “hooked,” different parts of society become “deeply entangled” in the fossil fuel economy and, consequently, emission reductions are harder to achieve.²⁰ This lock-in effect is evident when government “plan[s] and projections for fossil fuel production do not align with climate ambitions.”²¹ Supply-side policies “could allow for greater emission reductions at the same (or lower) cost than demand-side policies alone. They could help reduce carbon lock-in effects, making it easier for lower-carbon alternatives to compete with fossil fuels.”²²

In the case of Norway, 95 percent of the emissions generated by Norwegian fossil fuels occur abroad.²³ These emissions are what are called “exported emissions” or “extraction-based emissions,” and they are not taken into account when discussing Norwegian “climate leadership.” It is time to address the drill-rig-sized elephant in the room.

¹⁶ Jeff Gailus et al., “Oil, Gas and the Climate,” above note 10 at 5.

¹⁷ Depledge et al. (eds.), “The Production Gap,” above note 1 at 8 (internal citations omitted).

¹⁸ Jeff Gailus et al., “Oil, Gas and the Climate,” above note 10 at 4 (internal citations omitted).

¹⁹ See *ibid.* at 11.

²⁰ See Depledge et al. (eds.), “The Production Gap,” above note 1 at 13.

²¹ *Ibid.*

²² Michael Lazarous et al., “Supply-Side Climate Policy: The Road Less Taken” (2015) Stockholm Environment Institute Working Paper No. 2015-13.

²³ The Court of Appeals in *People v. Arctic Oil* acknowledged that “it is estimated that up to 5 per cent of the emissions occur in connection with the production and at least 95 per cent in connection with the combustion.” *Föreningen Greenpeace Norden v. Norway*, 18-060499ASD-BORG/3 at 29 (23.01.2020) (Borgarting Lagmannsrett).

17.2 THE NORWEGIAN PARADOX

The global carbon emissions from combusting fossil fuels extracted in Norway are about ten times higher than the total carbon emissions generated within Norway.²⁴ Norway is the world's seventh largest exporter of greenhouse gas emissions.²⁵ In 2016, then-Norwegian Climate and Energy Minister Vidar Helgesen said that "as long as the world needs oil and gas, we will provide it,"²⁶ a position reiterated throughout the oral arguments of the state in the *People v. Arctic Oil* case discussed below.

At the same time that Norway proclaims its credentials internationally as a leader in the fight against climate change,²⁷ analysis by the UN Special Rapporteur for human rights and the environment and conclusions by treaty bodies CESCR and CEDAW have found that further arctic oil exploration in Norway is not consistent with its human rights obligations.²⁸

As the Norwegian government embarks on new fossil fuel exploration at a time in which governments have found more oil than they can afford to consume if they are to achieve the Paris temperature targets, the question arises: aren't major exporters of greenhouse gas emissions accountable? With the support of a large coalition of civil society members, co-plaintiffs Nature and Youth and Greenpeace Nordic (together with interveners Grandparents Climate Campaign and Friends of the Earth Norway) sued the Norwegian government, taking their case all the way to the Supreme Court and making progress toward closing the supply-side accountability gap.

²⁴ See Taran Fæhn et al., "Climate Policies in a Fossil Fuel Producing Country: Demand versus Supply Side Policies" (2017) 38 *Energy Journal* 77.

²⁵ See Hannah McKinnon et al., "The Sky's Limit Norway: Why Norway Should Lead the Way in a Managed Decline of Oil and Gas extraction" (2017) Oil Change International, <<http://priceofoil.org/content/uploads/2017/08/The-Skys-Limit-Norway-1.pdf>>.

²⁶ Mark Lewis, "Paradox Nation: Norway, a Climate Leader Making Money on Oil," AP, August 1, 2016.

²⁷ See Kelly Eanna, "Norway to Focus Its Aid Budget on Climate Change," *Science Business*, June 20, 2019.

²⁸ See "Norway Must Resolve Climate Change and Human Rights Paradox, UN Expert Says", United Nations Human Rights, September 23, 2019, <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25038&LangID=E>>. This view was reiterated in the Special Rapporteur's final visit report, see Special Rapporteur on human rights and the environment, "Visit to Norway: Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment," UN Doc. A/HRC/43/53/Add.2 (2020); see also UN Committee on Economic, Social and Cultural Rights Concluding Observations, UN Doc. E/C.12/NOR/CO/6 (2020); see also UN Committee on the Elimination of Discrimination against Women, Concluding observations on the ninth periodic report of Norway, UN Doc. CEDAW/C/NOR/CO/9 (2017).

17.3 THE PEOPLE V. ARCTIC OIL CASE

The regulation of petroleum activities in Norway is divided into three stages: (1) the opening of a field, (2) the exploration phase, and (3) the production phase.²⁹ In October 2016, the *People v. Arctic Oil* case was filed against the Norwegian government for granting new oil drilling licenses (exploration phase) for the first time in twenty years in a newly opened area in the Arctic.³⁰ The plaintiffs argued that this drilling violates the right to a healthy environment enshrined in Article 112 of the Norwegian Constitution and contravenes Norway's responsibilities under international law. The plaintiffs claimed that the licensing decision facilitates potentially significant and long-term increases in the combustion of fossil fuels and emission of greenhouse gases, threatening to make a significant contribution to climate change. As the IPCC Special Report reaffirms, global temperature increases of over 1.5 degrees Celsius will have catastrophic impacts on local and global ecosystems through, inter alia, rising sea levels, extreme weather events, and biodiversity loss.³¹

17.3.1 *The Case before the Lower Courts in Norway*

At first instance, the Oslo District Court found that the right to a healthy environment was constitutionally protected but that the state had not infringed on this right. The District Court stated that the Norwegian state is not responsible for the carbon emissions connected to the burning of Norwegian oil and gas outside of Norway. The Court of Appeal in Norway upheld these rulings, except for one important finding. In establishing whether the government has infringed on the right to a healthy environment,

²⁹ The unofficial translation of the Supreme Court judgment forms the basis for the Supreme Court citations in this chapter, available at: <https://www.xn--klimasksm1-95a8t.no/wp-content/uploads/2021/01/judgement_translated.pdf>. See *Nature and Youth et al. v. Ministry for Petroleum and Energy*, HR-2020-2472-P at ¶65 (December 22, 2020) (Noregs Hosterett) (hereinafter "*People v. Arctic Oil* Supreme Court judgment").

³⁰ The unofficial translation of the Court of Appeal's judgment in *People v. Arctic Oil* forms the basis of the Court of Appeal citations in this chapter. Available at: <https://www.xn--klimasksm1-95a8t.no/wp-content/uploads/2019/10/judgement_Peoplevs_ArcticOil_Appeal_Jan2020.pdf>. *Föreningen Greenpeace Norden v. Norway* ("*Nature and Youth et al. v. Ministry for Petroleum and Energy*"), 18-060499ASD-BORG/3 at 29 (January 23, 2020) (Borgarting Lagmannsrett) (hereinafter "*People v. Arctic Oil* Appeal judgment"). The authoritative, Norwegian version can be found here: <<https://www.xn--klimasksm1-95a8t.no/wp-content/uploads/2020/01/dom.pdf>>.

³¹ See Masson-Delmotte et al., "Global Warming of 1.5°C: Summary for Policymakers," above note 6.

all greenhouse gas emissions from Norwegian oil exported abroad must be taken into account.³² Norway is responsible for these emissions after export because there is a “clear relationship between the production and the combustion” and because the concern for future generations necessitates it.³³ The Court of Appeal found that Article 112 also reinforces Norwegian regulations on impact assessments, which include positive, negative, direct, indirect, and long-term effects, stating that “emissions of greenhouse gases after export of oil and gas fall under this.”³⁴

17.3.2 *The Norwegian Supreme Court Judgment*

Sitting in plenary (with fifteen voting justices), the Supreme Court heard oral arguments over seven days, via video conference due to the COVID-19 pandemic, and rendered its judgment on December 20, 2020. In its 11–4 ruling against the plaintiffs, the Supreme Court left the door open for supply-side accountability, both in its majority and minority opinion.

Unlike the lower courts, the Supreme Court held that the right to a healthy environment enshrined in Article 112 was not exactly a right but rather a construction between a right and a principle. To be sure, the Article contains positive and negative obligations of the state and has legal substance, but it is not as enforceable as a right; it’s more akin to a legal principle. The Article imposes duties on the state to take measures to manage resources for the long-term in a comprehensive manner.³⁵ The Supreme Court found that Article 112 can be invoked “as an element in the statutory interpretation and as a mandatory consideration in the exercise of discretion”³⁶ before the courts when addressing environmental problems for which legislators have not taken a position. If the Parliament has considered a matter, Article 112 “must be read . . . as a safety valve,” and courts can set aside a decision if the Parliament has “grossly disregarded” its duties to take measures under Article 112. “The threshold is consequently very high.”³⁷

The Supreme Court found that “there is no basis for climate falling outside of the scope for application for article 112 of the Constitution”³⁸ and that there should be a combined assessment of the specific licensing decision together

³² See *People v. Arctic Oil* Appeal judgment, above note 30 at 21.

³³ *Ibid.*

³⁴ *Ibid.* at 41.

³⁵ See *People v. Arctic Oil* Supreme Court judgment, above note 29 at ¶¶143 & 87.

³⁶ *People v. Arctic Oil* Supreme Court judgment, above note 19 at ¶145.

³⁷ *Ibid.* at ¶142.

³⁸ *Ibid.* at ¶147.

with other emissions. “If activities abroad that Norwegian authorities have directly influenced or could take measures against cause harm in Norway, this must be capable of being included through the use of Article 112.”³⁹ This includes emissions generated by the combustion of Norwegian gas or oil abroad.⁴⁰

Although it is estimated that 95 percent of greenhouse gas emissions from Norwegian oil are generated abroad after export, these were not directly assessed in the licensing decision issues.⁴¹ Although there are no figures on the extent to which emissions will lead to harmful effects in Norway, “there is no doubt that global emissions will also affect Norway.”⁴² Nevertheless, the Supreme Court ruled that constitutional rights were not infringed, due to the uncertainty of the information and the timing and scope of the assessment.

The Supreme Court translated the uncertainty on the amount of oil and gas that would be found into an uncertainty about climate impacts.⁴³ As such, this impact assessment could be done at the approval of the extraction stage (“PDO” stage), which the Supreme Court concluded is the “most suitable and appropriate time.”⁴⁴ At that point, the assessment of “effects of petroleum extraction in the environment, including combustion of emissions after export” could be conducted.⁴⁵ The Supreme Court held that there will be no environmental impacts until there are commercially exploitable discoveries.⁴⁶ “If the situation at the production stage has become such that approving the production will be contrary to [a]rticle 112 of the Constitution, the authorities will have both the power and the duty not to approve the plan.”⁴⁷

The Supreme Court cited the 2020 European Court of Justice (CJEU) decision in *A. and Others* (C-24/19), which found a violation of the EU Planning Directive and held that “member states have a duty to ensure that environmental assessments are made in line with the Directive” and that national authorities and courts have a duty to intervene.⁴⁸ The Supreme Court held that because the opening decision and licensing decision have

³⁹ Ibid. at ¶149.

⁴⁰ See *ibid.*

⁴¹ See *ibid.* at ¶208.

⁴² Ibid. at ¶155.

⁴³ See *ibid.* at ¶¶216 and 223.

⁴⁴ Ibid. at ¶216.

⁴⁵ Ibid. at ¶¶216 and 191.

⁴⁶ See *ibid.* at ¶216.

⁴⁷ Ibid. at ¶222.

⁴⁸ Ibid. at ¶244.

not “led to emissions of greenhouse gases,” the authorities “will be able to correct – ‘remedy’ – . . . any deficient assessment.”⁴⁹

The majority opinion of the Supreme Court thusly concluded that there were no errors that would invalidate the licenses.⁵⁰

The dissent reached a different conclusion on the uncertainty of information and timing and scope of the impact assessment. It found that the licenses challenged on these procedural grounds were invalid due to the lack of a climate impact assessment.⁵¹ Moreover, despite the uncertainty surrounding the petroleum resources,⁵² the dissent found that the law requires the assessment to be “done as early as possible in the process.”⁵³

The dissenting opinion agreed with the majority that the procedural rules in petroleum legislation must be assessed in light of Article 112 but went further than the majority, stating that the “impact assessment is meant to ensure information for – and create a basis for participation by the population.”⁵⁴ The dissent placed a greater weight on the fact that political discussions in society and in government could have been different if an impact assessment and evaluation of the climate impacts from exported emissions had been done, even if this had already been discussed at a general level. According to the dissenting opinion, “there is little satisfaction in speculating on how political processes could and would have run, if the impact assessment had looked differently.”⁵⁵

Ultimately, through this case, progress has been made in addressing exported emissions in order to hold fossil fuel suppliers accountable for the climate harms.

Now that the case against Norway for an expansion of Arctic fossil fuel production continues before the European Court of Human Rights,⁵⁶ the Norwegian State has to answer the question as to whether the

⁴⁹ Ibid. at ¶¶244 and 246.

⁵⁰ See *ibid.* at ¶250.

⁵¹ Ibid. at ¶258.

⁵² See ¶¶259–88.

⁵³ Ibid. at ¶269.

⁵⁴ Ibid. at ¶255.

⁵⁵ Ibid. at ¶278.

⁵⁶ The case against an expansion of fossil fuels production in the Arctic continues. Greenpeace Nordic, Nature and Youth and six individual applicants have filed an application against the Norwegian government before the European Court of Human Rights. Particularly the delay in the assessment of climate impacts, in their view, gives rise to an Article 14 discrimination claim. See <<https://www.greenpeace.org/norway/people-vs-arctic-oil/>>.

postponement of the assessment of environmental impacts is compatible with the convention.⁵⁷

17.4 OTHER JURISDICTIONS CLOSING THE SUPPLY-SIDE ACCOUNTABILITY GAP

Several courts around the world have found that the climate effects of a fossil fuel project (in terms of greenhouse gas emissions) should be taken into account in the environmental impact assessment stage, which would, as a result, invalidate some projects.⁵⁸ Other jurisdictions have also included exported emissions in their analyses. This could mean that the judiciary can play a more active role in bridging this accountability gap. In the 2006 case *Gray v. Minister for Planning*, an Australian Federal Court rejected the environmental impact assessment for a coal mine slated for development in Anvil Hill, which would have produced coal for coal-fired power stations in Australia and overseas.⁵⁹ It held that the environmental impact assessment for the coal mine failed to take into account the potential greenhouse gas emissions that stemmed from the burning of coal by third parties outside of the control of the coal mine proponents. The court found that there was a sufficient causal link between the coal produced, the combustion of coal abroad, the release of greenhouse gases, and the increase in global warming.

This court also found that the failure to consider these emissions constitutes a breach of the legal requirement to take into account the principle of intergenerational equity.⁶⁰

In 2019, in the case *Gloucester Resources Limited v. Minister for Planning*, the court specifically held that combustion emissions from exported resources

⁵⁷ “Assuming that the purpose of issuing production licences is ultimately the subsequent extraction of oil and gas: to what degree – factually and legally – may the applicant organisations’ arguments concerning the environmental consequences of any specific petroleum production and extraction in continuation of the licences granted in the decision reviewed by the domestic courts realistically be taken into account at any later stages of the administrative process relating to production (such as in connection with approval of plans for development and operation/exploitation of petroleum deposits under section 4-2 of the Petroleum Act)? Will the scope, depth, quality and efficiency of any such subsequent assessment be such as to render unnecessary under the Convention an assessment, prior to the granting of the licences, of the environmental consequences of future extraction of oil and gas?” *Greenpeace Nordic and others v. Norway*, Application no. 34068/21. See <<https://hudoc.echr.coe.int/eng/#/%22itemid%22:%22001-214943%22>>.

⁵⁸ See, e.g. *Earthlife Africa Johannesburg v. Minister of Env'tl. Affairs* 2017 (2) All SA 519 (GP) (S. Afr.) at ¶188.

⁵⁹ See *Gray v. The Minister for Planning and Ors* [2006] NSWLEC 720 (Austl.).

⁶⁰ See *ibid.* at ¶126.

must be included in assessments made under Australian law.⁶¹ “In short, an open cut coal mine in this part of the Gloucester valley would be in the wrong place at the wrong time Wrong time because the greenhouse gas emissions (GHG) of the coal mine and its product will increase global total concentrations of GHGs at a time when what is now urgently needed, in order to meet generally agreed climate targets, is a rapid and deep decrease in GHG emissions.”⁶²

17.5 TWO PRINCIPLES TO CARRY BEYOND THE NORWEGIAN SUPREME COURT

As communities, campaigners, activists, and lawyers gear up for the next big fight to close the supply-side accountability gap, there are two principles to take beyond the Norwegian Supreme Court.

17.5.1 *There Is No Such Thing as Perfect*

Around the world, policymakers, industry lobbyists, and courts have for a long time accepted that climate pollution is predominately a demand-driven problem, and as such, reducing a particular fossil fuel supply project would not have an impact on the overall concentration of climate pollutants in the atmosphere. Perfect substitution, or the “market substitution assumption,” is the belief that if a fossil fuel project is rejected, another one will replace it and, as such, approving a project will have no consequence on the environment.⁶³ This assumption states that the rejection of a project will make no “material difference to global greenhouse gas emissions and resulting climate change” because the global demand will be met by another project elsewhere.⁶⁴ The market substitution assumption “allows responsibility for emissions to be continually avoided.”⁶⁵ This argument also “posits that the extraction of fossil fuels will not actually cause an increase in consumption, because the same quantity of the fuel would be produced elsewhere and eventually transported

⁶¹ See *Gloucester Resources Limited v. Minister for Planning* [2019] NSWLEC 7.

⁶² *Ibid.* at ¶699.

⁶³ See Justine Bell-James and Briana Collins, “If We Don’t Mine Coal, Someone Else Will: Debunking the Market Substitution Assumption in Queensland Climate Change Litigation” (2020) 37 *Environmental and Planning Law Journal* 167.

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

and consumed, even if the [government] agency did not approve the proposal at issue.”⁶⁶

This assumption forms the basis of the “drug dealer defense” in court and in the public eye and has been used by the fossil fuel industry, and often sponsored by governments, to escape moral and legal responsibility for creating and continuing to fuel and profit from the climate crisis. Those raising this defense argue that the supply of climate polluting energy sources will continue to flow from different sources, even if the emissions from a particular project are stopped. This, however, has been deemed by some analysts as “not a true comparison. A drug dealer cannot avoid criminal responsibility by arguing that, should they be charged and removed from the market, another drug dealer will take their place.”⁶⁷

The basis for this defense ignores any effect that the restriction of supply can have on price and, in turn, on demand. This perfect substitution argument “defies the basic economics of supply and demand. If there is less availab[ility] of a commodity – such as oil – its price will increase, meaning less of it will be consumed.”⁶⁸ When it comes to elasticity of supply – the ability of fossil fuel producers to increase extraction in response to an increase in prices – studies have shown that “for oil, each barrel left undeveloped in one region will lead to 0.2 to 0.6 barrels not consumed globally over the longer term.”⁶⁹

There are cases that acknowledge that perfect substitution cannot be assumed. In *WildEarth Guardians v. United States Forest Service et al.*, the District Court of Colorado dismissed arguments by the respondent agencies that there would be perfect substitution between coal provided by the contested mine and coal mined somewhere else.⁷⁰

In *Gloucester Resources Limited v. Minister for Planning*, the court found that there could be “no assumptions made that there would be market substitution by coal from new coal mines in other countries if the project were to be refused.”⁷¹ Chief Justice Preston referred to *WildEarth Guardians* and concluded that “the potential for a hypothetical but uncertain alternative development to cause the same unacceptable environmental impact is not a

⁶⁶ Michael Burger and Jessica Wentz, “Downstream and Upstream Greenhouse Gas Emissions: The Proper Scope of NEPA Review” (2017) 41 *Harvard Environmental Law Review* 109.

⁶⁷ Bell-James and Collins, “If We Don’t Mine Coal, Someone Else Will,” above note 61 at 184.

⁶⁸ “The Emissions Gap Report 2019” (2019) United Nations Environment Programme 50.

⁶⁹ *Ibid.* (internal citations omitted).

⁷⁰ See *WildEarth Guardians v. U.S. Forest Service*, 52 F. Supp.23d 1174 (D. Colo. 2014).

⁷¹ *Gloucester Resources Limited v. Minister for Planning* [2019] NSWLEC 7.

reason to approve a definite development that will certainly cause the unacceptable environmental impacts.”⁷²

In the *People v. Arctic Oil* case, the plaintiffs argued that what is known as “perfect substitution” cannot be assumed, citing several studies. Statistics Norway, for example, found that “only half of any reduction in production volume would be replaced by production in other places.”⁷³ The Stockholm Environmental Institute concluded that “when global oil production increases, so do oil consumption and overall CO₂ emissions.”⁷⁴ And Oil Change International showed that “by continuing to explore for and develop new reserves, Norway is forcing a more difficult transition on other countries (as well as itself).”⁷⁵

The Norwegian Supreme Court held that “the net effect of the combustion emissions is complex and controversial, as it is related to the global market and the competitive situation for oil and gas . . . Cuts on Norwegian oil production could be replaced by oil from other countries.”⁷⁶ Without discussing these studies, the court found that postponing the climate impact assessment to the PDO stage would be appropriate.

Echoing the words of a fictional character in Brian De Palma’s *Scarface* “never get high on your own supply,”⁷⁷ major fossil fuel exporting countries enact domestic climate-friendly policies while continuing to profit from feeding the world’s fossil fuel addiction through exports. Embedding a perfect substitution assumption in policy and in the judiciary would mean actively betting against the Paris Agreement.⁷⁸

17.5.2 *Betting against the Paris Agreement Is Betting against Ourselves*

International law supports the finding that supplier states are legally responsible for the greenhouse gas emissions stemming from the combustion of their fossil fuel products, even after export.

⁷² *Gloucester* at 545, cited in Bell-James and Collins, “If We Don’t Mine Coal, Someone Else Will,” above note 61 at 169.

⁷³ Taran Fæhn et. al, “Norsk olje- og gassproduksjon: Effekter på globale CO₂ -utslipp og energisituasjonen i lavinntektsland” (2013) Statistics Norway, <https://www.ssb.no/natur-og-miljo/artikler-og-publikasjoner/_attachment/133792?_ts=140969bb2e8>.

⁷⁴ Adrian Down, “Norwegian Oil Production and Keeping Global Warming “Well below 2°C” (2017) Stockholm Environmental Institute.

⁷⁵ McKinnon et al., “The Sky’s Limit Norway,” above note 25.

⁷⁶ *People v. Arctic Oil* Supreme Court judgment, above note 19 at ¶234.

⁷⁷ *Scarface* (Universal Pictures 1983).

⁷⁸ See Paris Agreement to the United Nations Framework Convention on Climate Change, Paris, December 12, 2015, TIAS No. 16-1104.

17.5.2.1 The No-Harm Principle

Established as a principle of customary international law by the International Court of Justice (ICJ) in the *Pulp Mills on the River Uruguay* judgment,⁷⁹ the no-harm principle provides that states have to exercise due diligence in preventing harm by taking all measures possible to reduce the risk of significant transboundary harm.⁸⁰ With respect to the climate change regime, the no-harm principle is embodied in the preamble to the UNFCCC. Legal scholars have also argued that this level of due diligence is found in the goals of the Paris Agreement.

17.5.2.2 The Paris Agreement

On December 12, 2015, parties to the United Nations Framework Convention on Climate Change (UNFCCC) reached an agreement to “strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.”⁸¹ The Paris Agreement sets out governmental duties in curbing greenhouse gas emissions and combating climate change. The Paris Agreement preamble acknowledges that “climate change is a common concern of humankind” and places the duty on developed nations to “continue taking the lead by undertaking economy-wide absolute emission reduction targets.” In addition, the principle of common but differentiated responsibilities is enshrined in the Agreement.⁸²

Analysts believe that “achieving the Paris Agreement goals entails a rapid phase out of fossil fuel extraction, and a dramatic turn from current patterns of investment, policy and subsidies.”⁸³ Efforts to further expand fossil fuel exploration, extraction, and production is therefore not only inconsistent with the Paris Agreement, it also contravenes its very purpose and specific terms.

⁷⁹ See *Pulp Mills on the River Uruguay (Argentina v. Uruguay)* [2010] ICJ Reports 2010, <<https://www.icj-cij.org/public/files/case-related/135/135-20100420-JUD-01-00-EN.pdf>>.

⁸⁰ See *ibid.* at ¶¶101 and 187.

⁸¹ “What Is the Paris Agreement?,” United Nations Climate Change, <<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>>.

⁸² Including in Articles 2.2, 4.3, and 4.19. See Paris Agreement to the United Nations Framework Convention on Climate Change, Paris, Arts. 2.2, 4.3, & 4.19, December 12, 2015, TIAS No. 16-1104.

⁸³ Muttit and Kartha, ‘Equity, Climate Justice and Fossil Fuel Extraction,’ above note 11 (internal citations omitted). See also Depledge et al. (eds.), ‘The Production Gap,’ above note 1 at 14 (internal citations omitted).

States have a duty of international cooperation to protect the human rights threatened by climate change.⁸⁴ This duty, along with the principle requiring due diligence to avoid causing transboundary harm and the need to achieve the Paris temperature targets, leads to the conclusion that major suppliers of fossil fuels need to take action to curb production.

Between signing and ratifying the Paris Agreement, the Norwegian government granted the licenses that were the subject of litigation in the *People v. Arctic Oil* case. The Court of Appeal in the *People v. Arctic Oil* case rightly pointed out that the Paris Agreement did not prevent it from taking exported emissions into account in its analysis. Stronger still, as discussed above, the Paris Agreement actually supports considering exported emissions as a result of the principle of common but differentiated responsibilities. The Supreme Court majority and dissent opinions found that there is a duty to assess and evaluate climate impacts, including exported emissions – with the majority finding that it was appropriate to conduct this analysis in the future. However, as climate science indicates, time is not on our side.

Norway submitted an enhanced Paris Agreement target in February 2020, which “sets a target of reducing emissions by at least 50% and towards 55% below 1990 levels by 2030.”⁸⁵ The Norwegian government represents its actions as “doing *its fair share* for the global goal of keeping global warming below 2°C compared to pre-industrial levels. This is consistent with industrialised countries taking the lead.”⁸⁶ However, “current policies are projected to lead to emission levels of which [are only] 14-21% below emissions in 1990”⁸⁷ and there are no supply-side measures in their NDC. More alarming still, in the context of the COVID-19 pandemic, the Norwegian government doubled down on its bet against the Paris Agreement and presented an economic recovery package that “includes tax relief for oil and gas companies, which economists warn could lead to Norway extracting oil and gas *for a longer period than previously expected.*”⁸⁸

⁸⁴ See, e.g., United Nations Framework Convention on Climate Change, Preamble, Rio de Janeiro, May 9, 1992, 1771 UNTS 107; see also Paris Agreement, above note 76 at Art. 2.

⁸⁵ See “Norway,” Climate Action Tracker, <<https://climateactiontracker.org/countries/norway/>>; see also “Update of Norway’s Nationally Determined Contribution,” UNFCCC, <[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway_updatedNDC_2020%20\(Updated%20submission\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway_updatedNDC_2020%20(Updated%20submission).pdf)>.

⁸⁶ *Ibid.* (emphasis in original)

⁸⁷ *Ibid.*

⁸⁸ *Ibid.* (emphasis in original)

17.6 CONCLUSION

Suppliers who, through their push to expand the fossil fuel industry, delay meaningful action on climate change cannot perpetually hide behind the apparent loopholes in climate accountability. Protecting the rights at stake from the effects of climate change and fulfilling international law obligations means taking exported emissions into account as early as possible and, also taking supply-side measures such as curbing the expansion of fossil fuel production. Failure to fulfill these obligations is not only unlawful but also a bet against ourselves and our children's future.

It is the urgent legal responsibility “and moral obligation of wealthy fossil fuel producers to lead in putting an end to fossil fuel development and to manage the phase-out of existing production.”⁸⁹ People all over the world are stepping up and have filed over 600 cases to force action on the climate crisis. Domestic courts have and will continue to close the accountability gap in these cases in the future. For now, the *People v. Arctic Oil* Supreme Court judgment sends a firm warning to the industry – you can look but you cannot touch.

⁸⁹ The Lofoten Declaration states that climate leadership requires managing the decline of fossil fuel production. It has been signed by hundreds of organizations from dozens of countries around the world. <<http://www.lofotendeclaration.org/>>.

Climate Litigation before International Tribunals

The *Six Portuguese Youth v. 33 Governments of Europe* Case before the European Court of Human Rights

GERRY LISTON AND PAUL KINGSLEY CLARK

18.1 INTRODUCTION

The 2017 wildfire season in Portugal will forever be etched in the memories of Sofia and André Oliveira; Cláudia, Martim, and Mariana Agostinho; and Catarina Mota. That year, over one hundred people perished as a result of the most devastating outbreak of forest fires in Portugal's history. Many were killed only miles from Cláudia, Martim, Mariana, and Catarina's homes in Portugal's Leiria district. For a number of years, these children and young adults have been experiencing ever-intensifying heat extremes that interfere with their ability to exercise, sleep, and spend time outdoors. But, as with so many among their generation, it is what their futures hold that scares them the most. And sadly, they have every reason to be extremely worried. If global warming remains on its current trajectory, Portugal could face deadly heatwaves, bringing temperatures of over forty degrees Celsius, which could endure for over a month, and the number of days on which there is an extreme risk of wildfire could quadruple.¹

It is for this reason that on 3 September 2020, these six Portuguese children and young adults ('youth-applicants') filed an application with the European Court of Human Rights ('ECtHR' or 'Court') against thirty-three European states in which they argue that these states are breaching their obligations under the European Convention on Human Rights ('ECHR') by failing to adopt adequate climate change mitigation measures.² This chapter provides an overview of the basis on which the youth-applicants argue that the

¹ See Carl-Friedrick Schlessner et al., 'Climate Impacts in Portugal' (2020) Climate Analytics, <<https://youth4climatejustice.org/wp-content/uploads/2021/01/Climate-Analytics-Climate-Impacts-in-Portugal-min.pdf>>.

² See European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14, ETS 5 (1950). A copy of the application filed with the

respondent states are responsible under the ECHR for the harm and risk of harm to which they are exposed as a result of climate change. For the purpose of this analysis, it will be assumed, as the youth-applicants contend, that this harm/risk falls within the scope of harm/risk covered by Article 2 (the right to life), Article 3 (the prohibition on inhuman or degrading treatment), and Article 8 (the right to respect for private and family life). This chapter begins with a brief overview of the key challenge – which stems from the absence of an agreed approach to how the burden of mitigating climate change ought to be shared between states – that arises in climate change litigation. Next, it outlines how principles of shared state responsibility address this difficulty and, further, how these principles are consistent with existing principles of ECHR law. A summary of the approach taken by the Dutch Supreme Court in the *Urgenda* case is then provided by way of comparison, followed by some brief concluding remarks.

18.2 THE CHALLENGE THAT ARISES IN CLIMATE CHANGE LITIGATION

It is well established that the ECHR imposes on states a duty ‘to put in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life’.³ The ECtHR has further held that ‘in the context of dangerous activities the scope of the positive obligations under Article 2 of the Convention largely overlap with those under Article 8’ such that ‘the principles developed in the Court’s case-law relating to planning and environmental matters affecting private life and home may also be relied on for the protection of the right to life’.⁴ Among the principles that apply in this context is that when a state ‘authorises [dangerous activities], it must ensure through a system of rules and sufficient control that the risk is reduced to a reasonable minimum’.⁵ When it comes to defining this ‘reasonable minimum’ in cases raising issues of an environmental nature, the ECtHR has regard to applicable international standards governing, for example, noise pollution⁶ or exposure to electromagnetic fields.⁷

Court is available at: <<https://youth4climatejustice.org/the-case/>>. A copy of the Court’s ‘Objet de l’Affaire’ is available at: <http://hudoc.echr.coe.int/eng?i=001-206535>.

³ E.g., *Öneryıldız v. Turkey*, 2004-XII Eur. Ct. H.R. at §89 (2004); *Budayeva v. Russia*, 15339/02 Eur. Ct. H.R. at §129 (2008); *Kolyadenko v. Russia*, App. Nos. 17423/05 *inter alia*, §157 (2012).

⁴ *Budayeva*, above note 3 at §133.

⁵ *Mučibabić v. Serbia*, 637 Eur. Ct. H.R. at §126 (2016).

⁶ See *Fägerskiöld v. Sweden*, 37664/04 Eur. Ct. H.R. (2008).

⁷ See *Calancea v. Moldova*, App. No. 23225/05, §29 (2018).

It seems fair to suggest, therefore, that if, hypothetically, only one European state was responsible for the greenhouse gas ('GHG') emissions that cause climate change, a case against that state would be relatively straightforward. The international standard would, of course, be provided by the Paris Agreement, which makes clear the need 'to limit the [global] temperature increase to 1.5°C' (1.5°C target).⁸ The only issue of any real complexity that would arise in such a hypothetical case is the extent to which the single emitting state could rely on the possibility that negative emissions technologies might emerge at some point in future, thereby enabling it, as it would argue, to delay reducing its emissions. The ECtHR has, however, already held that states must apply a precautionary approach in relation to 'new technology ... whose consequences for the environment [are] unknown'.⁹ And in any event, authoritative UN reports make clear the total emissions reductions that are required, year-on-year, to keep global warming to the 1.5°C target.¹⁰

Similarly, if it were the case that any GHG emissions would cause climate change to exceed the 1.5°C target, a case against any state that emits GHG would be equally straightforward. As Mayer notes, 'the task of lawyers would be easier if the global mitigation objective was an immediate and absolute cessation of all GHG emissions, as the implication of this objective would be clear: each State would be bound to stop [these] emissions'.¹¹

The principal challenge that arises with climate change litigation therefore stems from the fact that, first, multiple states contribute to the problem; second, it is not the case that any contribution to global emissions causes global warming to exceed a permissible level (in ECHR terms); third, by virtue of the 'bottom-up approach' of the Paris Agreement – and the associated ambiguity as to the meaning of 'equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances' ('CBDR') – the specific amount by which any given state must reduce its emissions in order to achieve the collective goal of that agreement is imprecisely defined;¹² and fourth, owing to the philosophical

⁸ Paris Agreement to the United Nations Framework Convention on Climate Change, 12 December 2015, TIAS No. 16-1104

⁹ *Tatar v. Romania*, App No. 67021/01, §108 (2009) (unofficial translation of original in French).

¹⁰ See, e.g., 'The Emissions Gap Report 2019' (2019) United Nations Environment Programme 26, <<https://www.unenvironment.org/resources/emissions-gap-report-2019>>.

¹¹ Benoit Mayer, 'Interpreting States' General Obligations on Climate Change Mitigation: A Methodological Review' (2019) 28 *Review of European, Comparative and International Environmental Law* 107, 112.

¹² On the contested understanding of the CBDR principle, see, e.g., Lavanya Rajamani, 'Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics' (2016) 65 *International and Comparative Law Quarterly* 493.

and political nature of the considerations underlying any choice as to how to measure a given state's 'fair share' of the required global mitigation effort, a court is unlikely to select the 'correct' approach to global burden-sharing.¹³ That is, a court would be unlikely to endorse, for example, historical responsibility over economic capability as the single proper approach to measuring a state's 'fair share'.

18.3 SHARED RESPONSIBILITY AND CLIMATE CHANGE

How, then, do the youth-applicants propose to address this challenge in the case before the ECtHR? In answering this question, it is appropriate to consider first the recently published Guiding Principles on Shared Responsibility ('Guiding Principles').¹⁴ According to Principle 2 of the Guiding Principles, 'the commission by multiple international persons of one or more internationally wrongful acts that contribute to an indivisible injury entails shared responsibility'.¹⁵ Thus, 'the defining feature of shared responsibility is that multiple international persons, by committing one or more internationally wrongful acts, contribute to an indivisible injury'.¹⁶ It is Principle 4 of the Guiding Principles that is relevant in the context of the ECHR obligation to prevent harm from climate change. It provides:

International persons share responsibility for multiple internationally wrongful acts when each of them engages in separate conduct consisting of an action or omission that:

- (a) is attributable to each of them separately; and
- (b) constitutes a breach of an international obligation for each of those international persons; and
- (c) contributes to the indivisible injury of another person.¹⁷

¹³ See Mayer, 'Interpreting States' General Obligations on Climate Change Mitigation', above note 11 at 112. It is true, however, that positive human rights obligations can, in a general sense, be read in light of the CBDR principle; see Margaretha Wewerinke-Singh, *State Responsibility, Climate Change and Human Rights under International Law* (Oxford: Hart, 2019), p. 110.

¹⁴ See André Nollkaemper et al., 'Guiding Principles on Shared Responsibility in International Law' (2020) 31 *European Journal of International Law* 15. The Guiding Principles, which were developed by a group of international lawyers with recognized expertise in the field of international responsibility, are of an interpretive nature and build on the existing rules of the law of international responsibility that address situations of shared responsibility. *Ibid.* at 20–21.

¹⁵ *Ibid.* at 16 (stating Principle 2).

¹⁶ *Ibid.* at 24.

¹⁷ *Ibid.* at 17 (stating Principle 4).

As the commentary to that Principle notes, ‘in order to establish shared responsibility for the indivisible injury of climate change, violations of applicable international obligations incumbent on each of the responsible international persons need to be established, for instance under international environmental law or international human rights law’.¹⁸

Taking the prevention of this ‘indivisible injury’ as being the chief objective of the ECHR obligation to mitigate climate change, it follows logically that this obligation, as it applies to each state individually, must be interpreted so as to ensure to the extent possible that its collective implementation is consistent with the prevention of such injury. And it is here that the widely accepted principle of law applicable to causal uncertainty arising from the involvement of multiple potential contributors to a particular harm becomes relevant.¹⁹ This principle may be illustrated by reference to the leading English authority in this area, *Fairchild v. Glenhaven Funeral Services*.²⁰ In that case, the plaintiffs were unable to establish which of several periods of exposure to asbestos by their multiple negligent employers had caused their resulting injuries. This was because the inhalation of as little as one single asbestos fibre could have given rise to those injuries, and it was not scientifically possible to establish when exactly this had occurred. The House of Lords, after reviewing the principles that apply to similar situations in various jurisdictions,²¹ concluded that it was appropriate to apply a relaxed approach to causation in such a situation, such that the defendant employers were presumed to have caused the injuries in question. This approach was necessary to give effect to ‘the policy of common law and statute to protect employers against the risk of contracting asbestos-related diseases’.²²

At the root, the ambiguity at issue in a situation such as that which arose in *Fairchild* is materially equivalent to the ambiguity as to what constitutes the ‘reasonable minimum’ amount by which any one state ought to reduce its emissions. First, the latter involves ambiguity as to the extent, if any, of the unlawful contribution to ‘indivisible injury’ by multiple potential contributors

¹⁸ Ibid. at 34.

¹⁹ See Cees van Dam, *European Tort Law* (Oxford: Oxford University Press, 2013), pp. 329–34; see also Christian Von Bar, *The Common European Law of Torts: The Core Areas of Tort Law, Its Approximation in Europe, and Its Accommodation in the Legal System*, vol. I (Oxford: Clarendon Press, 1998), pp. 340–42; see also Walter van Gerven et al., *Cases, Materials and Text on National, Supranational and International Tort Law* (Oxford: Hart, 2000) pp. 441 and 465.

²⁰ See *Fairchild v. Glenhaven Funeral Services Ltd and Others* [2003] 1 AC 32.

²¹ See *ibid* at 56–66 (Lord Bingham).

²² Ibid. at 75 (Lord Hoffmann).

to that injury. If any, because if a state's contribution to global GHG emissions falls below its 'reasonable minimum', then its contribution to that injury is not unlawful. Second, in both situations the ambiguity in question results solely from the fact that there are multiple potential contributors to the relevant injury.

A further justification for applying the *Fairchild* principle to the obligation to mitigate climate change concerns the fact that the ambiguity as to the 'reasonable minimum' amount by which any one state must reduce its emissions stems from the failure by states to agree on a globally applicable approach to sharing the burden of mitigating climate change. In *Fairchild*, Lord Bingham held that there was 'a strong policy argument in favour of compensating those who have suffered grave harm, at the expense of their employers who owed them a duty to protect them against that very harm and failed to do so'.²³ Thus, the potential injustice entailed by relaxing the approach on causation in such a case, that is, imposing liability on a negligent defendant who had not caused the harm in question, was 'heavily outweighed by the injustice of denying redress to a victim'.²⁴ By the same token, it is on balance surely more appropriate that states, and not the victims of the harm which they collectively cause, should bear the consequences of their failure to agree on an approach to distributing amongst themselves the global burden of mitigating climate change.

Applied in the context of climate change, this principle requires – insofar as global warming is on course to vastly exceed the 1.5°C target – that states' respective contributions (past and projected) to global GHG emissions be presumed, as a starting point, to exceed a 'reasonable minimum' amount. This places the onus on states to provide, in the language of the ECtHR, a 'satisfactory and convincing explanation'²⁵ that they are not contributing to injury (or risk thereof) caused by climate change. It is important to note in this context that it is axiomatic that the adequacy of one state's mitigation efforts depends on the mitigation efforts that they require of the rest of the world, if the 1.5°C target is to be achieved. Thus, to discharge its onus, a state is required to demonstrate that its approach to determining the extent of its mitigation efforts, if generalized globally, is capable of achieving that target, having regard to the mitigation effort it implies for the rest of the world (a point that the below analysis of the *Urgenda* decision will serve to clarify).

²³ Ibid. at 67.

²⁴ Ibid.

²⁵ See, e.g., *El Masri v. The Former Yugoslav Republic of Macedonia*, App. No. 39630/09, §97 (2002).

Furthermore, just as the ambiguity surrounding the causation question at issue in *Fairchild* was resolved in favour of the plaintiffs, the ambiguity as to the precise extent to which any particular state ought to reduce its GHG emissions, in order to hold global warming to the 1.5°C target, must also be resolved in favour of the victims of climate change-related injury. This simply reflects, as in *Fairchild*, the paramountcy of the need to prevent the injury that would result from global warming exceeding the 1.5°C target; any other approach would give rise to the possibility that states could ‘extricate’ themselves from their presumptive responsibility through mitigation efforts that, combined, would not be sufficient to hold global warming to that target. Thus, it requires the adoption of more demanding interpretations of states’ individual mitigation obligations, such as the exacting ‘due diligence’ standard of conduct advocated by Hunter Jones and Marjanac.²⁶

Equally, it requires that a state’s mitigation efforts be judged according to more onerous approaches to measuring that state’s ‘fair share’ of the global mitigation effort (in particular for ‘developed’ countries, in light of their obligation to ‘take the lead’ under the Paris Agreement).²⁷ It therefore provides a normative basis for relying on the approach of the Climate Action Tracker (‘CAT’) to measuring the compatibility of a state’s mitigation efforts with the 1.5°C target.²⁸ The CAT’s approach is to construct a ‘fair share range’ from the wide range of approaches to measuring the fairness of a particular state’s mitigation efforts.²⁹ That range is then divided into three sections: ‘insufficient’, ‘2°C compatible’, and ‘1.5°C compatible’. Each section corresponds to the temperature outcome that would result if all other countries were to adopt mitigation efforts of equivalent ambition relative to their respective fair share ranges. This approach reflects the point made above that the adequacy of a state’s mitigation efforts is necessarily relative to what it implies for other countries. And, in effect, it means that only where a state’s mitigation efforts are compatible with the relatively more demanding measures of fairness within its fair share range will those efforts be rated as compatible with the 1.5°C target.

²⁶ See Sam Hunter Jones and Sophie Marjanac’s chapter in this volume (Chapter 7).

²⁷ Paris Agreement, above note 8 at Art. 4(4).

²⁸ CAT is an independent scientific analysis that tracks government climate action and measures it against the globally agreed Paris Agreement. See <www.climateactiontracker.org>. On the relationship between the *Fairchild* principle and CAT’s approach, see Gerry Liston, ‘Enhancing the Efficacy of Climate Change Litigation: How to Resolve the ‘Fair Share Question’ in the Context of International Human Rights Law’ (2020) 9 *Cambridge International Law Journal* 241, 258–59.

²⁹ See ‘Comparability of Effort’, Climate Action Tracker, <<https://climateactiontracker.org/methodology/comparability-of-effort/>>.

18.4 SHARED RESPONSIBILITY, CLIMATE CHANGE, AND KEY PRINCIPLES OF ECtHR JURISPRUDENCE

An analysis of shared responsibility under the ECHR for harm caused by climate change would not be complete without reference to a number of key principles of ECtHR jurisprudence that are essential to determining responsibility under the Convention. Chief among these is, of course, the margin of appreciation principle by which the latitude enjoyed by states in their implementation of the Convention is determined.³⁰ As the ECtHR observed in *Taşkin v. Turkey*, ‘the Court has repeatedly stated that in cases raising environmental issues the State must be allowed a wide margin of appreciation’.³¹ In *Hatton v. United Kingdom*, which concerned the regulation of noise levels associated with night flights into London’s Heathrow Airport, the Court explained that the margin of appreciation in this area stems from the fact that ‘national authorities have direct democratic legitimation and are ... in principle better placed than an international court to evaluate local needs and conditions’.³² Furthermore, it was not for the Court ‘to substitute for the assessment of the national authorities any other assessment of what might be the best policy in this social and technical sphere’,³³ a point that has been made by the Court in numerous environmental cases since.³⁴

In the climate change context, states undoubtedly enjoy a very wide margin of appreciation when determining how to achieve their GHG emissions reductions, that is, when deciding from what sectors of the economy to seek to achieve their GHG emissions reductions or the mechanism used to do so. In ECtHR terminology, states enjoy a wide margin as to ‘choice of means’³⁵ in this area. The same cannot be true, however, when it comes to the overall rate at which a state reduces its emissions. This follows not only from the nature of the rights at stake but also from the fact that the margin of appreciation is a

³⁰ See, from amongst a wide range of literature, Dean Spielmann, ‘Allowing the Right Margin: The European Court of Human Rights and the National Margin of Appreciation Doctrine: Waiver or Subsidiarity of European Review?’ (2012) 14 *Cambridge Yearbook of European Legal Studies* 381; see also Oddný Mjöll Arnardóttir, ‘Rethinking the Two Margins of Appreciation’ (2016) 12 *European Competition Law Review* 27.

³¹ *Taşkin v. Turkey*, App. No. 46117/99, §116 (2004).

³² *Hatton v. United Kingdom*, 2003-VIII Eur. Ct. H.R. at §97 (2003).

³³ *Ibid.* at §100.

³⁴ See *Öneryıldız*, above note 3 at §107; see also *Budayeva*, above note 3 at §135; see also *Tatar*, above note 9 at §108.

³⁵ See, e.g., *Fadeyeva v. Russia*, 2005-IV Eur. Ct. H.R. at § 96 (2005); see also *Budayeva*, above note 3 at §134; see also *Kolyadenko*, above note 5 at §160.

creature of the principle of subsidiarity.³⁶ The latter principle finds expression in the Court's emphasis on state authorities' greater ability to evaluate local needs and conditions and their democratic legitimacy (as in the above quote from the *Hatton* case). A state's greater ability to assess its own local needs and conditions clearly does not, however, have the same relevance in the context of a global problem like climate change. Indeed, from its vantage point as an international court, the ECtHR is particularly well-placed to appreciate that if, for example, each state chooses a self-serving interpretation of its own 'fair share' of the global mitigation effort required to meet the 1.5°C target, that target will not be achieved. Similarly, a state could hardly rely on the democratically expressed preferences of its citizens to justify a less ambitious contribution to the required global mitigation effort.³⁷

Another important point to note in this context is that the majority of environmental cases before the ECtHR have been addressed under Article 8, which protects the right to respect for private and family life and which permits interference with that right in certain circumstances. In these cases, the margin of appreciation principle has been invoked when determining whether the extent of the interference with this right was 'necessary in a democratic society' and justified on the grounds enumerated in the second paragraph of that Article. Thus, in *Hatton*, for example, the margin of appreciation was central in determining whether the relevant UK authorities had, in permitting a degree of interference with the Applicants' Article 8 rights, struck a 'fair balance' between those interests and the competing economic interests served by permitting night flights into Heathrow Airport.³⁸ When it comes to climate change, however, it is clear that the interference that would result from global warming exceeding the 1.5°C target could never be justified as being 'necessary in a democratic society'. This is true not only as a matter of fact³⁹ but also because the 1.5°C target in the Paris Agreement reflects the international consensus as to the level beyond which global warming poses a threat to human well-being. And it is well-established

³⁶ See Amardóttir, 'Rethinking the Two Margins of Appreciation', above note 30 at 38; see also Steven Greer, *The Margin of Appreciation: Interpretation and Discretion under the European Convention on Human Rights* (Strasbourg: Council of Europe, 2000), p. 34.

³⁷ This is a point that is largely hypothetical insofar as European citizens favor greater action to reduce GHG emissions. See 'Special Eurobarometer 501: Attitudes of European citizens towards the Environment', European Commission, 2020, <<https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getSurveydetail/instruments/special/surveyky/2257>>.

³⁸ See *Hatton*, above note 31 at §§116–27.

³⁹ See, especially, the report of the Intergovernmental Panel on Climate Change (IPCC), 'Global warming of 1.5°C' (2018) IPCC.

that the expression of consensus via international instruments plays a central role in the interpretation of Convention rights.⁴⁰ Thus, the question that the margin of appreciation has been used to answer in environmental cases decided to date is, in the context of climate change, already answered by the Paris Agreement.

Two other principles that relate to the interaction between the Convention and other aspects of international law are also relevant in this context. First, in the landmark case of *Golder v. United Kingdom*, the ECtHR held that general principles of law of the kind referred to in Article 38 of the Statute of the International Court of Justice must be taken into account when interpreting the Convention.⁴¹ The principle of law applied in *Fairchild* has been recognized as a general principle of law of that kind.⁴² It is also, incidentally, among the ‘norms and principles applied . . . in the domestic law of the majority of member States of the Council of Europe’, which are equally relevant to the interpretation of the Convention.⁴³

Second, the Court has held that where there is ambiguity in the terms of a provision of international law of relevance to the interpretation or application of the Convention, it must ‘choose the interpretation which is most in harmony with the requirements of the Convention and which avoids any conflict of obligations’.⁴⁴ Resolving the ambiguity of the CBDR principle in favour of victims of harm from climate change is an approach that is entirely consistent with the object and purpose of the Paris Agreement of holding global warming to the 1.5°C target. Indeed, the contrary approach, that is, one where states can adopt self-serving interpretations of the CBDR principle, is contrary to that object and purpose.⁴⁵

The above-outlined approach to interpreting states’ mitigation efforts under the ECHR is also consistent with more generally applicable principles relating to the interpretation of the Convention. As far back as 1968, the Court held that it is ‘necessary to seek the interpretation that is most appropriate in order to realise the aim and achieve the object of the treaty, not that which would restrict to the greatest possible degree the obligations undertaken by the

⁴⁰ See *Demir and Baykara v. Turkey*, 1345 Eur. Ct. H.R. at §§85-86 (2008).

⁴¹ See *Golder v. United Kingdom*, 1 Eur. Ct. H.R. (ser. A) at §35 (1975).

⁴² See *Oil Platforms (Islamic Republic of Iran v. United States)*, 2003 ICJ Rep 161, 354-358 (November 6) (Separate Opinion of Bruno Simma).

⁴³ See *Demir and Baykara*, above note 40 at § 86.

⁴⁴ *Al Jadda v. United Kingdom*, App. No. 27021/08, §102 (2011).

⁴⁵ See Tim Crosland et al. ‘The Paris Agreement Implementation Blueprint: A Practical Guide to Bridging the Gap between Actions and Goal and Closing the Accountability Deficit (Part 1)’ (2016) 24 *Environmental Liability: Law, Policy and Practice* 114, 117.

Parties'.⁴⁶ This is in contrast to the discounted view of Sir Gerald Fitzmaurice, set out in the above-mentioned *Golder* case, that 'any serious doubt [as to the meaning of a Convention provision] must . . . be resolved in favour of, rather than against, the government concerned'.⁴⁷ The above-outlined approach is also consistent with the related effectiveness principle, which requires that states' obligations be interpreted in such a way that the right to live in an environment where climate change has not exceeded the 1.5°C target is 'practical and effective' rather than 'theoretical and illusory'.⁴⁸

18.5 A COMMENT ON THE *URGENDA* DECISION

Against the background of the above analysis, it is appropriate to consider the landmark decision of the Dutch Supreme Court in *Urgenda v. Netherlands*.⁴⁹ This case is of profound significance not only as the first in which a domestic court ordered a government to increase its GHG emissions reduction efforts but also because the Dutch Supreme Court arrived at this decision predominantly by reference to the Netherlands' obligations under the ECHR. Central to this outcome was the range of GHG emissions reductions of 25 per cent to 40 per cent relative to 1990 by 2020, which was presented to the court by the applicants in that case.⁵⁰ This range, which originated in the IPCC's Fourth Assessment Report, referred to the amount by which the parties listed in Annex I to the UN Framework Convention on Climate Change ('UNFCCC') (broadly corresponding with 'developed' countries), including the Netherlands, would be required to reduce their GHG emissions to hold global warming to two degrees Celsius ('2°C target'). The court ultimately held that the Netherlands was required to reduce its emissions by the lowest-end (25 per cent) figure in that range. In doing so, it followed an approach that, if replicated globally, would not be capable of keeping global warming even to the 2°C target on which that case was based; as has been noted by two leading experts on climate change mitigation policy, 'systematic court decisions that governments must follow the least-ambitious end of an equity range would be insufficient to achieve the [goal of the] Paris Agreement'.⁵¹

⁴⁶ *Wemhoff v. Germany*, 2 Eur. Ct. H.R. (ser. A, no. 7) at §8 (1968).

⁴⁷ *Golder*, above note 40 at §39 (Separate Opinion of Judge Sir Gerald Fitzmaurice).

⁴⁸ *Airey v. Ireland*, 32 Eur. Ct. H.R. (ser. A, no. 33) at §24 (1979).

⁴⁹ See HR 20 December 2019, 41 NJ 2020, m.nt. J.S. (*Urgenda/Netherlands*) (Neth.).

⁵⁰ See *ibid.* at ¶¶7.1–7.6.2.

⁵¹ Yann Robiou du Pont and Malte Meinshausen, 'Warming Assessment of the Bottom-up Paris Agreement Emissions Pledges' (2018) 9 *Nature Communications* 1, 2.

What is relevant for present purposes is how the Dutch Supreme Court came to hold, in the context of the Netherlands' obligations to mitigate climate change under the ECHR, that the 'equity range' in question was applicable and, further, that it was appropriate to opt for the lowest-end figure in that range. With regard to the equity range itself, the court referred to the fact that the parties to the Kyoto Protocol to the UNFCCC, which included the Netherlands, had agreed that the countries listed in Annex I to that Convention ought to reduce their emissions according to this range in order to prevent climate change from exceeding two degrees Celsius.⁵² This demonstrated 'a high degree of international consensus on the urgent need for the Annex I countries to reduce greenhouse emissions by at least 25–40 per cent by 2020 compared to 1990 levels', which could be 'regarded as common ground' among such states for the purpose of the ECHR principle of consensus referred to above.⁵³

As regards the decision to opt for the lowest-end of this range, it held that while the determination of 'the share to be contributed by the Netherlands in the reduction of greenhouse gas emissions is . . . in principle, a matter for the government and parliament, the courts can assess whether the State, with regard to the threat of a dangerous climate change, is complying with its duty . . . under Articles 2 and 8 ECHR'.⁵⁴ This duty requires the state to pursue 'a policy through which it remains above the lower limit of its fair share'.⁵⁵ It emphasized, however, that 'in determining the State's minimum obligations, the courts must observe restraint'.⁵⁶ The lowest-end figure 25 per cent could 'therefore be regarded as an absolute minimum' that the court was entitled to require the government to achieve.⁵⁷

It is notable that in its analysis of the obligations under Articles 2 and 8 of the ECHR to protect people against environmental hazards, the Dutch Supreme Court held that 'states are obliged to take appropriate steps without having a margin of appreciation' and that 'states do have discretion in choosing the steps to be taken, although these must actually be reasonable and suitable'.⁵⁸ It therefore seemed to be indicating that a state's margin of appreciation in this area is confined to 'choice of means'. It is clear, however,

⁵² See *Urgenda*, above note 49 at ¶¶7.2.1–7.2.3. Notably, the first instance decision in *Urgenda* was reached prior to the adoption of the Paris Agreement.

⁵³ *Ibid.* at ¶7.2.11.

⁵⁴ *Ibid.* at ¶6.5.

⁵⁵ *Ibid.*

⁵⁶ *Ibid.* at ¶6.6.

⁵⁷ *Ibid.* at ¶7.5.1.

⁵⁸ *Ibid.* at ¶5.3.2.

that in opting for the lowest end of the range in question based on separation of powers-type considerations, the court did, in effect, determine that the state enjoys a significant margin of appreciation regarding the total amount by which it must reduce its emissions. After all, separation of powers principles, based as they are in domestic constitutional law, play no role in determining the nature of states' obligations under the Convention.⁵⁹

The decision by the lawyers for *Urgenda* not to pursue on appeal the similar decision of the Hague District Court to opt for the 25 per cent figure has been criticized as a 'a major flaw in the treatment of this case'.⁶⁰ This view is misguided. On the contrary, the wisdom of that tactical decision is borne out by the fact that the Dutch Supreme Court would clearly have been unwilling to entertain such an argument. What the decisions of both *Urgenda's* lawyers and the Dutch courts do point to, however, is that recognition of shared responsibility, and the consequences that it entails, is needed to enhance the efficacy of climate change litigation at the domestic level.

18.6 CONCLUSION

Securing some of the most fundamental of Sofia, André, Cláudia, Martim, Mariana, and Catarina's rights – and those of their generation – now depends on governments adopting not just greater GHG emissions reductions but the 'deep and urgent'⁶¹ reductions that the science says are necessary to hold global warming to the 1.5°C target. International courts such as the ECtHR have a critical role to play in ensuring that human rights law does in fact require states to adopt such measures. Rules of shared state responsibility and a related centuries-old principle of law that applies to causal uncertainty and multiple contributors to harm equip them well to do so.⁶² The power of the latter principle in particular lies in how it renders ambiguities in the international climate change legal framework – the benefit of which has in practice mostly accrued to states to date – a problem for states and not victims of harm from climate change. In the ECHR context, these principles further combine with long-established principles of ECtHR jurisprudence to ensure that the Convention can, and indeed must, provide a response to the climate

⁵⁹ See *A and others v. United Kingdom*, App. No. 3455/05, §184 (2009).

⁶⁰ Benoit Mayer, 'The State of the Netherlands v. Urgenda Foundation: Ruling of the Court of Appeal of the Hague (9 October 2018)' (2019) 8 *Transnational Environmental Law* 167, 187.

⁶¹ See United Nations Environment Programme, 'The Emissions Gap Report 2019', XIII.

⁶² On the recognition of this principle in Roman law, see *Fairchild*, above note 20 at 113–15 (Lord Rodger).

crisis that is proportionate to the threat that it poses. A decision of the kind sought by the youth-applicants in this case the subject of this chapter would therefore significantly augment the potential of human rights-based climate change litigation first unlocked by the *Urgenda* case. It would, in other words, go a long way towards realizing the promise held by the ‘rights turn’ in climate change litigation.

Is There a Brazilian Approach to Climate Litigation?

The Climate Crisis, Political Instability, and Litigation Possibilities in Brazil

JULIA MELLO NEIVA AND GABRIEL MANTELLI

In Brazil, climate litigation has gained strength as a result of recent national experiences. Brazilian legal researchers have been developing studies in this field, now published in Portuguese, and debates are occurring in institutional and legal arenas throughout the country. Since the climate crisis functions according to a logic that is both global and local, it is very important to understand certain local dynamics in order to propose local solutions and consider how these solutions can contribute to the global agenda on the climate crisis. In this chapter, we offer an analysis of climate litigation within the current context of attacks on Brazilian democracy, the growing risks of a climate collapse, and a possible response from civil society. This chapter ultimately provides insight, based on the experience of a civil society organization, into how strategic litigation can be an important tool to combat such setbacks.

19.1 THE ENVIRONMENTAL AND CLIMATE CRISIS IN BRAZIL

Since President Bolsonaro's first day in office in January 2019, the Brazilian government has been imposing restrictions and increasing its control over the actions of civil society.¹ The activities of human rights and environmental defenders have been increasingly criminalized. The government has suppressed rights, weakened protections for forests and Indigenous peoples, and cut funding for policies on the protection of human rights and the environment, among other threats and forms of backlash.²

¹ See 'Retrospective: Human Rights in 2019', Conectas Human Rights, 19 December 2019, <<https://www.conectas.org/en/noticias/retrospective-human-rights-in-2019/>>.

² See, e.g., Fabrício H. Chagas Bastos, 'Political Realignment in Brazil: Jair Bolsonaro and the Right Turn' (2019) 69 *Revista de Estudos Sociais* 92; see also François-Michel Le Toumeau,

In 2019, fires and deforestation hit record levels in Brazil, especially in the Amazon. Fires in the Amazon are common in August. However, the rates compiled by the National Institute for Space Research (INPE) showed an increase of 84 per cent in 2019 in comparison to the same period in 2018.³ After the data was published, President Bolsonaro fired the president of the INPE, alleging that the data was false – a claim that was contested by several scientists in the country and abroad, including NASA.⁴ Investigations into the possible direct involvement of land grabbers and farmers in the fires are currently underway. Bolsonaro has, however, attacked NGOs and blamed them for the fires. Deforestation has been strongly linked to the agribusiness sector and irresponsible and illegal logging.⁵

Yet, despite these challenges, the government continues to cut funding for environmental protection. Moreover, importantly, the Environment Minister himself is under investigation for environmental crimes, and in late February 2020, he dismissed the employees of his ministry responsible for climate policies. In the past, the Minister described global warming as a secondary issue and claimed, as did the president, that fines for environmental crimes were ideologically motivated.⁶ Bolsonaro has also claimed several times that Brazil has an ‘industry’ of environmental fines, which put too many limits on development. Less than 95 per cent of these fines, however, are actually paid.⁷ Many officials hired to work for the Bolsonaro government challenge the concept and very existence of climate change.

The government has been weakening the institutional framework established to protect people and the environment. It continues to support the

‘O governo Bolsonaro contra os Povos Indígenas: as garantias constitucionais postas à prova’ (2019) 69 *Confinis* 501.

³ See ‘Amazon Fires Increase by 84% in One Year – Space Agency’, BBC, 21 August 2019, <<https://www.bbc.com/news/world-latin-america-49415973#:~:text=Brazil's%20Amazon%20rainforest%20has%20seen,the%20same%20period%20in%202018>>; see also Rodrigo de Oliveira Andrade, ‘Alarming Surge in Amazon Fires Prompts Global Outcry’, *Nature*, 23 August 2019, <<https://www.nature.com/articles/d41586-019-02537-0#:~:text=Several%20million%20plant%2C%20animal%20and,have%20prompted%20an%20international%20outcry>>.

⁴ See ‘Uptick in Amazon Fire Activity in 2019’, NASA Earth Observatory, 19 August 2019, <<https://visibleearth.nasa.gov/images/145498/uptick-in-amazon-fire-activity-in-2019/145515w>>.

⁵ See, e.g., Leandro Valle Ferreira et al., ‘O desmatamento na Amazônia e a importância das áreas protegidas’ (2005) 19 *Estudos Avançados* 157.

⁶ See Anna Jean Kaiser, ‘Brazil Environment Chief Accused of “War on NGOs” as Partnerships Paused’, *The Guardian*, 17 January 2019, <<https://www.theguardian.com/world/2019/jan/16/brazil-environment-chief-accused-of-war-on-ngos-as-partnerships-paused>>.

⁷ See Aldem Bourscheit et al., ‘Calote Biolonário’, *The Intercept Brasil*, 21 October 2019, <<https://theintercept.com/2019/10/21/ibama-bilhoes-multas-ambientais/>>.

relaxation of environmental laws despite the clear impacts that a poor and incomplete environmental licensing system generates, especially when combined with an irresponsible and predatory mining sector, as can be seen in the tailings dam disasters in Brumadinho and the Doce River.⁸ The legacy of these disasters still looms large for the affected communities: death, destruction of livelihoods, pollution of rivers and land, intensification of social and land-related conflicts, gender discrimination, health problems, and threats to defenders, among other harms. To make matters worse, these negative impacts are present in almost all mining projects in the country. These disasters were not enough to prevent the government from supporting a new licensing bill that, if passed, will speed up and simplify the licensing process for projects.

The government continues to present and support many other bills that clearly threaten the environment and Indigenous and traditional communities, such as bill no. 191/2020.⁹ Unfortunately, Brazil is a global leader in the killing of rights defenders, according to the 2018, 2019, and 2020 Global Witness reports.¹⁰ Brazil has always been one of the most dangerous places in the world for human rights defenders, particularly in rural areas. Yet, as a result of the new political context, in 2019, it became even more dangerous to be a human rights defender.

Serious setbacks regarding environmental and climate issues have resulted primarily from a political context where the institutional structure for environmental protection is not only neglected but also dismantled. This has put the effectiveness of these legal instruments to the test. Yet, in the midst of such an unfavourable context, they are increasingly being used as a tool to demand that public authorities fulfil the obligations established by legislation. This trend is increasingly important given that, in Brazil, climate issues are managed mainly by the executive and legislative branches of government, which are often the direct (or indirect, by omission) perpetrators of attacks on the environment. This much was recently revealed in a statement by

⁸ See “Brazil Learned Nothing from Its Worst Ever Social and Environmental Disaster”, Says Experts’, Conectas Human Rights, 25 January 2020, <<https://www.conectas.org/en/noticias/brazil-learned-nothing-from-its-worst-ever-social-and-environmental-disaster-say-experts/>>.

⁹ See Julia Neiva and Juliana de Batista, ‘Mineração Predatória como Política de Governo’, Nexo, 14 February 2020, <<https://www.nexojornal.com.br/ensaio/2020/Minera%C3%A7%C3%A3o-predat%C3%B3ria-como-pol%C3%ADtica-de-governo>>.

¹⁰ See ‘At What Cost?’ (2018) Global Witness, <<https://www.globalwitness.org/en/campaigns/environmental-activists/at-what-cost/>>; see also ‘Enemies of the State?’ (2019) Global Witness, <<https://www.globalwitness.org/en/campaigns/environmental-activists/enemies-state/>>; see also ‘Defending Tomorrow’ (2020) Global Witness, <<https://www.globalwitness.org/en/campaigns/environmental-activists/defending-tomorrow/>>.

Environment Minister Ricardo Salles, who admitted to using the COVID-19 pandemic to distract public attention in order to ‘run the herd through’ and undermine environmental protection legislation.¹¹

19.2 ENVIRONMENTAL AND CLIMATE RACISM AS A CHALLENGE

Some groups suffer from environmental and climate impacts more intensely than others,¹² particularly in countries where structural racism pervades society, as is the case in Brazil.¹³ The groups affected the most by socio-environmental disasters – natural or man-made – are generally poorer, non-white populations, in which women are even more harshly impacted. The intersection of characteristics like gender, race, class, and territoriality increases the experience of oppression and the marginalization of poor and non-white women.¹⁴ It also affects how they experience socio-environmental impacts, which are assumed to be more intense for them than for other women.

Yet, even though different groups experience environmental harms differently, the effects of climate change will be increasingly felt by all. In January and February 2020, the rains in the Brazilian south-eastern states of São Paulo, Minas Gerais, and Espírito Santo were so intense that they affected the richer and white populations living in the posh city neighbourhoods close to the rivers that flooded, in addition to impacting poorer and more marginalized communities.

In São Paulo, it rained more in a twenty-four-hour period than it had in the last thirty-seven years. As a result, 5 people died, 500 were displaced, 142 lost their homes, and thousands were unable to go to work. In Minas Gerais, the

¹¹ ‘Ministro do Meio Ambiente defende passar “a boiada” e “mudar” regras enquanto atenção da mídia está voltada para a Covid-19’, *Globo*, 22 May 2020, <<https://g1.globo.com/politica/noticia/2020/05/22/ministro-do-meio-ambiente-defende-passar-a-boiada-e-mudar-regramento-e-simplificar-normas.ghtml>>.

¹² See generally Joan Martínez Alier, *El Ecologismo de los Pobres* (Barcelona: Icaria Editorial, 2009); see also Henri Acselrad, ‘Ambientalização das Lutas Sociais - O Caso do Movimento por Justiça Ambiental’ (2010) 24 *Estudos Avançados* 103.

¹³ See Silvio Almeida, *Racismo Estrutural* (São Paulo: Pólen Produção Editorial, 2019). For more on climate racism and injustice in Brazil, see Rogério Santos Rammê, ‘A Política da Justiça Climática: Conjugando Riscos, Vulnerabilidades e Injustiças Decorrentes das Mudanças Climáticas’ (2012) 17 *Revista de Direito Ambiental* 367; see also Gabriel Antonio Silveira Mantelli et al., ‘Uma Análise da Justiça Climática na Perspectiva do Socioambientalismo Brasileiro’ (2017) 67 *Revista de Direitos Difusos* 95.

¹⁴ See Bob Bolin and Liza C. Kurtz, ‘Race, Class, Ethnicity, and Disaster Vulnerability’ in Donner H. Rodríguez et al. (eds.), *Handbook of Disaster Research* (New York: Springer, 2018), pp. 181–203.

volume of rain for the month of January was the highest it had been in 110 years. There, 101 cities declared a state of emergency, 55 people were killed, and over 45,000 were forced to leave their homes. The mayor of Belo Horizonte, the state capital, stated that reconstruction of the city will cost over seventy million US dollars. In addition, in the state of Espírito Santo, over 10,000 people left their homes as a result of floods caused by the heavy rains.

Despite the fact that the rainy season in southern Brazilian states occurs during the country's summer, from December to March, such heavy rains were not frequent. The social and environmental disasters that they have caused were the combined result of the failure to implement public policies to deal with the impacts of climate change, poor urban planning, and the global increase in rainfall as a result of climate change. In the state of São Paulo, for instance, 42 per cent of the budget for policies to prevent the impacts of floods have not been used.¹⁵

19.3 CONTEXTUALIZED STRATEGIC LITIGATION AS A POSSIBLE RESPONSE

Considering the context described above, it is clear that socio-environmental threats are a human rights issue and, as a result, are on the human rights agenda. Human rights and environmental activists and NGOs met in September 2019 at the Peoples' Summit on Climate, Rights and Human Survival to discuss these intersections and plan for the future.¹⁶ As already stated by United Nation reports and documents, climate change and human rights must be acknowledged as major challenges for civil society.¹⁷ The interdependence of the climate system and human rights, coupled with

¹⁵ See Léo Arcoverde, 'Em 10 anos, governo de SP deixou de usar 42% da verba contra enchentes', *G1*, 11 February 2020, <<https://g1.globo.com/sp/sao-paulo/noticia/2020/02/11/em-10-anos-governo-de-sp-deixou-de-usar-42percent-da-verba-contra-enchentes.ghtml>>.

¹⁶ See 'Announcing The First Ever Global Summit on Human Rights and Climate Change', Amnesty International, 9 July 2019, <<https://www.amnesty.org/en/latest/news/2019/07/announcing-peoples-summit-on-climate-rights-and-human-survival/>>.

¹⁷ See, e.g., Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 'Mapping Report', UN Doc. A/HRC/25/53 (2013); see also 'A New Climate Change Agreement Must Include Human Rights Protections for All', OHCHR, 17 October 2014, <https://www.ohchr.org/Documents/HRBodies/SP/SP_To_UNFCCC.pdf>; see also 'Human Rights Council Holds Discussion on the Adverse Impacts of Climate Change on States' Efforts to Realize the Right to Food', OHCHR, 6 March 2015, <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15661&LangID=E>>; see also Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 'Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the

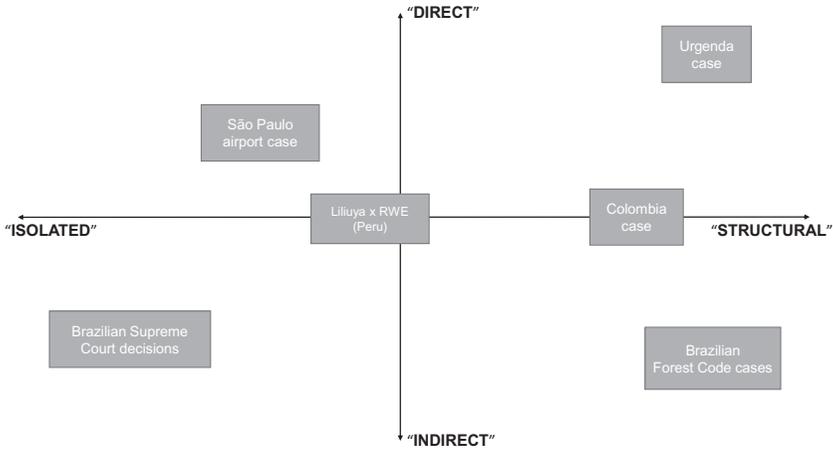


FIGURE 19.1. Possible combinations of climate litigation cases.
 SOURCE: Adapted from *Guia de Litigância Climática* (Conectas, 2019).

governments' failure to implement effective policies to combat climate change, have contributed to the emergence of numerous climate cases around the world.¹⁸ Among the host of avenues for climate action, climate litigation has become a worldwide trend.¹⁹

Conectas Human Rights has created a schematic chart to help visualize the possibilities for climate litigation in the Brazilian context.²⁰ Figure 19.1 illustrates the possible combinations of climate actions based on two criteria: (1) the scope of the action and (2) the relationship with specific climate legislation. For the first criterion (scope), the action can be 'structural'

Enjoyment of a Safe, Clean, Healthy and Sustainable Environment', UN Doc. A/HRC/31/52 (2016), <<https://undocs.org/A/HRC/31/52>>.

¹⁸ See 'The Status of Climate Change Litigation: A Global Review' (2017) UN Environment Programme, <<https://wedocs.unep.org/bitstream/handle/20.500.11822/20767/climate-change-litigation.pdf?sequence=1&isAllowed=y>>; see also Eric A. Posner, 'Climate Change and International Human Rights Litigation: A Critical Appraisal' (2006) 155 *University of Pennsylvania Law Review* 1925.

¹⁹ See, e.g., Joana Setzer and Rebecca Byrnes, 'Global Trends in Climate Litigation: 2020 Snapshot' (2020) Grantham Research Institute on Climate Change and the Environment, <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/07/Global-trends-in-climate-change-litigation_2020-snapshot.pdf>; see also Katerina Mitkidis and Theodora N. Valkanou, 'Climate Change Litigation: Trends, Policy Implications and the Way Forward' (2020) 9 *Transnational Environmental Law* 11.

²⁰ See James Dawson, 'Conectas Launches Climate Litigation Guide during COP25', Conectas, 6 December 2019, <<https://www.conectas.org/en/noticias/conectas-launches-climate-litigation-guide-during-cop25/>>; see also Gabriel Mantelli et al., *Guia de Litigância Climática* (São Paulo: Conectas, 2019), <<https://www.conectas.org/publicacao/guia-de-litigancia-climatica/>>.

or ‘isolated’. With respect to the relationship with climate law, it can be ‘direct’ or ‘indirect’.

Structural court actions are those that tend to challenge complex public policies with a wide territorial scope (such as national adaptation policies). Isolated court actions can exist under different modalities. They can be those in which the objective of the action is to obtain a more administrative decision (such as the requirement to carry out a climate impact assessment to obtain a licence for a thermoelectric plant), those where the focus is sectorial (as in the energy and urban mobility cases), or, finally, those cases filed with subnational authorities.

Direct actions are those where the main basis is climate change, in fact and in law. An example of such a climate dispute is one that directly questions climate programmes and policies and is expressly based on climate laws and climate-related institutional frameworks. Indirect climate actions are ones in which environmental norms and other legal arguments not explicitly linked to climate change are invoked, but the result, if favourable, would have an important impact on climate mitigation or adaptation. An example of a hypothetical indirect action is a dispute that requires authorities to protect the peoples of the forest, in which one could argue that the importance of these peoples is their role in forest management without explicitly mentioning the conservation of ecosystems that serve as carbon sinks.

In the Brazilian context, the combination of these two criteria – scope and climate approach – creates numerous possibilities for configuring a concrete climate lawsuit. Any court actions developed based on these criteria and this schema have varying chances of success and face certain challenges. Structural actions tend to attract more controversial issues that are part of the broader legal debate about the relationship between the judiciary and other powers, and they may be costlier due to the action’s potential proportions and the procedural financial support needed, especially in the preliminary procedural phases. Isolated actions, in turn, can be promising, as they reduce the risks associated with ‘all or nothing’ scenarios – that is, they can serve as a litigation experience, and they can be replicated.

Direct actions can help raise awareness and facilitate the direct enforcement of climate laws within the judiciary and by other actors in the justice system. However, there is a risk that the initial burden of demonstrating the very existence of the climate impacts at issue through scientific evidence will raise challenges associated with causation. Indirect actions are an alternative approach and more subtly tackle the climate issue, addressing the determinants of global warming in language that has already been tested in court. A favourable decision in an indirect action can have positive repercussions for

the climate issue as a whole. One downside is that by not addressing climate issues directly on a factual and legal basis, it does not serve as an opportunity to raise normative awareness of climate change among judges and courts.

19.4 AN OVERVIEW OF CLIMATE LITIGATION IN BRAZIL

Brazil was the first country to sign the UN Framework Convention on Climate Change at the 1992 Earth Summit in Rio and commit to mitigating the effects of the climate crisis. It has made several efforts to develop a legal framework specifically for this purpose: it developed the National Policy on Climate Change (or PNMC, its acronym in Portuguese), Law no. 12,187 of 2009, and created the National Climate Change Fund, Law no. 12,114 of 2009.²¹ It has extensive environmental legislation that could potentially be used as a basis for climate litigation, as well as constitutional guarantees on environmental protection – namely, article 225 of the Federal Constitution, which states that all have the right to an ecologically balanced environment.²²

Within this context, climate litigation is becoming an extremely important means for forcing the state or third parties to comply with these standards. This adds another actor to the system of climate governance in Brazil, in addition to the executive and legislative branches: the judiciary.²³ Climate litigation could thus serve as a means to obtain redress not only for direct acts that negatively affect the climate but also for omissions by the state, like the failure to develop and implement climate adaptation and mitigation measures. However, in Brazil, as in much of the Global South, climate litigation, as understood by mainstream literature, is a recent phenomenon.²⁴ As a result,

²¹ See, e.g., Paula Cerski Lavratti and Vanêsa Buzelato Prestes, 'Diagnóstico de Legislação: Identificação das Normas com Incidência em Mitigação e Adaptação às Mudanças Climáticas' (2009) Instituto Planeta Verde, <<http://www.planetaverde.org/mudancasclimaticas/index.php?ling=por&cont=pesquisa&codpais=1>>; see also Luciana Correia Gaspar Souza and Débora Sotto, 'A Lei de Mudanças Climáticas da Cidade de São Paulo: Aspectos Ambientais e Urbanísticos' (2012) 2 *Revista Direito Ambiental e Sociedade* 318.

²² See generally Juliana Santilli, 'Os "novos" direitos socioambientais' (2006) VI, no. 9 *Revista Direito e Justiça* 173; see also Ingo Wolfgang Sarlet and Tiago Fensterseifer, 'Direito constitucional ambiental: Estudos sobre a constituição, os direitos fundamentais e a proteção do ambiental' (2011) 19 *Revista dos Tribunais* 297.

²³ See Vinicius Lameira, 'Mudanças climáticas: estratégias de litigância e o papel do judiciário no combate as causas e efeitos do aquecimento global no contexto brasileiro' (2017) 64 *Revista do Ministério Público do Rio de Janeiro* 197.

²⁴ See, e.g., Carmen G. Gonzalez, 'Environmental Justice, Human Rights, and the Global South' (2015) 13 *Santa Clara Journal of International Law* 151; see also Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' (2019) 113 *American Journal of International Law* 679; see also Joana Setzer and Lisa Benjamin,

there is no well-established doctrine and case law on this subject in Brazilian law.²⁵

Among the small number of Brazilian cases on climate change, the vast majority have been indirect, as they have addressed climate change as a peripheral issue and only a couple of cases have made it to the Brazilian Supreme Court (Supremo Tribunal Federal or STF), the highest court in the Brazilian justice system.²⁶ This only changed in 2020, when ADO 60 (Ação Direta de Inconstitucionalidade por Omissão no. 60) – the Climate Fund Case – on the suspension of the activities of the Climate Fund was submitted directly to the STF.²⁷

Before 2020, one of the most important cases to be heard by the STF with indirect climate consequences was the 2012 Forest Code case, which ended in 2018. Since this case focused on the preservation of forest fragments and compensation for consolidated areas,²⁸ it involved carbon sinks and thus greenhouse gas emissions. The STF ruling that allowed sugarcane producers to burn their fields was also important, as it ignored the negative climate and environmental impacts that this practice generates.

The Superior Court of Justice (another important Brazilian court, known as STJ, its acronym in Portuguese) has seen a wider variety of cases that can be classified as climate litigation. Three precedents are worth highlighting. The first case,²⁹ presided over by Justice Herman Benjamin, dealt with a garbage dump and the illegal drainage of a mangrove forest. The ruling condemned the company responsible for the environmental damage, ordering it to remove the landfill and the buildings it had constructed in the mangrove area and

'Climate Litigation in the Global South: Constraints and Innovations' (2020) 9 *Transnational Environmental Law* 77.

²⁵ See generally Joana Setzer et al. (eds.) *Litigância climática: Novas fronteiras para o direito ambiental no Brasil* (São Paulo: Revista dos Tribunais, 2019); see also Caio Borges et al., 'Climate Change Litigation in Brazil', in Ivano Alagna et al. (eds.), *Climate Change Litigation: Global Perspectives* (in press).

²⁶ See Gabriel Wedy, 'Climate Legislation and Litigation in Brazil' (2017) Sabin Center for Climate Change Law, <<https://climate.law.columbia.edu/sites/default/files/content/Wedy-2017-10-Climate-Legislation-and-Litigation-in-Brazil.pdf>>; see also Setzer et al., *Litigância climática: Novas fronteiras para o direito ambiental no Brasil*, above note 25.

²⁷ See Alessandra Lehmen and Caio Borges, 'Climate Fund Case: Climate Litigation Reaches the Brazilian Supreme Court', Oxford Human Rights Hub, 24 July 2020, <<https://ohrh.law.ox.ac.uk/climate-fund-case-climate-litigation-reaches-the-brazilian-supreme-court/>>.

²⁸ In Brazilian rule, consolidated areas are rural property areas with pre-existing human occupation on 22 July 2008, with buildings, improvements or agricultural activities. See, e.g., Daíse de Felipe and Flávia Trentini, 'O conceito de área rural consolidada no código florestal de 2012: principais controvérsias' (2018) 4 *Revista de Direito Agrário e Agroambiental* 77.

²⁹ See *Public Prosecutor's Office v. H Carlos Schneider S/A Comércio e Indústria & Others*, Special Appeal no. 650.728/SC, Relator: Ministro Herman Benjamin, 2007 (Braz.).

reforest the area in accordance with the specific characteristics of mangroves. In his argument, endorsed by the other judges, Justice Benjamin cited the important role that mangroves play in controlling climate change and sea level rise, one of their main ecological functions.

The second case³⁰ worth highlighting, which banned the use of fire to burn straw in sugarcane harvesting, contrasts with the aforementioned ruling by the STF. In this STJ ruling, Justice Humberto Martins references the release of carbon dioxide into the atmosphere in his recommendation. The third precedent³¹ also uses climate-related arguments to oppose fires – which, in this case, were illegal – and justify the fine levied for the illegal use of fire, an administrative infraction. Justice Herman Benjamin explicitly mentions the climate change emergency in his recommendation. These precedents set by the STJ demonstrate the court's concern with climate change and indicates that a joint interpretation of Brazil's environmental laws, even on climate-related issues, is possible.³²

The public civil actions (or ACPs, their acronym in Portuguese)³³ that address climate change are also noteworthy. In 2010, the Public Prosecutor's Office filed a series of ACPs against more than thirty airline companies operating out of the Guarulhos Airport, demanding that they, through reforestation, offset or compensate for the greenhouse gas emissions generated by the taking off and landing of airplanes. The basis for the request was the harm emissions inflict upon the atmosphere and the Brazilian Environmental Policy. In 2017, the São Paulo Public Prosecutor's Office launched an ACP against the São Paulo Environmental Agency (Companhia Ambiental do Estado de São Paulo or CETESB) in an effort to preserve coral reefs, given their important role in combating rising sea levels.

As illustrated in Figure 19.1, the main precedents and trends in climate litigation in Brazil can be classified according to the aforementioned schema. The public civil action involving the Guarulhos Airport was an example of direct climate litigation since the core demand in the case was the reduction

³⁰ See Interlocutory Appeal of the Motion for Clarification, Special Appeal no. 1.094.873/SP, Relator: Ministro Humberto Martins, 2009 (Braz.).

³¹ See Special Appeal no. 1.000.731/RO, Relator: Ministro Herman Benjamin, 8 September 2010 (Braz.).

³² See Joana Setzer et al., 'Panorama da Litigância Climática no Brasil e no Mundo', in Joana Setzer et al. (eds.), *Litigância climática: novas fronteiras para o direito ambiental no Brasil* (São Paulo: Revista dos Tribunais, 2019), pp. 59–86.

³³ In Brazil, ACPs are procedural instruments that protect diffuse, individual, and homogenous rights and that allow the public administration or any natural or legal person to be named as the defendant. However, only the Public Prosecutor's Office, Public Defender's Offices, and federal bodies can file them.

of greenhouse gas emissions. This case, however, was the only direct climate litigation prior to 2020. Indirect cases comprise the rest of the case law; some of them are specific, like the cases brought before the STJ, while others are structural, like the lawsuits challenging the constitutionality of the Forest Code.

In 2019 and 2020, as global attention to climate change increased – thanks in part to the mobilizations of youth movements and the COVID-19 crisis – and as the issue continued to appear in courts around the world, climate litigation in Brazil began to further develop and increase in scope. On 5 June 2020, World Environment Day, the Brazilian Association of Members of the Public Prosecutor's Office for the Environment (Associação Brasileira dos Membros do Ministério Público de Meio Ambiente or Abrampa), four political parties, and two NGOs (Greenpeace and Instituto Socioambiental – ISA) launched three court actions challenging Brazil's current environmental policy, with consequences in the climate field.³⁴

The first of the three recently launched actions is a public civil action filed by Abrampa, Greenpeace, and ISA against the federal government and the Brazilian Environmental Agency (IBAMA) at the Federal Court of Amazonas. The lawsuit contests IBAMA president Eduardo Bim's decision to permit the export of wood without government inspection – a decision that contradicted the recommendations of the institution's experts. This litigation can be considered indirect, as deforestation has major climate consequences since forests are natural and structural carbon reservoirs. The decision being contested, moreover, was valid for the entire country and is part of a trend in the government's overall environmental policy. In the initial petition, the authors explicitly mention climate change.

The two other cases are constitutional actions filed by four political parties at the STF against the federal government.³⁵ The first one³⁶ addresses the recent suspension of the activities of the Amazon Fund (Fundo Amazônia),³⁷ whose goal is to support projects that combat deforestation and promote the conservation and sustainable use of the Legal Amazon region. Given the

³⁴ See 'Três Ações Judiciais Colocam em Xequê Política Ambiental do Governo Bolsonaro', Observatório do Clima, 5 June 2020, <<https://www.oc.eco.br/tres-acoes-judiciais-colocam-em-xequê-política-ambiental-governo-bolsonaro/>>.

³⁵ See 'Partidos Apontam Omissão da União na Paralisação de Fundos Destinados ao Meio Ambiente', Supremo Tribunal Federal, 10 June 2020, <<https://www.oc.eco.br/tres-acoes-judiciais-colocam-em-xequê-política-ambiental-governo-bolsonaro/>>.

³⁶ See Ação Direta de Inconstitucionalidade por Omissão no. 59, 2020 (Braz.), <<http://portal.stf.jus.br/processos/detalhe.asp?incidente=5930766>>.

³⁷ The current government has dismantled the Fund's structure by eliminating two bodies, the Technical Committee and the Guidance Committee. It also froze over 1.5 billion reais by not going ahead with new projects and interrupting all of the fund's activities.

exponential increase in deforestation rates and the serious fires that occurred in 2019, the political parties are arguing that the federal government's decisions are unconstitutional by omission: the failure to make the Fund's resources for protecting the Amazon available constitutes a violation of the government's constitutional obligation to preserve and protect the environment (art. 225 of the Constitution). The political parties are asking the STF to order the federal government to take administrative measures to reactivate the Amazon Fund. This court action can be considered structural climate litigation, and it falls between direct and indirect. It is structural because it deals with one of the main funding mechanisms for Brazil's climate policy, the Amazon Fund. It can be classified as falling between direct and indirect because climatic balance is an indirect consequence of the protection of the Amazon, and yet, in a context of the climate emergency, the protection of the Amazon is also a specific mitigation measure.

The second case,³⁸ for its part, is a direct and structural court action related to climate change.³⁹ It can be categorized as such because it deals with the freezing of the Climate Fund (Fundo Clima), which, similar to the Amazon Fund, is part of the Brazilian system of climate governance. However, it focuses specifically on reducing greenhouse gas emissions and climate adaptation. At the beginning of his mandate, Environment Minister Ricardo Salles dissolved the Secretariat of Climate Change, which was responsible for administering the Climate Fund. In April 2019, President Bolsonaro issued a decree extinguishing the Fund's Steering Committee. The Fund's activities have since been suspended, which drove the political parties to file the case and demand the immediate reactivation of the Fund and the elaboration of a plan within a thirty-day period on the use of its resources, as well as a plan for the next two years.

Finally, on 11 November 2020, seven political parties brought another constitutional action before the Federal Supreme Court against the federal government and its bodies for their acts and omissions in executing the primary national deforestation policy, the Action Plan for Deforestation Prevention and Control in the Legal Amazon (PPCDAm). While the lawsuit was formally brought by political parties due to the procedural requirements of the legal pathway, its development has been led by a coalition of civil society

³⁸ See *Ação Direta de Inconstitucionalidade por Omissão no. 60*, Relator: Roberto Barroso, 2020 (Braz.).

³⁹ See Lehmen and Borges, 'Climate Fund Case: Climate Litigation reaches the Brazilian Supreme Court', above note 27.

actors.⁴⁰ The lawsuit asserts that the government, through its inadequate implementation of PPCDAm and its failure to control deforestation in the Amazon, is significantly contributing to dangerous climate change. The plaintiffs also claim that the government has violated the fundamental rights of the populations living in the Amazon and throughout Brazil, particularly the rights of Indigenous peoples and traditional communities, as well as those of present and future generations.⁴¹

19.5 CLIMATE LITIGATION IN BRAZIL: THE CHALLENGES

Although climate litigation has been increasingly recognized in recent years as an effective tool for climate mitigation and adaptation, there are still many challenges associated with its development, especially in the Global South. The large majority of existing cases and academic literature on the subject are from the Global North, where not only the climate differs but so do economic and legal conditions. Furthermore, countries in the Global South tend to experience a greater lack of capacity within government agencies, civil society, and the judicial system when broadly compared to the Global North.⁴²

In Brazil, the most common types of environmental cases relate to the protection of forests, fauna, and flora, animal protection, nature conservation, soil protection, natural resources, and sustainability. As a result, there is a theoretical-legal gap in the area of climate change, given that environmental law is the legal framework most frequently used and there are limitations to its capacity to handle specific issues in the field of climate change.⁴³ The debate on this subject is split between two different positions. Those who hold the first position believe that the best way to proceed is to raise the climate debate directly and talk specifically about climate change. Those who hold the second position prefer to use a more evasive strategy that involves addressing

⁴⁰ The civil society coalition includes: Artigo 19, Articulação dos Povos Indígenas do Brasil (Apib), Conectas Direitos Humanos, Conselho Nacional das Populações Extrativistas (CNS), Engajamundo, Greenpeace Brazil, Instituto Alana, Instituto Socioambiental (ISA), Observatório do Clima, and Associação Alternativa Terrazul.

⁴¹ See 'Organisations take Brazilian government to the Supreme Court over deforestation and human rights abuses' (2020) Greenpeace, <<https://www.greenpeace.org/international/press-release/45634/brazil-climate-litigation-deforestation-climate-human-rights/>>.

⁴² See Setzer and Benjamin, 'Climate litigation in the Global South: constraints and innovations', above note 24 at 77–101.

⁴³ See generally Mantelli et al., *Guia de Litigância Climática*, above note 20.

the problem indirectly and using issues already dealt with under environmental law as the main grounds for the proceedings.⁴⁴

As mentioned earlier, litigation strategies can be described according to two types of judicial-procedural arrangements: the scope of the case and the relationship with specific climate legislation. The scope may be structural or isolated. The relationship with climate legislation can be direct or indirect. Yet, although this opens a range of possibilities for litigation, this area is nonetheless limited in Brazil as a result of procedural issues and matters related to the legal system's organization. Problems arise, for example, from the fact that structural action requires greater efficiency within government branches and is more costly (primarily due to the costs related to the proceedings). Structural action also creates more obstacles in terms of proving the causal link, since the litigator must gather empirical evidence on compliance or non-compliance with national or sectoral policies. As for cases with a specific scope, they tend to be easier as they are related to specific, concrete cases that do not challenge institutional and political structures. This demonstrates one of the problems associated with the judicialization of climate issues in Brazil, which may help to explain why only one structural and direct court action has been filed in the country thus far.

Furthermore, other factors hindering the development of a culture of climate litigation in Brazil include the slowness of the courts, which also raises the costs of litigation, and the lack of knowledge and disinformation of judicial bodies and judges on the issue. In cases involving the private sector, there is additional difficulty in holding companies accountable, often due to the asymmetry in resources at the litigants' disposal as well as the corporate veil, which makes it difficult to hold corporations responsible.⁴⁵

In short, the biggest challenges facing climate litigation in Brazil, especially if the litigation is direct, are the lack of interest on the part of the government in promoting, funding, and supporting climate-related issues (including research and studies), the current political and environmental crisis, and the way that the Brazilian judiciary functions and Brazilian legislation is structured, which allows environmental issues that are not specifically climate-related to prevail.

⁴⁴ Ana Maria de Oliveira Nusdeu, 'Política Climática Brasileira e Seu Potencial de Judicialização', Jota, 5 June 2019, <<https://www.jota.info/opiniao-e-analise/artigos/politica-climatica-brasileira-e-seu-potencial-de-judicializacao-06052019>>.

⁴⁵ See, e.g., Vinicius Lameira, 'Mudanças climáticas: estratégias de litigância e o papel do judiciário no combate as causas e efeitos do aquecimento global no contexto brasileiro' (2017) 64 *Revista do Ministério Público do Rio de Janeiro* 197.

19.6 CONCLUSIONS AND POSSIBILITIES

Brazil does not yet have a paradigmatic case of climate litigation. To summarize, most of the cases that can be classified as relevant to climate change are generic environmental and/or human rights actions that address some climate issues. Key actors currently discussing climate litigation generally believe that it would be best and safer to start with easy and isolated lawsuits, given that certain legal hypotheses have not yet been fully tested. Brazil's judiciary does not yet seem particularly concerned with climate issues. Nevertheless, the debate on climate litigation in Brazil has emerged in recent years, led notably by academia.

Climate litigation strategy also needs to go beyond the traditional normative frameworks that use, for instance, only civil liability and environmental law. Opportunities to use non-environmental legislation in a creative way exist. For instance, it is possible to use legal frameworks that challenge the actions and omissions of public and private actors, such as those on public financing, public procurement, business law, civil legislation (in innovative sub-areas), and disaster law. More importantly, lawsuits should take into consideration the intersectionalities mentioned earlier in order to force the judiciary to address the conditions of affected communities and victims. Environmental and climate racism generates a great deal of injustice, and climate litigation could be an innovative tool to combat it.

Climate Change Litigation in India

Its Potential and Challenges

ARPITHA KODIVERI*

20.1 INTRODUCTION

India is the third-largest emitter of carbon, and evidence suggests that it will overtake China and the United States soon given its increasing dependence on fossil fuel for energy and with 29 per cent of its population living in poverty and without access to electricity.¹ India is in a difficult position as it seeks to balance the competing priorities of economic growth, energy security, and climate change.

In the coal-rich state of Odisha, a new coal mine is set to expand. The coal from the mine is being used to feed the energy demands of a growing economy. The local community, whose land is to be acquired, is currently challenging the ongoing destruction of 120,000 trees and the endangerment of the ability of these forests to mitigate climate change.² This contestation provides a glimpse into the multiplicity of factors that shape the challenge of addressing climate change in India.

The Indian judiciary has played an active role in addressing issues of environmental protection and human rights. Public Interest Litigation (PILs), which allows those without *locus standi* to approach the courts over an issue of public interest, has become the dominant pathway through which environmental cases are filed, oftentimes on human rights grounds. PILs in India have incorporated international human rights and environmental law

* The author gratefully acknowledges comments and suggestions by the editor and participants in the Litigating the Climate Emergency Conference held at New York University School of Law in March 2020.

¹ See Jocelyn Temperly, 'The Carbon Brief: India Available,' CarbonBrief, 14 March 2019, <<https://www.carbonbrief.org/the-carbon-brief-profile-india>>.

² See Sushmita, 'Digging Continues in Talabira Open Cast Mine Despite Protests' *The Wire*, 10 February 2020, <<https://thewire.in/rights/talabira-mine-odisha-digging-continues-protests>>.

principles such as the polluter pays principle; the public trust doctrine; and the right to free, prior, and informed consent.³ The judiciary in India, in particular within the context of the environment and climate change, has been selectively progressive and overreaching, as its judgments affect the activities of regulatory bodies and shape governance structures for the environment.⁴

The Narendra Modi administration came into power promising economic development and a business-friendly regulatory environment. It began with an aggressive overhaul of environmental laws, where it sought to eliminate safeguards put in place for processes like the environmental and forest clearances. This was followed by attempts to change land acquisition laws to enable easy acquisition of land for industries. Initiatives to address climate change sit within this broader neoliberal growth agenda. The government's efforts to address climate change concerns have focused on certain mitigation strategies like renewable energy and afforestation.⁵

Climate change litigation in India is still in the nascent stages. A recent case filed before the National Green Tribunal explicitly argues for the court's intervention in addressing climate change.⁶ While environmental organizations and activists have often approached the courts to address environmental issues ranging from deforestation to pollution, before this case, they had not explicitly called for intervention on climate change, though it may have appeared in the broader orbit of the judgment. The court, nevertheless, has been the space where regulatory failures to address environmental issues have been checked, and the judiciary has taken a far-reaching role in compelling the government to protect the environment.

The looming contestation on climate change in future litigation may strain environmentalism. India has historically been a place where environmentalism was shaped both by concerns for the natural environment and demands for social justice. Ramchandra Guha spoke to this form of environmentalism as the environmentalism of the poor. In India, human rights and the rights of the local community impacted by environmental harms were at the heart of the environmental question. This strain of environmentalism, however, exists alongside exclusionary conservation, particularly in forest areas where the

³ See Lavanya Rajamani, 'Rights Based Climate Litigation in Indian Courts: Potential, Prospects and Potential Problems' (2013) Center for Policy Research Working Paper 2013/1.

⁴ See Geetanjoy Sahu, *Environmental Jurisprudence and the Supreme Court* (Hyderabad: Orient Blackswan, 2014).

⁵ See Arpitha Kodiveri, 'Changing Terrain of Environmental Citizenship in India's Forests' (2016) 12 *Socio-Legal Review* 74.

⁶ See Rajamani, 'Rights Based Climate Litigation in Indian Courts', above note 3.

recognition of the rights of forest-dwelling communities is viewed as hampering the conservation of these areas.⁷ The role of the judiciary in climate change litigation will continue to be shaped by the choices that courts make between these different strains of environmentalism and the impact these choices have on forest-dwelling and other local communities.

In response to the questions animating this collective volume, I seek to address two issues in this chapter. First, what has the role of courts been with respect to climate change? Second, what is the potential role for courts in addressing climate change in India, given the associated challenges? These questions are interrelated, and they will help contextualize the discussion on the strategic potential for climate change litigation in India, given the country's ambitious growth agenda and divergent strains of environmentalism.

I argue that courts have played a significant role in environmental governance, which carries into the regulation of climate change. However, I qualify this argument by examining the vulnerability of court decisions in PILs that have adversely impacted forest-dwelling and other local communities shaped by India's development agenda. Given this caveat, I argue that courts can play an important role in climate change governance, provided they adopt a more sensitive approach to questions of climate justice.

This chapter begins with an overview of courts and environmental jurisprudence in India and then focuses on climate change in the courts. It then will then contextualize the role of the courts in environmental decisions in light of the neoliberal economic growth paradigm and divergent strains of environmentalism. Section 20.3 will trace the potential for climate change litigation and its associated challenges. The chapter concludes by arguing that courts can play an important role in climate change governance, but their potential must be approached cautiously.

20.2 COURTS AND ENVIRONMENTAL JURISPRUDENCE IN INDIA

Courts in India have been the sites of discussion for key questions of public policy, pollution, and environmental governance. The innovation of public interest litigation in post-emergency India prompted passionate environmental lawyers and local communities adversely impacted by development projects to approach the courts. This avenue opened by PILs ultimately produced a mixture of progressive and problematic environmental jurisprudence.

⁷ See Ramchandra Guha, *Environmentalism: A Global History* (New York: Penguin Books, 2016).

Progressive environmental jurisprudence in India has spurred ailing environmental governance bodies into action and helped secure the rights of forest-dwelling communities to land and resources and democratize environmental decision-making. The creation of the National Green Tribunal (NGT) in 2010, moreover, opened a specialized and dedicated avenue for environmental disputes. With the creation of the NGT, many progressive judgments followed.

The progressive streak of environmental jurisprudence in India exists simultaneously with decisions that undo the progressive impact of this jurisprudence. The undermining of the progressive impact results from the prioritization of economic concerns and the demands of exclusionary conservation, which will be elaborated below. As a result, looking to courts to push for action on climate change carries the risk of creating bad precedent that does not prompt better laws.

20.3 CLIMATE CHANGE IN THE COURTS

In identifying the cases that come within the ambit of climate change, and drawing from Peel and Lin as well as Lavanya Rajamani,⁸ I identify two categories of cases: (1) those cases where climate change forms the core of the legal arguments made by the petitioners and (2) those cases where the legal claims at issue relate to climate change concerns but do not explicitly refer to it. Looking at these two categories generates a wide range of cases that relate to climate change mitigation but fewer cases that relate to adaptation. I, moreover, restrict the scope of my inquiry to landmark cases in the Supreme Court, High Court, and the National Green Tribunal.

20.3.1 *When Climate Change Is at the Core of the Case*

Climate change litigation, as stated earlier, has been underexplored by environmental activists and lawyers. A number of these cases, moreover, have used climate change as a means to draw the judiciary's attention to environmentally destructive practices. The key cases that emerge are before the High Court of Delhi, Allahabad, and the National Green Tribunal.

In *Manushi Sangathan v. Government of Delhi*,⁹ the petitioners challenged a ban against cycle rickshaws by using the IPCC's fourth assessment report,

⁸ See Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' (2019) 113 *American Journal of International Law* 679.

⁹ See *Manushi Sangathan v. Government of Delhi*, W.P. (C) 4572 (2007).

which encouraged policies that promoted the use of more fuel-efficient vehicles. The High Court ruled that the restriction on the plying of cycle rickshaws was arbitrary and violated the cycle rickshaw drivers' right to livelihood.

In *We the People v. Union of India*,¹⁰ the petitioners challenged the cutting down of trees for the expansion of roads in Uttar Pradesh, which contributed to global warming. They further argued that trees were not being planted elsewhere to compensate for the loss of these trees. The Allahabad High Court held that additional trees needed to be planted to compensate for the trees that had been cut down.

Lastly, in 2017, Ridhima Pandey, a nine-year-old from Uttarakhand, filed a case before the National Green Tribunal challenging government inaction on climate change. The grounds upon which the case has been filed are as follows:

The Applicant is invoking the principle of sustainable development and the precautionary principle, as envisaged under Section 20 of the National Green Tribunal Act, 2010, as well as the inter-generational equity principle and the Public Trust Doctrine. The application also raises the issue of non-implementation of various environmental laws, more particularly no implementation of the Forest (Conservation) Act, 1980, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, and the Environmental Impact Assessment Notification, 2006, which has led to adverse impacts of climate change across the country.¹¹

This case is being heard before the National Green Tribunal. No significant decisions have been made yet. The case has attracted significant media attention, but this has not yet translated into concrete policy changes.

There are too few cases to comment on the role that the judiciary has played on climate change, but what these cases provide is an insight into the way climate change concerns have been argued in the courts. Climate change has been invoked by petitioners on a number of grounds, including air pollution, the cutting of trees, and government inaction. Though these issues have been framed as climate change concerns, there have also been a litany of other cases where these claims have been made by petitioners without reference to climate change.

¹⁰ See *We the People v. Union of India*, Order of the Allahabad High Court in Misc. Bench, 16 June 2010, No. 5750 of 2010, <<http://www.indiankanoon.org/doc/1558452/>>.

¹¹ See 'Pandey v. India', Sabin Center for Climate Change Law, <<http://climatecasechart.com/non-us-case/pandey-v-india/>>.

20.3.2 Cases That Relate to Climate Change

As stated earlier, litigation has been the dominant strategy used by activists to address environmental issues. Public interest litigation in particular has been employed by leading lawyers to challenge environmental harms. It is difficult to identify which are specifically climate cases, as there have been many landmark cases that have addressed a range of issues concerning the environment while invoking climate change. The few cases that have had important implications for the potential for climate change litigation in India have been rights-based cases, which raised the right to a clean environment, among others.¹²

Lavanya Rajamani and Shibani Ghosh, in their exploration of the possibilities for climate change litigation in India, argue that the progressive, rights-based jurisprudence on environmental issues provides a fertile ground for climate change litigation.¹³ Rights-based environmental jurisprudence in India has hinged on the expansive interpretation of fundamental rights, particularly the right to life. In *Subhash Kumar v. State of Bihar*,¹⁴ the Supreme Court held that the right to the enjoyment of pollution-free water and air comes within the ambit of the right to life. This precedent has been followed by a slew of other decisions that have read the right to a clean and healthy environment into the right to life.

While the judiciary may provide a fertile ground for intervention on climate change, a case currently before the Supreme Court serves as a warning of the dangers associated with PILs. This case has been filed by Wildlife First, an NGO committed to securing conservation, and aims to dilute the Forest Rights Act, 2006, a progressive law that recognizes the rights of forest-dwelling communities by evicting forest-dwellers whose rights have not yet been recognized.¹⁵ The challenge with PILs, as analyzed by Anuj Bhunia, has been that many of them have resulted in the violation of the rights of those very people that they were meant to protect: the marginalized. This should, consequently, serve as a note of caution for the proponents of climate litigation, and it underscores the potential challenges associated with using

¹² See Rajamani, 'Rights Based Climate Litigation in Indian Courts' above note 3.

¹³ See Lavanya Rajamani and Shibani Ghosh, 'India', in Richard Lord et al. (eds.) *Climate Change Liability: Transnational Law and Practice* (Cambridge: Cambridge University Press, 2011), p. 139.

¹⁴ See *Subhash Kumar v. State of Bihar*, 1991 AIR 420, 1991 SCR (1)5.

¹⁵ See *Wildlife First and Others v. Ministry of Environment and Forests*, Writ Petition(s)(Civil) No(s). 109/2008.

litigation to address climate change.¹⁶ Lavanya Rajamani and Shibani Ghosh, in their exploration of the possibilities for climate change litigation, are more optimistic, given the present political context in which the judiciary has been careful in its decisions on the environment.¹⁷ Climate change litigation will require careful thought and planning in order to achieve the intended results and avoid unintended consequences for marginalized communities.

20.4 THE CHALLENGES ASSOCIATED WITH CLIMATE CHANGE LITIGATION

Though the judiciary has been responsive to environmental issues in India, there have been some limitations. Below is a schematic overview of those limitations that have a bearing on climate change litigation. The list is not exhaustive but rather is intended to be diagnostic while bearing in mind the role that the judiciary has played thus far on the environment.

20.4.1 *India's Aggressive Development Policies*

How to balance development with environmental protection has been at the heart of environmental jurisprudence in India. The environmental clearance and forest clearance processes have constituted the legal arena where this question has been contested within the judiciary. The judiciary, in turn, has repeatedly failed to curtail developmental activities at the expense of environmental protection. A noteworthy case where this dynamic is visible is the *Narmada Bachao Andolan* case, where local communities filed a case before the Supreme Court calling for restrictions on the height of the dam. The Supreme Court instead permitted the dam construction, reasoning that it would not be an ecological disaster. The Supreme Court held:

In the present case, we are not concerned with the polluting industry which is being established. What is being constructed is a large dam. The dam is neither a nuclear establishment nor a polluting industry. The construction of a dam undoubtedly would result in the change of environment, but it will not be correct to presume that the construction of a large dam like the Sardar Sarovar will result in ecological disaster. India has an experience of over 40 years in the construction of dams. The experience does not show that the

¹⁶ See Anuj Bhunia, *Courting the People* (Cambridge: Cambridge University Press, 2017).

¹⁷ See Rajamani and Ghosh, 'India,' above note 13 at 139.

construction of a large dam is not cost-effective or leads to ecological or environmental degradation.¹⁸

The judiciary has been selective and restrained in how it deals with balancing development and environmental concerns. On the one hand, in instances where biodiversity hotspots in the Western Ghats have been impacted by mining, the court ruled for a complete ban on mining. The court ruled similarly in the ecologically fragile areas of the Eastern Ghats.¹⁹ On the other hand, the Modi administration has pursued an agenda of deregulation with respect to the environment and, in spite of this, there have been fewer instances where the judiciary has taken an activist role in securing environmental rights.²⁰

The Modi government has recently pushed to open the coal mining sector by privatizing coal. This move is bound to increase carbon emissions, and, despite criticism, the government has justified this move by pointing to India's need for energy security.²¹ Aggressive development policies, including the reliance on coal and the interlinking of rivers, create a political climate where environmental considerations rank towards the bottom of the government's list of priorities.²²

20.4.2 *Exclusionary Conservation*

India has two competing strains of environmentalism: one that stems from 'environmentalism' and another that is purely exclusionary. The judiciary has at different points in time complied with each one of these two competing strains. The previously mentioned case currently before the Supreme Court – which is challenging the constitutionality of the Forest Rights Act, 2006 – is an example of a visible conflict between these two strains of environmentalism. The adversarial setting of the court has brought the conflict to a crossroads, and the judiciary must choose between these two competing strains. In a recent order, it called for the eviction of forest-dwelling community members whose claims for rights had been rejected.

¹⁸ *Narmada Bachao Andolan v. Union of India*, 2000 10 SCC 664.

¹⁹ See *Goa Foundation v. Union of India and Others*, Writ Petition (Civil) No. 435/2012.

²⁰ See Kodiveri, 'Changing Terrain of Environmental Citizenship in India's Forests', above note 5.

²¹ See Arpitha Kodiveri, 'Privatisation of Coal in India', *Ambitious Accounts*, 5 June 2018, <<http://www.amphibiousaccounts.org/#/en/publicacion/privatization-of-coal-in-india-threats-to-the-rights-of-local-communities-and-climate-change-commitments>>.

²² See Mayank Agarwal, 'What Modi's and BJP's Return Means for India's Environmental Laws', *Huffington Post*, 25 May 2019.

The current failure to reconcile these two competing strains of environmentalism outside the courts – either within other branches of government or through discourse – leads adversarial settings like courts to make more polarizing decisions. Exclusionary conservation has had devastating effects on the rights of forest-dwelling communities. Discussions on climate change, particularly in the context of forests and forest governance, have been dominated by this strain of environmentalism as a result of compensatory afforestation efforts and the prevention of the exercise of forest rights to avoid fragmentation.

20.5 THE STRATEGIC POTENTIAL FOR CLIMATE CHANGE LITIGATION IN INDIA

The strategic potential for climate change in India is one framed by its limitations. The judiciary has been effective in fostering a culture of compliance with environmental norms and accountability on the part of environmental regulatory bodies to their citizens. The judiciary is an important actor in the constellation of actors involved in climate change governance and policy. The judiciary cannot, however, be viewed in isolation of the political economy in which it operates. As India becomes increasingly dominated by an aggressive development agenda, many have viewed the judiciary as a hurdle to speedy growth.

20.5.1 *Connecting Existing Jurisprudence on Environmental Justice with the Climate Crisis*

The strategic potential of climate change litigation in India lies in the ability to harness rights-based environmental jurisprudence and frame it relative to existing climate change policies in India. India has an ambitious National Climate Action Plan with eight missions, including one that is specific to the Himalayan region.²³ Yet, cases have not yet been filed in which climate change concerns are pegged to rights-based environmental jurisprudence informed by the discourse of environmentalism of the poor.

There is a significant need to connect India's rich jurisprudence on environmental justice to the impending climate crisis. The jurisprudence on the rights of forest-dwellers, as seen in the *Niyamgiri* case, needs to frame future

²³ See 'National Action Plan on Climate Change', Prime Minister's Council on Climate Change, <<http://www.nicra-icar.in/nicrarevised/images/Mission%20Documents/National-Action-Plan-on-Climate-Change.pdf>>.

interventions in the courts. While the challenge of exclusionary conservation remains, interventions in court need to harness the progressive jurisprudence that exists and strengthen its position as a precedent and guiding force that shapes future jurisprudence.

India's environmental jurisprudence, which articulates key legal principles like the public trust doctrine and the stewardship rights of forest-dwelling communities, can be drawn upon to reinvigorate these core legal principles and the role the jurisprudence can play in addressing climate change. The application filed by Richa Pandey draws on some of these principles, but its thrust was based on India's international legal obligations. The order by the National Green Tribunal thus stated that there is

no reason to presume that the Paris Agreement and other international protocols are not reflected in the policies of the Government of India or are not taken into consideration in granting environment clearances.²⁴

Shibani Ghosh alerts us to a cautionary note in her work on litigating climate claims: Indian courts remain superficial in their understanding of international environmental law obligations. Specifically, she states:

Indian environmental judgments often rely on international environmental law while interpreting statutory obligations, but judicial reasoning in such situations is not always robust, and the engagement seems superficial at times. A similar treatment can be seen in the context of climate claims where the courts refer to the UN Framework Convention on Climate Change, the Kyoto Protocol, the Paris Agreement, and India's NDCs. Like elsewhere, the courts' reliance on these instruments is not always accompanied by strong judicial reasoning that explains how India has violated or is required to comply with, an international obligation.²⁵

The ability to frame climate claims within the boundaries of India's climate policies and environmental frameworks can help progressively develop the jurisprudence on climate change. Although it's hard to predict the precise outcome of approaching the courts, couching legal arguments in existing jurisprudence can create a jurisprudential arc that connects the existing understanding of environmental justice to the impending climate crisis.

The court should be viewed as an important node and institution within the overall climate change and environmental governance system. Courts can inform

²⁴ See *Pandey v. India*, App. No. 187/2017, Nat'l Green Tribunal (15 January 2019), <<https://static1.squarespace.com/static/571d109b04426270152febe0/t/5cb424defa0d60178b2900b6/1555309792534/2019.01.15.NGT+Order-Pandey+v.+India.pdf>>.

²⁵ See Shibani Ghosh, 'Litigating Climate Claims in India' (2020) 114 *AJIL Unbound* 45.

and influence future legislative decisions and administrative actions. They can also catalyze powerful change across spheres of environmental governance, which, in turn, can be harnessed to change India's approach to climate change while at the same time remaining mindful of the limitations of such an approach.

In addition to existing environmental jurisprudence, inspiration can be drawn from movements on the ground, including ongoing campaigns by younger students and Adivasi communities. A recent campaign called #I AM A CLIMATE WARRIOR reframed the struggle of forest-dwellers to control their land and resources as being important for the conservation of forests in the face of climate change (see Figure 20.1).

Interventions outside courts like this one will inform future court cases and the arguments that are made. As forest-dwelling communities begin to re-articulate their rights as being necessary for climate stewardship, a new opportunity for legal mobilization emerges. This strategic potential must be explored, bearing in mind the risks associated with approaching the courts.

To understand the strategic potential of a particular case, I suggest the development of a sort of litigation impact assessment process, which can be undertaken to understand how a particular case will impact the rights of Indigenous and other local communities and develop a strategy to overcome any adverse impacts. For instance, the ban on mining in the Western Ghats has led to large-scale unemployment and, consequently, highlights the need to incorporate aspects of just transition in future court interventions.

A strategic case that, after a thorough impact assessment, has the potential to join the many aspects discussed is a constitutional challenge, under Article 21,

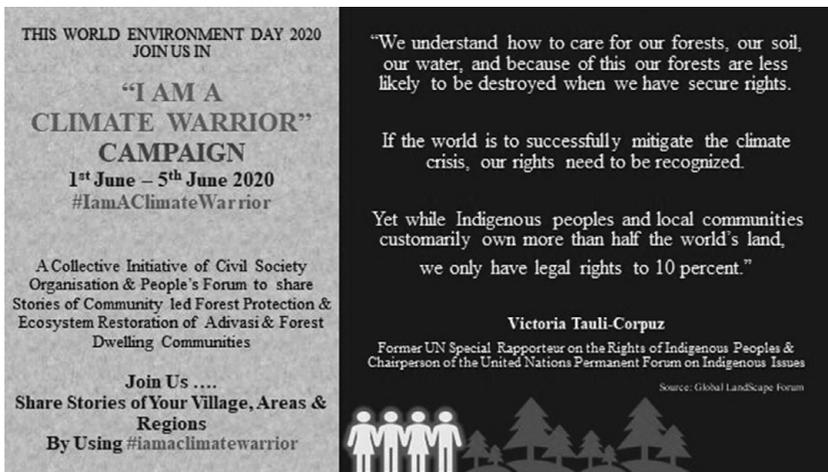


FIGURE 20.1 Image of the Climate Warrior Campaign

to the Indian government's recent move to privatize its coal resources and make them available for commercial coal mining. At the same time that the Indian government moves to expand coal mining, the state has an impressive plan already in place to transition to renewable resources as part of its climate change mitigation strategy and in line with the solar mission in the national climate action plan.

The Indigenous communities living in different parts of India's coal belts are often subject to land grabs, deforestation, and pollution. A case brought by these impacted communities, like the communities in Talabira, Odisha, can pave the way for the judiciary to grapple with the many features of climate change while addressing the aims of the state's policies on climate change mitigation and environmental justice. Although it is difficult to predict how the judiciary would decide such a case, the case would nevertheless bring the reality of climate change governance and policy to the courts and may foster the development of a more nuanced jurisprudence that avoids the mistakes identified earlier.

20.6 CONCLUSION

In this chapter, after an overview of climate change litigation in India, I have argued that courts are an important site for the negotiation of pertinent questions regarding the environment and development. I qualified this with the limitations of the judiciary, which has failed to curtail development activities that harm the environment and the marginalizing discourse of exclusionary conservation.

As India opens the coal mining sector, a legal challenge has been mounted by sub-national states like Jharkhand and Chhattisgarh, as this opening would be detrimental to the forest-dwelling communities living in and around these coal mines. It interestingly makes no mention of the impact increased coal production will have on India's climate change commitments.²⁶ Forest-dwelling communities living near these coal mines have started to protest this move on the grounds of climate change. Thus, new developments are underway, and climate change concerns that are being mobilized from below will eventually make their way to the courts. Yet the strategic potential of the judiciary needs to be explored bearing in mind the limitations. As a result, I propose that the test cases brought before the courts reflect the complexity and the reality of climate change governance and policy in India, as opposed to cases that shy away from the nuance of climate change decision-making in India.

²⁶ See Writ Petition No – of 2020 filed by the State of Jharkhand before the Supreme Court (obtained by the author from the State of Jharkhand Department of Environment).

The Tide of Climate Litigation Is upon Us in Africa

POOVEN MOODLEY

The now-familiar Black Lives Matter chant, ‘I can’t breathe’ brought me back to the small smoke-filled, apartheid-constructed village of my youth. Countless black children – in my village and others like it – developed respiratory problems as a direct consequence of their exposure to toxic pollution in their homes, which were placed near coal-fired factories as a result of apartheid planning. Some nights, as I struggle to breathe, I lie awake thinking about the inequality exacerbated by fossil fuel pollution, the harms generated by fossil fuel companies, and governments’ obligations to protect the right to a healthy environment. Though environmental degradation and climate change dramatically impact the lives of Indigenous and local communities throughout Africa, the connection between human rights, climate change, and the protection of ecosystems has only recently gained more widespread recognition. In this chapter, I will offer some reflections on several key climate cases in Africa that highlight local community struggles and how the lines established by precedent have been drawn in this issue area. This chapter will emphasize these developments in the context of the current planetary crisis, and it will conclude with some thoughts on where climate litigation in Africa will go from here.

21.1 INTRODUCTION: SIMULTANEOUS CRISES EXACERBATE VULNERABILITY

A confluence of crises – namely, the climate crisis, the current economic and health crises, systemic racism, and patriarchy – are rocking countries and communities around the world and generating massive turbulence. The COVID-19 pandemic, in particular, has dramatically exacerbated existing inequalities and injustices in Africa and around the world, including poverty, hunger, unemployment, disease and illness, conflict, and climate vulnerability. At the onset of the COVID-19 pandemic, the UN estimated that half a

billion people, or 8 per cent of the global population, could have been pushed into destitution by the end of 2020.¹ The World Food Programme predicted that the number of people facing hunger would double to over 250 million and the projected deaths due to hunger would rise to 30 million by the end of 2020.² The International Labour Organization reported recently that 1.6 billion workers in the informal economy – nearly half of the world's total workforce of 3.3 billion – 'stand in immediate danger of having their livelihoods destroyed'.³ All of this is occurring on top of existing vulnerabilities. Many communities in Africa, for example, are already vulnerable for a host of reasons, including the decimation of ecosystems and high levels of extractive activities. Moreover, the COVID-induced economic collapse around the world, including in Africa, raises the risk that future debt and conditional loans will sustain and accelerate the extractive economic model common throughout Africa. This will increase the threat to communities and to the planet.

The climate crisis, thus, overlaps with and exacerbates existing crises, with mutually reinforcing results. As the world has awoken to the existential threat posed by climate change, advocates have increasingly turned to litigation to spur action on climate change. In Africa, climate litigation is a key and developing strategy that is gaining increasing traction. Communities that have relied predominantly on organizing and resisting economic development projects that harm communities and the environment are now also exploring litigation as part of a broader strategy to secure their rights and the protect the environment in which they sustain themselves. Litigation provides communities with hope and inspires other communities to take action, though the implementation of court decisions remains a massive challenge. This chapter explores some of the precedent-setting climate cases in Africa.

21.2 ENVIRONMENTAL RIGHTS AND SUSTAINABLE DEVELOPMENT: OVERVIEW

The protection and promotion of human rights, including, in particular, environmental justice, on the African continent faces a number of challenges.

¹ See Andy Summer et al., 'Estimates of the Impact of COVID-19 on Global Poverty' (2020) WIDER Working Paper 2020/43.

² Remarks by David Beasley, UN World Food Programme (WFP) Executive Director, at the UN Security Council on the Maintenance of International Peace and Security, see 'Protecting Civilians Affected by Conflict-Induced Hunger', World Food Programme, 21 April 2020, <<https://www.wfp.org/news/wfp-chief-warns-hunger-pandemic-covid-19-spreads-statement-un-security-council>>.

³ 'ILO: As Job Losses Escalate, Nearly Half of Global Workforce at Risk of Losing Livelihood', ILO, 29 April 2020 <https://www.ilo.org/moscow/news/WCMS_743036/lang-en/index.htm>.

Yet sustainable development is not possible without a rights-based approach that incorporates the right to a healthy environment and recognizes that climate change threatens human rights. Likewise, any approach to climate change mitigation and adaptation must incorporate a human rights-based approach.

Globally, the need for an environmental rights-based approach to sustainable development, founded on principles of equity, has received increasing attention. Nevertheless, substantial impediments continue to hamper the full development of this approach. Private and government actors are still at significant odds with environmental human rights activists, and threats made to the lives of environmental defenders continue to grow. Additional roadblocks include states' corruption, ineffective institutional coordination, lack of policy coherence at the international and local levels, improper policy and legal implementation at the domestic level, and the ongoing and unprecedented rate of natural resource degradation and depletion.

The need to incorporate environmental rights into sustainable development discussions mirrors the need to broaden discussions of human rights to include the right to a clean and safe environment, the right to act to protect the environment, the right to information, and the right to participate in decision-making.

There is, moreover, a growing recognition that climate change is a human rights issue, given that climate change threatens people's rights to life, natural resources, culture, basic social services, and development, particularly in developing countries. If business continues as usual and the global community continues to take grossly inadequate action on climate change, the unprecedented threat posed by climate change to human rights will only grow. Climate action must be prioritized.

Given the monumental threat to human rights posed by climate change, the approach adopted to address the climate emergency (now, more than ever) must be based on a global rights perspective that considers obligations, inequalities, and vulnerabilities and seeks to redress discriminatory practices and unjust distributions of power. This approach must address adaptation to the impacts of climate change as well as mitigation, as it is becoming increasingly clear that certain climate impacts are inevitable regardless of carbon emission reductions. Priority areas for climate adaptation include ecosystem-based adaptation, traditional knowledge, analysis and networking, and access to adaptation finance.

Integrating human rights into action and policies on climate change and empowering people to participate in policy formulation will help states promote sustainability and ensure the accountability of all duty-bearers.

And yet achievement of these twin aims has been hampered by the fact that states have not made their adaptation and mitigation plans sufficiently available to the public. Successful rights-based climate change mitigation and adaptation efforts will depend on accurate and transparent measurements of greenhouse gas emissions and climate impacts, including human rights impacts.

21.3 ENVIRONMENTAL AND HUMAN RIGHTS: THE AFRICAN CONTEXT

In Africa, generally, environmental human rights at the regional level are defined by the poor management of resources, unequal access to and ownership of resources, weak environmental laws that are subject to manipulation by the executive, lack of implementation of these laws, inability to integrate legal obligations into public policies and programmes, and lack of state accountability in the use of natural resources and political power to frustrate environmental policies and programmes.

In addition, African states continue to deny people decision-making authority over their resources, marginalize pastoral and rural communities, and fail to acknowledge the role of women as environmental managers and/or include women in the conceptualization, development, and execution of programmes. This is in spite of the fact that domestic and international tribunals in the region have concluded that the failure to protect the environment may violate human rights and the collective rights of Indigenous people over their ancestral land and resources.

These specific challenges to a rights-based approach to environmental and climate management are compounded by structural features of African society. Patriarchy, for example, is deeply entrenched structurally and enforced. Women are burdened by unpaid care work, the costs of healthcare, unequal pay, and lack of access to the means of production. These disproportionate burdens are often entrenched through tradition and by state laws and practice. Indigenous communities, moreover, continue to struggle to reclaim their land or avoid expulsion from their land for the purpose of economic exploitation. Indigenous communities also continue to push for recognition for themselves and for the traditional knowledge they carry.

In Africa, much work needs to be done to integrate rights into environmental and climate frameworks. This work can't wait, as this is no ordinary time. We are in the midst of the sixth mass extinction of life on Earth, which therefore necessitates bold, transformative cooperation and collective organizing to protect people's rights, ecosystems, and the planet.

Communities in Africa have increasingly turned to courts as part of their strategy to stop rights violations and to protect their territories. They have also looked to international legal frameworks for relief. The next several sections explore certain relevant international legal frameworks and examine several African cases related to rights-based environmental and climate management.

21.3.1 *International Legal Frameworks*

In a number of instances, communities have limited success in protecting their rights and the environment as a result of challenges with domestic laws and the implementation of those laws by governments. In these cases, Indigenous peoples and local communities have fought hard to secure their rights at the regional and international levels. This section will focus on environmental or climate-focused international legal frameworks and how they impact Indigenous communities. Decades of commitment, tenacity, personal sacrifice, and well-executed negotiating strategies have led to important rights gains and legal recognition, including, perhaps most significantly, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (2007) and the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas (2018). While securing these legal frameworks at the international level was undoubtedly an achievement, the challenge now often lies at the national level, where many communities are still not recognized and land dispossession has, too frequently, not been addressed.

The United Nations Declaration on the Rights of Indigenous Peoples provides for the protection of land and natural resource rights. The UN Convention on Biological Diversity's (CBD) Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits seeks to ensure the sustainable use of biodiversity's components and the fair and equitable sharing of the benefits of genetic resources. The Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) highlights (in its preamble) that climate action should respect and promote human rights and the rights of Indigenous peoples.⁴ These legal frameworks have been successfully incorporated into legal challenges and negotiations with governments who have signed onto these conventions and protocols. They provide an additional layer of accountability and protection

⁴ See Paris Agreement to the United Nations Framework Convention on Climate Change, 12 December 2015, TIAS No. 16-1104, Preamble.

and are used in particular to support people's rights and environmental protections provided under state constitutions.

South Africa, for instance, voted for UNDRIP and has signed and ratified CBD, UNFCCC, and the Paris Agreement. The South African government is therefore obliged to comply with these instruments, namely, by incorporating these international obligations into their national laws.⁵ In the larger Southern African context, Indigenous communities currently face drastic social change, extreme marginalization, and poverty.⁶ These communities tend to have the lowest health and nutritional outcomes, the highest rates of unemployment, illiteracy, and mortality, the shortest life spans, the lowest incomes, and the lowest degrees of political participation.⁷ The COVID-19 pandemic is, in manifold ways, exacerbating these issues for Southern Africa's Indigenous peoples, some of whom are already struggling for state recognition and grappling with issues around access to their land and the natural resources and benefits that derive from it.

21.4 EXAMPLES OF CLIMATE-RELATED CASES IN AFRICA

21.4.1 *Save Lamu & Five Others v. National Environmental Management Authority & Another*

On 26 June 2019, the National Environment Tribunal delivered an important decision revoking an Environmental Impact Assessment (EIA) License issued to Amu Power Company Limited for the development of Kenya's first coal-fired power plant – a 1050MW plant to be located on the seashores of the climate-sensitive Lamu County. The long-awaited decision followed an appeal first filed on 7 November 2016 by Save Lamu, a community-based organization, and five Lamu residents, together representing the interests of the vibrant and diverse community that has called Lamu Island home for centuries. Lamu was previously declared a World Heritage site.

The judgment asserts the centrality of community voices in decision-making processes, emphasizing in particular the participation of those communities

⁵ See Cath Traynor et al., 'Protecting and Promoting Indigenous Peoples Rights in Academic Research Processes', Natural Justice, February 2018 <<https://naturaljustice.org/wp-content/uploads/2018/06/Protecting-Promoting-Indigenous-Peoples-Rights-English.pdf>>.

⁶ See Jennifer Hays and Megan Biesele, 'Indigenous Rights in Southern Africa: International Mechanisms and Local Contexts' (2011) 15 *International Journal of Human Rights* 1.

⁷ See Robert K. Hitchcock and Lola Garcia-Alix, 'Report from the Field: The Declaration on the Rights of Indigenous Peoples: Implementation and Implications' (2009) 4 *Genocide Studies and Prevention* 99.

that are most affected by such harmful development choices. It equally highlights key aspects of effective public participation, underscoring the importance of access to information and the role played by the environmental regulator in facilitating participation and ensuring that environmental licences contain adequate measures to mitigate harmful environmental impacts.

Notably, the Appellants argued that the project would breach Kenya's obligations under the UNFCCC's Paris Agreement and that the project was inconsistent with Kenya's low-carbon development commitments. Amu Power, on the other hand, argued that it had included climate mitigation and adaptation measures in its Environmental and Social Impact Assessment (ESIA) Study. Amu Power further argued that the Appellants had not shown exactly how the Kenyan government would violate its international obligations and that the Paris Agreement only came into force after the ESIA Study had been concluded and the ESIA License issued, therefore rendering it inapplicable.

In terms of domestic climate legislation, Kenya had passed the Climate Change Act in 2016. In its decision, the Tribunal stated: 'Climate Change issues are pertinent in projects of this nature and due consideration and compliance with all laws relating to the same. The omission to consider the provisions of the Climate Change Act 2016 was significant even though its eventual effect would be unknown.'⁸

The Tribunal applied the precautionary principle and explained that where there is a lack of clarity on the consequences of certain projects, it behooves regulatory bodies to reject those project proposals as a precaution. Amu Power conceded that while they had sections on climate change, they had not considered the provisions of the Climate Change Act, which was in force by the time that they were preparing the ESIA. They argued, however, that the consequences of their failure to consider the Climate Change Act and Kenya's obligations under the Paris Agreement would be unknown (especially because the Paris Agreement was only concluded in November 2016, and Save Lamu had not demonstrated how the coal plant might impact these commitments). The Tribunal nevertheless rejected the argument that it was acceptable to omit detailed climate impact assessments due to the uncertainty around impacts.

21.4.2 Earthlife Africa Johannesburg v. Minister of Environmental Affairs & Others

This case was brought by Earthlife Africa, as represented by the Centre for Environmental Rights, and challenged the construction of a coal plant on

⁸ *Earthlife Africa Johannesburg v. Minister of Envntl. Affairs* 2017 (2) All SA 519 (GP) (S. Afr.).

climate change grounds. The Chief Director of the Department of Environmental Affairs authorized, under the National Environmental Management Act, 107 of 1998, the construction of a 1,200MW coal-fired power station (Thabametsi) near Lephalale in the Limpopo Province without the benefit of a climate impact assessment to inform his decision. The application raised concerns about the environmental impacts of that decision.

Earthlife pursued judicial review of the decisions of the Chief Director and the Minister of Environmental Affairs. Earthlife argued that the Chief Director was obliged to consider the climate change impacts of the proposed power station before granting the authorization, which he failed to do. Coal-fired power stations are the single largest national source of greenhouse gas emissions in South Africa. Thabametsi's own reports indicate that the power station, if it proceeds, would have an operational lifespan of forty years. It would emit 8.2 million tons of carbon dioxide equivalent each year, thereby contributing up to 2 per cent of South Africa's total GHG emissions by 2020 and up to 3.9 per cent by 2050.

On 8 March 2017, the High Court in Pretoria confirmed that climate change poses a substantial risk to sustainable development, which is enshrined in the South African Constitution as an environmental right. The Court also found that adequate consideration of climate change forms part of the principle of intergenerational justice. The decision-maker should thus have given proper consideration to the climate change impacts of the proposed coal-fired power station before making a decision on the application. The case sets an important precedent, challenging decisions that rely on outdated energy policies to support new coal development and applying international agreements in the local context. While the decisions are being challenged, the construction of the plant, and the emissions associated with its operation, has been suspended.

21.4.3 Philippi Horticultural Area Food & Farming Campaign & Another v. MEC for Local Government, Environmental Affairs & Development Planning: Western Cape & Others

The Philippi Horticultural Area (PHA) is a 120-kilometre radius of farmland and wetland that has been the city of Cape Town's primary source of fresh produce for over a century. The success and climate resilience of the PHA is due, in part, to the Cape Flats Aquifer, which makes the area cooler and more resistant to drought.

For a long time, the city did not approve any developments that encroached into the PHA. However, as urban sprawl increased, the city's resolve

diminished. Relying upon misguided and inaccurate studies, the city of Cape Town approved development proposals that would move its urban edge to incorporate productive farmland. The two proposed developments would eliminate one-third of the farmland, resulting in a loss of 4,000 jobs and 150,000 tons of annual vegetable and flower production, not to mention millions of rand in economic losses.

The PHA Food & Farming Campaign, a grassroots organization, took the matter to the Western Cape High Court. That court determined that, while there were groundwater, freshwater, and stormwater impact assessments, there was no specialized aquifer impact assessment. Moreover, the impact assessments already completed were outdated. Judge Savage, in her judgment, stated: ‘What was required was a more recent assessment of the health of the aquifer and the impact that the proposed development will have on the aquifer given climate change and water scarcity in the area.’⁹

This case marks the first time a judge has instructed a city or a municipality in South Africa to take into account water scarcity and the importance of the water supply in light of climate change for development planning. The court determined that neither the city of Cape Town nor the Western Cape provincial government considered the full impact of the development projects on the Cape Flats Aquifer. The High Court suspended and sent back the development decisions for reconsideration, specifically instructing reconsideration of the rezoning permission and the environmental authorization.¹⁰

⁹ *Philippi Horticultural Area Food & Farming Campaign v. MEC for Local Gov't, Env'tl. Affairs Dev. Planning* 2020 ZAWCHC 8 (High Court Western Cape Division) (S. Afr.).

¹⁰ *Sustaining the Wild Coast and others v. Shell*. In November 2021, Shell made its announcement that it would commence seismic surveys off the wild coast, covering an area of about 6,01km² on the East Coast of South Africa. At the end of 2021, various civil society organisations and Indigenous and local communities brought two court applications challenging Shell's plans to undertake seismic surveys off the east coast of South Africa. Natural Justice and others challenged the government of South Africa and Shell based on the current climate crisis, the impact on the ecosystem and on communities who are culturally and spiritually connected to the land and the ocean. On 28 December 2021, the Grahamstown High Court ordered Shell to stop the seismic surveys. Shell has been interdicted pending the finalisation of Part B of the application. This was a massive victory for the communities. Some of the key issues were the legality of conducting a seismic survey without environmental authorisation, violations of communities constitutional rights, inadequate public consultation and the point that the ocean is common heritage. In the judgment, free prior informed consent, the precautionary principle, understanding of meaning participation, and the cultural and spiritual connection were all reinforced. The legal teams from Richard Spoor Attorneys, Cullinan and Associates, Legal Resources Centre and Natural Justice worked together to stop Shell.

21.4.4 *Sustaining the Wild Coast and Others v. Shell*

In November 2021, Shell announced that it would commence seismic surveys off the Wild Coast, which comprises an area of about 6,011 km² on the East Coast of South Africa. At the end of 2021, various civil society organizations and Indigenous and local communities filed two court applications challenging Shell's plans to undertake these seismic surveys. Natural Justice and others specifically challenged the South African government and Shell using arguments based on the current climate crisis and the impacts on ecosystems and communities who are culturally and spiritually connected to the land and the ocean. On December 28, 2021, the Grahamstown High Court ordered Shell to halt the seismic survey plans, pending the finalization of part B of the application to the Court.

This was a massive victory for the communities involved. The key issues included the legality of conducting a seismic survey without environmental authorization; violations of communities' constitutional rights; inadequate public consultation; and the common heritage of the ocean. The Court, in its judgment, reinforced the importance of free, prior and informed consent; the precautionary principle; participation; and the cultural and spiritual connection of local and Indigenous communities with the land and ocean.

21.5 CONCLUSION

These cases and a few others are beginning to set precedents that give hope to communities as they challenge and win battles against multinational corporations and governments. In the case of *Baleni & Others v. Minister of Mineral Resources & Others*, for example, the Pretoria High Court ruled in favour of the Xolobeni community. The High Court ruled that the Minister of Mineral Resources must obtain the full and formal consent of the Xolobeni community before granting mining rights.

Communities in Africa, like those throughout the rest of the world, are living through very uncertain times. Economies are collapsing, unemployment rates are skyrocketing, hunger is increasing exponentially, and the current droughts and anticipated cyclones continue to endanger communities. It is past time for transformed, people-centred solidarity economies that finally address this injustice and inequality.

Communities in Africa have, moreover, been inspired by climate litigation victories around the world, including more recently in Colombia, New Zealand, Pakistan, India, South Africa, Kenya, and the Netherlands, and the momentum for climate litigation is starting to grow across Africa.

Strategic climate litigation is one avenue communities can pursue to challenge corporations and governments. While it is time- and resource-intensive, it draws a line in the sand and helps create a barrier to stop rights violations and fossil fuel extraction. Each victory produces a ripple effect that reaches communities in Africa and the boardrooms of multinational companies. As communities become more aware of the law, they are better positioned to use it, shape it, and challenge it. Court victories, moreover, make a difference in people's lives when attention is paid to implementation. Though times are uncertain, we can be sure that people, when equipped with the right tools, will stand up for their rights.

As the importance of human rights and a rights-based approach within climate and sustainable development discourse is increasingly recognized, climate litigation is more and more seen as a critical part of the strategy for climate action in Africa. As coal, oil, and gas extraction continues to be supported by financiers and facilitated by governments in Africa, communities are increasingly supported by human rights and environmental lawyers in Africa, with the knowledge that the tide will eventually turn. On the 8th of October 2021, the UN Human Rights Council adopted resolution 48/13 recognizing the right to a clean, healthy and sustainable environment as an international human right. This is a breath of fresh air for the environmental and human rights movement: the air we breathe, the food we eat, the water we drink, and our health, wellbeing, and survival all depend on a clean, healthy and sustainable environment.

Pakistan

*A Good Story That Can Go Awry If Shortcomings Remain
Unacknowledged*

WAQQAS AHMAD MIR*

Pakistan, a country of more than 215 million people,¹ ranks high on the list of countries vulnerable to climate change.² Its history of and experience with environmental law litigation provide many lessons; while there is reason to celebrate certain judicial developments, it is important that litigators and observers remain cognizant of the shortcomings of the approaches currently in vogue. This chapter discusses Pakistan's experience with environmental and climate litigation while also commenting on the limitations of the current approaches.

22.1 ENVIRONMENTAL LAW LITIGATION IN PAKISTAN:
THE HISTORICAL CONTEXT

Although legislation in Pakistan has contained environmental protection provisions for many years, it was not until the 1990s that Pakistan saw the emergence of far-reaching developments on environmental protection in the legislative and judicial spheres.

The Constitution of the Islamic Republic of Pakistan 1973 ('the Constitution')³ has a separate chapter on judicially enforceable rights (dubbed

* This chapter expands on ideas already mentioned in my blog for OpenGlobalRights. Many of the themes and arguments used here have also been explored in greater detail in my article 'From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex Than a Celebratory Tale'. It is printed in the book *Climate Change Litigation in Asia Pacific*. See Jolene Lin and Douglas A. Kysar (eds.), *Climate Change Litigation in Asia Pacific* (Cambridge: Cambridge University Press, 2020).

¹ World Bank Data on Pakistan is available at: <<https://data.worldbank.org/country/pakistan>>.

² See Syed Muhammad Abubakar, 'Pakistan 5th Most Vulnerable Country to Climate Change, Reveals Germanwatch Report', DAWN, 16 January 2020.

³ The Constitution is available at: <<http://www.pakistan.org/pakistan/constitution/> (last accessed 23 August 2020)>..

‘Fundamental Rights’)⁴ that can be used to challenge executive action as well as legislation. The text of the Fundamental Rights, however, carries no express provision regarding any individual or collective right to environmental or climate protection. This gap was ultimately addressed through a judicially crafted process that began in the late 1980s and culminated in a major environmental law ruling in 1994.

Beginning in the late 1980s,⁵ the Supreme Court of Pakistan opened the door to a new species of litigation called ‘public interest litigation’ or PIL.⁶ Simply put, PIL is class action constitutional law litigation that does not require a class to come before the court – individuals can sue to address an issue relating to the ‘public interest’ and can identify a class being affected by the issues raised. Inspired by courts in India, PIL is characterized by relaxed standing/locus requirements for litigants approaching the court, the judicial use of a collaborative and non-adversarial approach to enforcing rights, and the liberal use of judicially created ‘commissions’ to gauge basic facts that are then used by the court to pass final judgment.⁷ Courts use fact-finding commissions in PIL because the High Courts and the Supreme Court of Pakistan in their constitutional jurisdiction – traditionally, as a matter of practice – do not allow the presentation of evidence through, for example, witness examination in such proceedings since courts limit themselves to questions of law and not disputed issues of fact.⁸

As a result of PIL, the Supreme Court and the High Courts have progressively read the Fundamental Rights chapter in expansive ways. These readings may seem curious if one adopts a textualist approach, but they have been justified in the name of aiding vulnerable citizens by expanding the scope of rights. Article 9, which guarantees that no person shall be deprived of life or liberty save in accordance with law, has received a very broad reading and has been interpreted to include a host of other rights, among them the right to a clean and healthy environment.

⁴ Articles 8 to 28 of the Constitution of the Islamic Republic of Pakistan cover the Fundamental Rights and their effect.

⁵ *Benazir Bhutto v. Federation of Pakistan and Others* (1988) PLD 416 (SC) (Pak.).

⁶ See Mansoor Hassan Khan, *Public Interest Litigation: Growth of the Concept and Its Meaning in Pakistan* (Karachi: Pakistan Law House, 1993); see also see Maryam Khan, ‘Genesis and Evolution of Public Interest Litigation in the Supreme Court of Pakistan: Toward a Dynamic Theory of Judicialization’ (2014) 28 *Temple International and Comparative Law Journal* 285.

⁷ See Khan, ‘Genesis and Evolution of Public Interest Litigation in the Supreme Court of Pakistan’, above note 7 at 285.

⁸ For an illustration, see *Rules and Orders of the Lahore High Court* (Lahore: Zephyr, 2005), Volume V, Rule 7, Chapter 4-J. As a matter of practice, superior courts in Pakistan will generally not get involved in issues relating to factual controversies.

The 1994 *Shehla Zia* case, in particular, is now recognized as seminal.⁹ A group of residents in the capital city of Islamabad approached the Supreme Court in its original constitutional jurisdiction¹⁰ with a PIL asking the court to declare that the construction of a proposed electricity grid station should stop. The applicants supported their claim by arguing that the Water and Power Development Authority had carried out inadequate assessments of the effects of the proposed grid station on human health and the environment. The Supreme Court used the language of Article 9, which prohibits the state from depriving a person of life or liberty save in accordance with law, to impose a positive obligation on the state and establish that the ‘right to life’ in the Constitution included the right to a clean and healthy environment.¹¹

Over the next few years, the Supreme Court’s approach was adopted by the High Courts too, as courts decided hundreds of cases where the petitioners’ main claim was the ‘right to a clean and healthy environment’. Many of these cases involved challenges by citizens to large-scale construction or development projects as well as challenges to the conversion of amenity plots or residential plots into commercial zones.¹² In other cases, the grievances aired went beyond a particular locality and concerned entire cities, like when a lawyer filed a PIL challenging vehicular pollution in the capital of Pakistan’s largest province.¹³ Other citizens challenged how the government disposed of solid waste.¹⁴ Until 2015, the scope of PIL and the right to a clean and healthy environment was limited to cases similar to those identified above.

22.2 CLIMATE CHANGE: THE NEW CHALLENGE FOR PIL IN PAKISTAN

In 2015, Asghar Leghari,¹⁵ an agriculturalist and member of the Lahore High Court Bar Association, approached the Lahore High Court to complain of

⁹ See *Shehla Zia and Others v. WAPDA* (1994) PLD 693 (SC) (Pak.).

¹⁰ Article 184(3) allows a party to invoke the original jurisdiction of the Supreme Court of Pakistan if there is a question of general public importance involved with respect to the enforcement of any of the Fundamental Rights conferred by the Constitution.

¹¹ See *Shehla Zia and Others v. WAPDA* (1994) PLD 693, 714 (SC) (Pak.).

¹² See *Ardeshir Cowasjee and 10 Others v. Karachi Building Control Authority and Others* (1999) SCMR 2883 (Pak.).

¹³ See *Syed Mansoor Ali Shah and 4 Others v. Government of Punjab and 3 Others* (2007) PLD 403 (Lahore) (Pak.).

¹⁴ See *Muhammad Yousaf v. Province of the Punjab* (2003) CLC 576 [Lahore] (Pak.); see also Order dated 11 December 2002 in Intra-Court Appeal No. 798/2002, titled *City District Government v. Muhammad Yousaf and Others* (2002) I.C.A No. 798/2002 [Lahore] (Pak.).

¹⁵ See *Leghari v. Pakistan* (2015) W.P. No. 25501/2015 [Lahore High Court Green Bench] (Pak.).

inaction by the state in fighting climate change. The scope of the petition was unlike any other brought before the court. Leghari based his claim on the Pakistani Ministry of Climate Change's failure to implement the National Climate Change Policy, 2012 ('the Policy') and the Framework for Implementation of Climate Change Policy (2014–2030) ('the Framework'). Since he had invoked PIL jurisdiction, the petitioner was not only arguing that there had been a violation of his own fundamental rights but also emphasized that the broader public had been denied its rights. Hence, this claim was not about a city-wide problem – it was about a global issue affecting all Pakistani citizens and people around the world.

In its own words, the court was motivated to act to protect the fundamental rights of the citizens of Pakistan, particularly those of the vulnerable and weak segments of society who are unable to approach the court themselves.¹⁶

Soon after admitting the petition for regular hearing, the court set up a Climate Change Commission.¹⁷ This twenty-one-member commission consisted of representatives of the federal and provincial governments, environmental experts, interest groups, and the petitioner's counsel.

From September 2015 to January 2018, the Climate Change Commission acted, in the court's own words, as 'the driving force in sensitizing the [federal and provincial] governments and other stakeholders regarding gravity and importance of climate change'.¹⁸

The Commission was tasked with ensuring the 'effective implementation of the Policy and the Framework'.¹⁹ While the case proceeded, the court received interim and supplemental reports from the Commission, which helped it gauge progress while also ensuring that all parties cooperated.

The Commission worked as a unit as well as in smaller working groups to achieve the goals identified under Priority Actions provided under the Framework and the Policy. As per the judicial record, the Commission, over a two-year period, helped achieve 66 per cent of the Framework's Priority Actions.²⁰ The Commission also helped design a framework for Climate Smart projects and a method to evaluate them.²¹ It worked with a provincial government to develop a Draft Water Policy as well as a Draft Climate Change Policy.²² The work of the Commission also led all relevant provincial

¹⁶ *Ibid.* at ¶12.

¹⁷ Appointed through the Orders of 14 September 2015, *ibid.* at n14.

¹⁸ *Ibid.* at n14, ¶19.

¹⁹ *Ibid.* at ¶13.

²⁰ See *ibid.* at ¶19.

²¹ See *ibid.* at ¶16.

²² See *ibid.* at ¶ 18.

departments to identify climate change focal points. Plans were also set in place to ensure that climate change concerns are reflected in future growth and development plans.

Another important aspect of the *Leghari* case was that the court kept it pending as a rolling mandamus or continuing review. This is important because there may not always be a clearly identifiable endpoint in climate litigation. A ‘rolling review’ or a continuing mandamus is, by no means, the norm in Pakistan. The last order in this case was passed in January 2018, which consigned the matter to the record instead of closing it as a finally adjudicated matter. With its last order, the court took another innovative step by setting up a six-member Standing Committee – composed of select members of the Commission – that can approach the court ‘for appropriate orders for enforcement of the fundamental rights of the people in the context of climate change, if and when required’.²³

Also notable is the court’s recognition of environmental justice as distinct from climate change matters – perhaps no one could have predicted at the time of the *Shehla Zia* decision in 1994 that this would be the form that the jurisprudence would take. In the court’s own language, environmental justice ‘was largely localized and limited to our [national] ecosystems and biodiversity’.²⁴ Climate justice, on the other hand, calls for a new approach that recognizes the shift ‘from a lineal local environmental issue to a more complex global problem’ where ‘the identity of the polluter is not clearly ascertainable and by and large falls outside the national jurisdiction’.²⁵ Recognizing that countries face a choice between mitigation or adaptation, the court emphasized the importance of the latter.²⁶

The court noted that climate change is not confined to ‘local geographic issues’.²⁷ The court was emphatic that Pakistan faces immense challenges as a result of climate change, including, but not limited to, threats to the environment, ecology, economy, and society. Hence, the scope of PIL now covers what the court called climate justice.

Leghari is as seminal a case as *Shehla Zia*, which first opened the door to the use of PIL to protect the environment. There is no denying that the potential scope of future public interest litigation petitions has broadened.

²³ Ibid. at ¶27.

²⁴ Ibid. at ¶20.

²⁵ Ibid. at ¶21.

²⁶ See *ibid.*

²⁷ Ibid. at ¶20.

22.3 THE LIMITATIONS OF CLIMATE CHANGE PIL

PIL in the High Court and the Supreme Court is high impact insofar as it grabs headlines and allows petitioners, activists, and arguably even judges to feel good about themselves; the high rhetoric of this type of PIL invokes the language of the Constitution while promising protections for the general public and criticizing state inaction. Yet this cannot be seen as a long-term sustainable panacea. Courts can open the door for litigants, but high rhetoric without substantive action cannot solve climate change issues that affect people on the ground. To the extent that courts encourage and aid this high rhetoric, while knowing that the state cannot fulfil the promises of this rhetoric, is unfortunate, to say the least. Constitutional courts tasked with deciding questions of law – and not fact – are not and cannot be the real or final battleground for climate change.

The Supreme Court and the High Courts have also been reluctant to appoint scientists as experts to assist them in climate change or even environmental law litigation. This is the unfortunate result of a common outlook according to which senior (almost always male) lawyers are seen as experts on all things related to environmental law and climate change. Scientific expertise is important not only because it lends credibility to court verdicts but also because it is necessary from a strategic perspective: if superior courts don't use scientists as experts then this will, indeed already does, send a signal to lower forums acting as triers of fact that they do not need to appoint scientists as experts either. In a system where powerful individuals and corporations hire the most expensive lawyers and experts to defend them before the courts that conduct trials of first instance, the courts of magistrates and the environmental tribunal lack capacity and expertise. Superior courts can help these lower courts hold wrongdoers accountable by encouraging them to appoint scientists as experts. If triers of fact, such as statutory tribunals vested with the authority to decide questions of fact, remain ineffective, climate change litigation will continue to suffer a big setback. Superior courts, as well as tribunals exercising statutory jurisdiction, will need to acknowledge that their own expertise in the science involved in climate change litigation can be limited and, as a result, they will need to be more open to appointing climate change experts (i.e., scientists) – not just lawyers – to ensure that solutions are viable and have purchase across the board.

The High Courts, apart from the constitutional jurisdiction in which they hear PIL matters, also exercise appellate jurisdiction and hear statutory appeals of specific fact-based questions under the Environmental Protection Act 1997. The treatment of statutory appeals and the time they take to be resolved is

vastly different from the high-profile indulgence granted to claims lodged in the courts' constitutional (as opposed to appellate) jurisdiction.²⁸ This is troubling and must be addressed by the High Courts that hear appeals from decisions of the lower forum, that is, the Environmental Tribunal. While specific fact-based questions involving liability of individual parties might be less glamorous compared to constitutional law questions involving lofty promises, individuals, and entities contributing to climate change can only be held accountable after detailed evidence is examined and courts rule on the issues involved. It will hurt the courts' legitimacy if they cannot counter the perception that they are slow to address statutory appeals in environmental law; the meaty cases where issues of fact, evidence and specific liability are involved. This is of course as opposed to PIL jurisprudence that, in the eyes of many, is used to lift the public perception of courts while trying to make the executive look inept.

There is no denying that the executive in Pakistan has yawning gaps in what it promises and what it can deliver – but is judicial activism the answer? If every instance of executive action (or even inaction) is mired in litigation flowing from PIL, it will damage policymaking and fair accountability and is likely to result in the executive perpetually second guessing itself. Courts should therefore steer clear of policymaking – celebrating judicial activism is more likely to hurt rather than promote democratic accountability.

There is no doubt about the gains that are possible when courts are seen as a platform that facilitates dialogue between the state and its citizenry.²⁹ However, activists also need to remember that direct engagement with the executive as opposed to simply filing constitutional petitions is more likely to be a strong bet for meaningful change. For instance, Pakistan passed the Climate Change Act in the year 2017, which envisages a Climate Change Council³⁰ as well as a Climate Change Authority.³¹ The two bodies are tasked with ensuring that the country has, among other things, policies regarding adaptation as well as mitigation. The substance of these policies has still not been shared with the public – even if such policies exist in some bureaucrat's locked drawer. It goes without saying that, in developing the substance of

²⁸ See Waqqas Ahmad Mir, 'From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex Than a Celebratory Tale', in Jolene Lin and Douglas A. Kysar (eds.), *Climate Change Litigation in Asia Pacific* (Cambridge: Cambridge University Press, 2020).

²⁹ See Paula R. Newberg, *Judging the State: Courts and Constitutional Politics in Pakistan* (Cambridge: Cambridge University Press, 1995), p. 13.

³⁰ See Pakistan Climate Change Act 2017, 424(2017)/Ex. Gaz., §3 (2017).

³¹ See *ibid.* at §5.

these policies, activist citizens will need to work with the government instead of asking courts to fill in the gaps. While courts can indeed direct that the relevant meetings of the forums identified by Climate Change Act 2017 take place, the activist citizens will need to do the non-glamorous job of working with the government to ensure that policies meet the needs of the vulnerable communities; unlike high-profile constitutional cases, this is non-glamorous work, but it is necessary for long-term sustainability.

Activist litigators appearing for vulnerable communities and rights groups face two major challenges. One is the extreme reluctance of courts in Pakistan to recognize the law of tort, hence rendering next to impossible lawsuits filed against powerful corporations in the hope of recovering tortious damages. In a world in which corporations exert enormous power, muscle, and footprint, activist litigators need to band together to ensure that corporations feel the heat. Although the Punjab Environmental Protection Act 1997³² envisages the payment of compensation to victims and also talks about sums to be paid by a wrongdoer to restore the environment to its state prior to damage, these provisions are rarely enforced. Powerful actors accused of wrongdoing use delays endemic to the justice system to defeat the letter and the spirit of these provisions. This is one area where activist litigators must push courts to start enforcing the law without delay. The second challenge stems from the nature of PIL; it only allows state action or inaction to be questioned by the High Courts and the Supreme Court. Activist litigators, in order to hold corporations accountable, will therefore, as one option, need to convince the High Courts and Supreme Court to read the Constitution broadly enough to subject private parties to PIL.³³ There cannot, however, be long-term accountability for corporations unless environmental tribunals increase their capacity and expertise and start enforcing provisions that allow corporations to be fined or required to pay compensation to victims.

Empowering institutions (just like communities) needs to be at the top of Pakistan's reform agenda. The institutions that are in dire need of reform include the executive-controlled environmental protection agencies in provinces and the federal capital and forums (such as magistrates' courts and environmental tribunals) that try issues of fact related to environmental and

³² See *ibid.* at §17. Provinces have their own environmental protection legislation. The Punjab law is available at: <<http://punjablaws.gov.pk/laws/2192a.html>>.

³³ See *Pakistan Olympic Association v. Nadeem Aftab Sindhu* (2019) SCMR 221 (SC) (Pak.) and *Human Rights Commission of Pakistan v. Pakistan* (2009) PLD 507 (SC) (Pak.) for case law that suggests that courts are open to this possibility.

climate change matters. It is imperative that Pakistan's institutions – as well as those approaching these institutions – recognize that the challenges they face will only become more formidable in the coming years. In order to change things for the better, the shortcomings of current approaches to climate and environmental litigation must be acknowledged.

Index

- accountability
 - carbon majors, 247–48, 319–20
- attributing emissions, 248–53
 - deforestation, 263
 - lack of damaging narratives, 297–300
 - private parties, 246–47
 - supply-side accountability gap, 321–22, 334
 - common but differentiated responsibilities principle, 332–33
 - Gloucester Resources case, 328
 - Gray case, 328
 - no-harm principle, 332
 - People v. Arctic Oil*, 324–27, 334
 - perfect substitution principle, 329–31
 - visual evidence, importance of, 273, 284
- adequacy of efforts to reduce emissions. *See* assessment of climate change policies; failure to adequately mitigate
- administrative due process claims, 127
- administrative law cases, 120, 122–24
- airport expansion, 124
 - climate litigation currents, 126–27
 - coal power stations, development of, 124
 - precedents, 117–29
- Africa
 - balancing development and environmental rights, 377–79
 - failures of legal systems, 379–80
 - Indigenous peoples' movements, 380–81
 - inequalities and injustices, 376–77
 - exacerbation through climate change, 377
 - See also* Kenya; South Africa
- air travel
 - balancing impact of emissions and rights of others, 179–80
 - offset or compensation for emissions, 179, 358
 - tax credits, 32
- airport expansion, 2, 124, 130
 - judicial deference, 309
- Alaska Inter-Tribal Council (AITC)
 - global warming, impact on Indigenous peoples, 282
- Alston, Philip, 267–68
- Amazon (corporation)
 - corporate liability for climate change, 139
- Amazon rainforest
 - deforestation, 2, 12–13, 99, 350
 - Kichwa Indigenous People of Sarayaku* case, 276–80
- assessment of climate change policies
 - “all appropriate measures”, 171
 - consistency, 173
 - due diligence obligation. *See* due diligence obligation
 - due process, 173
 - good faith, 173
 - “highest possible ambition”, 171
 - “maximum available resources”, 172
 - proportionality, 173
 - attribution research, 223–24, 238
 - failure-to-adapt claims, 234–38
 - failure-to-mitigate claims, 231–34
 - individual versus collective rights, 224–30
 - source attribution, 232–34
- Australia, 328–29
 - administrative climate litigation
 - Bushfire Survivors* case. *See* *Bushfire Survivors for Climate Action Incorporated v. Environment Protection Authority*

- Gloucester Resources Limited* case, 328
Gray case, 328
Greenpeace Australia case, 124
 National Environmental Policy Act, 124
 Torres Strait. *See* Torres Strait islanders
 wildfires, 227
 visual evidence, importance of, 285–87
- balancing competing priorities, 32, 257, 340, 343
 Africa, 377–79
 Amazon rainforest, 360
 India, 364, 370–75
 Bangladesh
 climate change inequalities, 134–35, 144
 baseline rights and duties
 common ground doctrine, 25–27
 bioenergy with carbon capture and storage
 (BECSS), 185
 Brazil
 challenges to environmental policy, 359–61
 “direct” climate actions, 355
 environmental and climate crisis
 criminalization of environmental
 activism, 349
 fires and deforestation, 349–50
 illegal logging, 350
 weakening of institutional framework,
 350–52, 361–62
 human rights defenders, 350–52
 illegal drainage of mangrove forests, 357–58
 illegal use of fire, 358
 “indirect” climate actions, 355, 357–58
 “isolated” court actions, 355
 public civil actions, 358–59
 racial inequalities
 disproportionate impacts of climate
 change, 352–53, 363
 release of carbon dioxide, 358
 “structural” court actions, 355
*Bushfire Survivors for Climate Action
 Incorporated v. Environment
 Protection Authority*, 285–87
- Canada
 forced displacement as a result of climate
 change, 226
 public interest standing, 316
 wildfires, 227
 carbon dioxide (CO₂), 240–41
 oil and gas extraction, impact of, 241, 248,
 320
 sources, 241–44, 242
- carbon majors, 2
 accountability, 319–20
 attribution, 250–53, 251
 supply-side accountability gap, 321–22
 advancements in climate science, 209
 aims of litigation, 210
 attributing source emissions, 250
 attribution
 accountability, 250–53, 251
 direct financial impacts of litigation
 defendants, 215
 direct regulatory impacts of litigation, 214
 impacts of litigation, 207, 218–19
 financial impacts, 215–18
 regulatory impacts, 214–15
 indirect financial impacts of litigation
 devaluation of shares, 216–18
 increasing capital costs, 216
 investors, 216
 liability insurance, 216
 indirect regulatory impacts
 of litigation, 215
 land lost to sea level rises, 251
 negligence, 119, 211
 number of cases, 209
 private nuisance, 119, 211
 production gap, 321
 public nuisance, 211
 responsibility for emissions, 239, 242, 247–50
 strategic litigation, 208
 tort law, 211
- causality and human rights–based climate
 litigation, 15, 36, 308
 asbestos litigation, 314
 attribution research, 224
 failure-to-adapt claims, 234–38
Fairchild principle, 339–41
 liability model of responsibility, 36
 wildfire litigation, 227
- Center for Climate Crime Analysis (CCCA),
 256, 260
 cooperation, 265
 core principles, 261–62
 illegal logging and deforestation, 265
- Children’s Investment Fund Foundation
 (CIFF), 196, 201
- children’s rights, 142, 224. *See also* *Future
 Generations v. Colombia*; *Juliana
 v. United States*; ICCPR complaint;
 UN Committee on the Rights of the
 Child; UN Convention on the
 Rights of the Child

- civil law cases, 119–20
- claims against corporations, 16, 35, 120, 246–47
 Amazon (corporation), 139
 corporate veil, 362
 strategic litigation, 99
- ClientEarth, 201–2, 212
- Climate Accountability Institute, 249
- Climate Action and Low Carbon
 Development Act 2015 (Ireland),
 305–6
- Climate Action Tracker (CAT), 341
- Climate Change Act 2016 (Kenya), 382
- Climate Change Act 2017 (Pakistan), 393–94
- Climate Change Advisory Council (Ireland),
 305
- climate change science, 240
 sources of greenhouse gases,
 241–44
- climate justice
 disproportionate impacts of global warming,
 132–33
 political inequalities, 137–38, 374–75
 racial inequalities, 136–37, 352–53, 363
 wealth versus poverty, 133–35, 138–40, 371–72
 women, 135–36
 ethics and moral responsibility,
 140–41
- Climate Litigation Accelerator (CLX), 5
- climate refugees. *See Teitiota v. New Zealand*
- Climate Warrior Campaign (India), 374
- coal mining, 2, 17, 164
 India, 364, 371, 375
 Urgenda case. *See Urgenda v. the Netherlands* see also oil and gas
 extraction
- coal-fired power stations, 17, 22, 37
 Australia, 328
 Kenya, 381–82
 South Africa, 382–83
- collective rights, 226–27
 Indigenous communities, 226, 280, 379
 self-determination, right to, 226–27
- Colombia
 deforestation in the Amazon region, 350
 incorporation of human rights arguments,
 102. *See also* deforestation; *Future Generations v. Colombia*
- Committee on the Elimination of
 Discrimination against Women
 (CEDAW)
 climate change as a human rights duty,
 153–54. *See also* women,
- common but differentiated responsibility
 (CBDR) principle, 151, 245, 332, 337
 ambiguity, 344
- common ground as a baseline for human rights
 claims, 25–27
- community rights versus individual rights,
 224–30. *See also* collective rights;
 individual rights
- construction of new airport runways. *See*
 airport expansion
- corporate responsibility for emissions. *See*
 claims against corporations
- corporate veil, 362
- courts. *See* judicial proceedings
- COVID-19 pandemic
 impact of, 180, 219, 333, 352, 359, 376, 381
- criminal and corporate liability law cases, 120
- dam construction
 Narmada Bachao Andolan case, 370
- dam disasters, 236, 350–51
- deforestation, 13, 99
 cattle ranching, impact of, 2
 Center for Climate Crime Analysis,
 265
 foreign enforcement targeting illegal
 commodities, 263–64
 foreign enforcement, lack of information
 for, 264
 illegal logging, 262, 350
 Intergovernmental Panel on Climate
 Change, 262
 link to other illegal activities, 263
 local enforcement, lack of, 263. *See also*
 illegal logging,
- delay enacting national climate change law, 12,
 37–38, 111, 186, 239, 247–48, 334, 337,
 394
- democratic legitimacy
 open standing, 315–18
 subsidiarity principle, 343
- “direct” climate actions, 355
 Brazil, 355, 360
- disillusionment with multilateral processes, 101
- diversity of legal actions
 range of acts, policies, and practices, 98
 range of legal principles, 98
 range of parties, 908
- drug dealer defense
 market substitution assumption, 329–30
- Duarte Agostinho v. Portugal*
 minimum fair share norm, 31

- due diligence obligation
- climate change policies, 173–75, 341
 - compliance, 175
 - consistency, 175–76
 - methodology, 176
 - policy gaps, 176
 - policy implementation/effectiveness, 176
 - progression, 176
 - targets and monitoring, 175
 - timelines, 176
 - transparency, 176
 - Milieudefensie* case, 212
 - no-harm principle, 332
 - Notre Affaire à Tous* case, 213
- due process, 34, 127, 173
- duty of care
- Milieudefensie* case, 212
 - Notre Affaire à Tous* case, 213
 - Urgenda* case, 128, 142
- duty to take precautionary measures, 127.
- See also* precautionary principle
- Earthlife Africa Johannesburg v. Minister of Environmental Affairs & Others*, 382–83
- Ecuador
- illegal mining operations, 274–76. *See also* *Kofan Indigenous People of Sinangoe v. Ecuador Ministry of Mining*
 - illegal oil exploration, 277–80. *See also* *Kichwa Indigenous People of Sarayaku v. Ecuador*
- emissions reduction plans
- assessment of state human rights obligations, 178
 - CESCR assessment of state human rights obligations
 - whether avoiding regression, 182–83
 - whether climate plan appropriately ambitious, 181–82
 - whether emissions reductions consistent with human rights, 185
 - whether progressive increase in ambition, 182–83
 - whether state giving adequate priority to human rights, 181
 - whether state has taken/is taking all rights-respecting steps, 178–80
 - whether state planning to reduce emissions in line with global target, 183–85
- challenges
- mitigation targets, 18
 - rights-based challenges, 19
 - rulings, 22–24
 - specific projects and policies, 19
 - challenges to corporations, 16
 - challenges to states, 16, 166–70
 - Family Farmers and Greenpeace Germany* case, 168
 - Juliana* case, 166–67
 - Neubauer* case, 9
 - Norwegian Constitution, 167–68
 - reasonable minimum obligation, 339–40
 - Urgenda* case, 9, 167
- enforcement lawsuits, 193–94
- balancing competing priorities, 257
 - evidence, 257
 - inadequate enforcement, 257
 - lack of coordination, 257
 - legal competence of courts, 27–28, 255–56
 - technological advancements
 - information sharing, 258–60
- environmental impact assessments
- licenses granted by local planning authorities, 123, 125, 355, 381
 - obligations of States, 165
 - omission of climate impacts, 29, 123, 193, 328, 382, 384
 - People v. Arctic Oil*, 326–27
 - strategic litigation, 374
- equality-focused climate litigation, 140–41
- benefits, 141–42
 - proliferation, 142–44
- Europe
- human rights-based climate litigation, 9–11
- European Convention on Human Rights (ECHR) claims, 305, 309–11
- prohibition on inhuman or degrading treatment, 336
 - respect for private and family life, 236, 336, 343
 - right to life, 236, 336. *See also* European Court of Human Rights (ECtHR)
- European Court of Human Rights (ECtHR)
- Budayeva and Others v. Russia*, 236
 - common ground doctrine, 25
 - Duarte Agostinho v. Portugal*, 31–32
 - failure-to-adapt claims, 235–36
 - Family Farmers and Greenpeace Germany v. Germany*, 168
 - Kolyadenko v. Russia*, 236

- European Court of Human Rights (ECtHR) (cont.)
Önerildiz v. Turkey, 236
Six Portuguese Youth v. 33 Governments of Europe, 335–38, 347–48
 state's positive obligations in respect of natural disasters, 236
Urgenda case. *See Urgenda v. the Netherlands*
- European Court of Justice (CJEU)
 duty to carry out environmental impact assessments, 326
- European Union
 mitigation targets, 29, 37
- evidence
 enforcement lawsuits, 257
See also visual evidence, importance of
- Extinction Rebellion, 1. *See also* social justice movements
- extraction and development projects
 economic considerations, primacy of, 125
See also balancing competing priorities
- failure to adapt
 attribution science, 223, 234–38
 causation analysis, 235
 source attribution, 235
 human rights–based climate litigation, lack of, 34
Sacchi case, 225
Shehla Zia case, 391
- failure to adequately mitigate, 177
 attribution science, 223, 231–34
Sacchi case, 225
Shehla Zia case, 391
- Fairchild v. Glenhaven Funeral Services*, 339–40
 causation, 339–41
- Family Farmers and Greenpeace Germany v. Germany*, 168
- Ferrão Carvalho v. Europe*, 29, 37
- foreseeability of climate impacts, 232, 235, 237–38
- forest-dwelling communities
 stewardship rights, 366–67, 369, 372–75
- fossil fuel companies. *See* carbon majors
- Framework for Implementation of Climate Change Policy 2014–2030 (Pakistan), 390
- France
 climate change inequalities, 140
 failure to adequately mitigate, 226
- fraud and misrepresentation
 misleading public opinion and investors, 120, 208, 210–12, 217
- #FridaysforFuture, 1, 205. *See also* social justice movements
- Friends of the Irish Environment v. Government of Ireland & Ors*, 168, 305, 318
 deference, 308–12
 judicial deference, 306
 justiciability arguments, 307–8
 policy discretion, 306–7
 retrogressive steps, 314
 right to a healthy environment, 305, 312–15
 right to bodily integrity, 305, 312
 separation of powers, 306–7
- Future Generations v. Colombia*, 191, 299
 attribution science, 232, 237
 government responsibility for adequate mitigation, 128
 state and non-state collaboration, 148
- Germany, 9
 domestic climate litigation
 incorporation of human rights arguments, 102
 lawyer-activists, 200
 standing, 37
See also Neubauer v. Germany
- Global South
 common but differentiated responsibility principle, 151
 constitutional and human rights arguments, 147–48
 development of climate litigation, 146, 189–91
 enforcement of existing laws, 193–94
 rights-based claims, prevalence of, 191–93
 stealthy climate litigation, 194–95
 implement mitigation projects, 155–56
 implementation of climate law frameworks, 146–47
 modes of legal action, 187–89, 195–205
 remedies in climate cases, 148–49
 polluter pays principle, 151
 reparations for climate-related harms, 149
restitutio in integrum, 150
- Gloucester Resources Limited v. Minister for Planning*
 market substitution assumption, 330
- Golder v. United Kingdom*, 344

- governmental responsibility for adequate mitigation, 128
 - source attribution, 232, 238
 - See also* states' responsibilities to guarantee protection from climate change-related harms
- grassroots activism, 197–99
- greenhouse gas (GHG) emissions
 - climate change science, 241–44
 - Neubauer* case
 - insufficient pledges, 9
 - Urgenda* case
 - insufficient pledges, 9
- Greenpeace Australia Ltd v. Redbank Power Co*, 124
- Greenpeace Germany v. Germany*, 26, 32, 169
- greenwashing, 208, 217, 239
 - violations of OECD guidelines, 212
- Guiding Principles on Shared Responsibility
 - indivisible injury, 338–39
- human rights–based climate change (HRCC)
 - litigation, 1–2
 - baseline rights and duties. *See* baseline rights and duties
 - cases (2005–2021), 11–12, 22, 40–83
 - failure to adapt. *See* failure to adapt
 - failure to adequately mitigate. *See* failure to adequately mitigate
 - legal mobilization theory. *See* legal mobilization theory
 - limitations
 - geographic reach, 34
 - not an end in and of itself, 34
 - “new wave”/“next generation” cases, 99–101
 - post-Paris Agreement, 10–18
 - common ground doctrine, 25–27
 - compatibility of government policies with climate rights and duties, 29–33
 - establishing baseline rights and duties, 25–27
 - justiciability of legal obligations, 27–29
 - pre-Paris Agreement, 10
 - procedure, 24–25
 - proliferation, 3, 10–14
 - recent key legal challenges, 2–3
 - ICT. *See* technological advancements
 - illegal logging, 262–64, 350
 - Center for Climate Crime Analysis, 265
 - import embargoes, 264. *See also* deforestation
 - illegal mining operations
 - Kofan Indigenous People of Sinangoe* case, 274–76
 - impacts of global warming
 - climate litigation, 145–48
 - disproportionate nature, 132–33
 - gender inequality, 135–36
 - Global South, 155–56
 - political inequality, 137–38
 - poor and marginalized people, 133–35, 371–72
 - racial inequality, 136–37
 - See also* climate justice
 - international cooperation, 152–55
 - remedies, 148–51
 - India
 - development policies
 - balancing environmental protection, 370–71
 - emissions, 364
 - exclusionary conservation, 371–73
 - international environmental law, 373
 - judicial proceedings, 365–66
 - environmental jurisprudence, 366–67
 - land acquisition, 365
 - non-implementation of environmental laws, 368
 - public trust doctrine, 365, 368, 373
 - standing, 364
 - strategic litigation
 - balancing development with environmental protection, 372–75
 - Indigenous peoples' movements, 1, 226
 - Baleni* case, 385
 - constitutional obligation to manage shared natural resources, 280–83
 - granting mining rights, 385
 - illegal mining operations, 274–76
 - illegal oil exploration, 276–80
 - land grabs, 375
 - public international law cases, 121
 - rights of forest-dwellers, 372
 - Torres Strait islanders, 158–65
 - “indirect” climate actions, 355, 357–58
 - Brazil, 355
 - individual rights, 227
 - insufficient pledges, 2, 32, 180
 - greenhouse gas (GHG) emissions
 - Neubauer* case, 9
 - Urgenda* case, 9
 - reducing deforestation, 12

- Inter-American Court of Human Rights (IACtHR)
- Advisory Opinion on Human Rights and the Environment, 22, 88, 192
 - failure-to-adapt claims, 237
 - forms of evidence, 278
 - Kichwa Indigenous People of Sarayakur* case, 277–80
 - Velasquez Rodriguez* case, 150
- Intergovernmental Panel on Climate Change (IPCC), 1–2, 130, 244
- common ground doctrine, 26
 - GHG emissions reduction targets, 10
 - impacts of global warming, 132, 320
- international cooperation
- international law as persuasive authority, 153
 - judicial and quasi-judicial bodies, 152–55
 - teleological or purposive method of interpretation, 152
- International Covenant on Civil and Political Rights (ICCPR)
- right to life, 143
 - rights of Indigenous peoples
 - Torres Strait islanders, 158–65
 - Adaptation Claim, 162–63
 - Australia's human rights obligations, 164–65
 - Mitigation Claim, 163–64
- International Covenant on Economic, Social and Cultural Rights (ICESCR)
- adequacy of efforts to reduce emissions, 177
 - international cooperation, 153
 - international treaties, importance of, 131
- Ireland
- Climate Action and Low Carbon Development Act, 305–6
 - National Mitigation Plan, 305–6
 - See also Friends of the Irish Environment v. Government of Ireland & Ors*
- “isolated” court actions, 355, 362
- Brazil, 355
- Israel
- climate change inequalities, 137–38
- judicial activism, 192, 307, 311, 393–95
- judicial and quasi-judicial bodies
- international cooperation, 152–55
- judicial deference, 27, 32
- Friends of the Irish Environment* case, 306, 308–10
- judicial proceedings, 255
- enforcement concerns, 255–56
 - Friends of the Irish Environment* case, 305–7
 - deference, 308–12
 - justiciability arguments, 306–8
 - right to a healthy environment, 312–15
 - standing, 315–18
- India, 365–66
- balancing development with environmental protection, 370–71
 - environmental jurisprudence, 366–67
 - right to a healthy environment, 312–15
 - technological advancements, impact of, 256
- Juliana v. United States*, 84, 99, 143, 166–67, 228, 299
- justiciability
- Friends of the Irish Environment* case, 306–8
- justiciable right to government climate action, 27–29
- non-justiciability doctrine, 93, 194, 307
- Kanuk v. State of Alaska*
- constitutional obligation to manage shared natural resources, 280–83
 - Public Trust doctrine, 280
- Kenya
- coal-fired power stations, 381–82
- Kichwa Indigenous People of Sarayaku v. Ecuador*, 276–80
- Kofan Indigenous People of Sinangoe v. Ecuador Ministry of Mining*, 274–76
- Kyoto Protocol, 16, 164
- India, 373
 - Netherlands, 346
- land acquisition
- India, 365, 375
- lawyer-activists, 199–201
- legal certainty, 313–14
- legal challenges, nature of
- coal mining, 2
 - fossil fuel companies, 2
 - high-emission economic activities, 2
 - insufficient government pledges, 2
 - Neubauer* case, 9
 - Urgenda* case, 9, 32
 - UN Committee on the Right of the Child, 3
 - young plaintiffs and future generations, 2, 12

- legal mobilization theory, 85–86, 93–94
 group dynamics and collective mobilization, 89–92
 institutional and structural incentives and disincentives, 86–89
 micro-politics of disputing behaviour, 92–93
- legal transplant litigation, 203–4
- Leghari v. Pakistan*, 2, 11, 99, 191, 236
 attribution science, 232
 Climate Change Commission, 389–91
 continuing mandamus, 391
 failure to implement climate change policy, 390
 state and non-state collaboration, 148
- links between human activity and climate
 impact, 1, 320–22. *See also* attribution research
- locus standi. *See* standing
- low-profile climate litigation, 117
 administrative law cases, 120–21
 civil law cases, 119–20
 criminal and corporate liability law cases, 120
 public international law cases, 121
- major fossil fuel companies. *See* carbon majors
- Manushi Sangathan v. Government of Delhi*, 367
- margin of appreciation, 28–29, 173
 ECtHR, 310, 342–44
 emissions reductions
 choice of means, 342–43
Hatton case, 342–44
 respect for private and family life, 343–44
Taşkin case, 342
Urgenda case, 346–47
 use of its resources and rights obligations, 179
- margin of discretion, 155, 167, 173
- market incentives
 illegal deforestation, 264
 renewable energy projects, 125, 130
- market substitution assumption, 329–30. *See also* perfect substitution argument
- Massachusetts v. EPA*, 189, 193
 air pollutant, concept of, 128
 minimum fair share norm, 30–33, 37
 nationally determined contributions, 170–75
Urgenda case, 167, 175
- modes of litigation, 205
 “The Enforcer”, 197, 204–5
 “The Engineer”, 197, 203–4
 “The Farmer”, 197, 201–3
 “Grassroots Activist”, 197–99
 “Hero Litigators”, 197, 199–201
- Narmada Bachao Andolan v. Union of India*, 370–71
- narrative change strategies, 290–93
 climate litigation, 296–97, 300–1
 negative/damaging narratives, 297–300
Even it Up campaign, 294
 human stories, use of, 295–96
 Ley Pulpin, Peru, 293–94
- National Climate Change Fund (Brazil), 356
- National Climate Change Policy 2012 (Pakistan), 390
- National Environmental Policy Act (NEPA) (Australia), 124
- National Environmental Policy Act (NEPA) (USA), 124
- National Green Tribunal (India), 365
- National Policy on Climate Change (Brazil), 356
- nationally determined contributions (NDC)
 assessment of emissions reductions,
See assessment of climate change policies; emissions reduction plans
 Australia and Torres Strait, 163
 Global South, 195
 Paris Climate Agreement,
 170–75, 178, 245
- negative emissions, 184–85, 337
- negligence
 cases against carbon majors, 119, 211
- Netherlands, 9
 domestic climate litigation
 incorporation of human rights arguments, 102
See also Urgenda v. the Netherlands
- Neubauer v. Germany*, 2, 9–10
 failure to mitigate, 18
 justiciability, 27
 material incentives, 33
 standing, 37
 temporal dimensions of climate change, 38
 “new wave”/“next generation” cases, 99–101
 strategic litigation, 101–3
- New Zealand, 13. *See also Teitiota v. New Zealand*
- no-harm principle, 175, 332
- non-justiciability doctrine, 93, 194, 307

- non-profit organization litigants, 188, 195, 201–3, 205
- Norway
carbon emissions, 323, 333
regulation of petroleum activities, 324
See also People v. Arctic Oil
- OECD Guidelines for Multinational Enterprises, 35, 212, 264
- oil and gas extraction, 122–25, 212–13, 322
CO₂ impact of, 241, 248, 320
enforcement concerns, 255
Norwegian Constitution, 167–68, 324
People v. Arctic Oil, 324–27
See also carbon majors; coal mining; extraction and development projects
- oil exploration, 2
Kichwa Indigenous People of Sarayaku case, 276–80
People v. Arctic Oil, 323, 324–27
See also coal mining; *Kichwa Indigenous People of Sarayaku v. Ecuador*;
People v. Arctic Oil
- open standing regime, 315–18
- Oslo Principles on Global Climate Change (2015), 125
- “others do it too” defense, 234
- Pakistan, 11, 387
environmental justice, 391
environmental protection provisions, 387, 393–94
identity of polluters, 391
judicial activism, 393–95
judicially enforceable rights, 387
public interest litigation, 388–89
- Palestine
climate change inequalities, 137–38
- Pandey v. Union of India*, 193, 368, 373
- Paris Climate Agreement (2015), 1–2, 15–30, 373
adoption and implementation, 14, 245
Africa, 380
common but differentiated responsibilities, 332
common ground doctrine, 26
GHG emissions reduction targets, 10, 332
human rights impacts, recognition of, 2
international cooperation, 153, 333
People v. Arctic Oil, 333
- People v. Arctic Oil*, 320
oil drilling licenses, 324
- Paris Agreement, 333
- perfect substitution argument, 331
right to a healthy environment, 324–25
Supreme Court judgment
supply-side accountability, 325–27
See also market substitution assumption
- Philippi Horticultural Area v. MEC for Local Government, Environmental Affairs and Development Planning*, 383–84
- Philippines’ Human Rights Commission
impact of climate change on human rights, 17, 35, 99, 101, 213, 298–99
- Planning Act (UK)
airport expansion, 309
environmental assessments, 326
- policy discretion, 27–29, 166, 168, 174, 179
Friends of the Irish Environment case, 306–7
People v. Arctic Oil, 325–27
Urgenda case, 346
- political inequalities
disproportionate impacts of climate change, 137–38
- polluter pays principle, 151, 156, 368
- Portillo Cáceres v. Paraguay*, 149–50, 171
- Portugal, 31. *See also Duarte Agostinho v. Portugal*; *Six Portuguese Youth v. 33 Governments of Europe*
- precautionary principle, 90, 125, 128, 165, 174
Kofan Indigenous People of Sinangoe case, 276
Pandey case, 368
Save Lamu case, 382
- precedent and legal certainty, 313–15
- private nuisance
cases against carbon majors, 119, 211
prohibition on inhuman or degrading treatment, 336
- prosecutor/enforcement authority initiated litigation, 204–5
- public activism, 110–11
- public interest litigation (Pakistan)
limitations
lack of substantive action, 392
reluctance to appoint climate change experts, 392
statutory appeals, 392
right to a clean and healthy environment, 389
right to life, 388
Shehla Zia case, 389

- standing requirements, 388
- public international law cases, 121
- public nuisance
 - cases against carbon majors, 211
- public trust doctrine, 284
 - India, 365, 368, 373
 - Kanuk* case, 280–83
- Punjab Environmental Protection Act 1997 (Pakistan), 394

- racial inequalities
 - disproportionate impacts of climate change, 136–37, 143–44
 - Brazil, 352–53, 363
- regulation-forcing litigation, 193–94
- remedies
 - balancing competing priorities, 32
 - duty to cooperate as a judicial remedy, 152–55
 - Global South
 - polluter-pays principle, 150
 - Portillo Cáceres* case, 149
- reparations, 149
- restitutio in integrum*, 150
 - Teitiota* case, 149
 - Velasquez Rodriguez* case, 150
 - injunctive relief, 211
 - international law, 153–55
 - strategic litigation, 111–13
- resource allocation
 - comparison to peer states, 181–82
 - margin of appreciation, 179
 - emissions reduction, 178–80
 - state subsidies, 181
- respect for private and family life, 224
 - ECHR, 236, 336, 343
- retrogressive steps, 182–83
 - Friends of Irish Environment* case, 314
- right to a healthy environment, 27, 319, 378
 - Friends of the Irish Environment* case, 305–6, 312–15, 318
 - IACHHR, 22
 - Norwegian Constitution, 324–25
 - Pakistan, 389
 - People v. Arctic Oil*, 324
- right to bodily integrity, 305
 - Friends of the Irish Environment* case, 305, 312
- right to health, 224, 319
- right to life, 38, 88, 165, 192, 224, 319
 - Africa, 378
 - ECHR, 236, 336
 - Friends of the Irish Environment* case, 305, 312
 - IACHHR, 311
 - ICCPR, 143, 158
 - Portillo Cáceres* case, 149
 - Shehla Zia* case, 389
 - Subhash Kumar* case, 369
 - Teitiota* case, 149
- Rio Declaration (1992), 2
- risks associated with litigation, 113–15

- Sacchi v. Argentina*
 - children's rights, 225
 - failure to adapt, 225
 - failure to adequately mitigate, 225
 - UN Convention on the Rights of the Child, 225, 228–29
- Save Lamu & Five Others v. National Environmental Management Authority & Another*, 381–82
- separation of powers doctrine, 28, 155, 168, 232, 307, 309, 317, 347
- shared responsibility
 - causation, 340–41
 - common but differentiated responsibilities, 337 *See also* common but differentiated responsibility (CBDR) principle
 - ECHR obligations, 338–41
 - fair share, 337–38, 341
 - Guiding Principles on Shared Responsibility, 338–39
 - indivisible injury, 338–39
 - reasonable minimum obligation, 339–40
 - Urgenda* case, 347
 - Shehla Zia and Others v. WAPDA*, 389, 391
 - Six Portuguese Youth v. 33 Governments of Europe*, 335–36
 - ECHR claims, 336–38, 347–48
- social inequalities. *See* climate justice
- social justice movements, 1
 - India, 365
- South Africa
 - coal-fired power stations, 383
 - development impacts on aquifers, 383–84
 - international agreements, 381
 - See also Earthlife Africa Johannesburg v. Minister of Environmental Affairs & Others; Philippi Horticultural Area v. MEC for Local Government, Environmental Affairs and Development Planning*

- standing, 37
 applicable standing rules, 315
Friends of the Irish Environment case, 315
 India, 364
 liberal approach
 government decision-making, 317
 rule of law, 315–16
 trend, 316
 rule of law, relationship with, 315–16
 separation of powers argument, 317
 traditional approach, 316
- states' responsibilities to guarantee protection
 from climate change-related harms,
 149–51, 156, 158–60. *See also* shared
 responsibility
- stealthy climate litigation
 Global South, 194–95
- strategic ambitions of climate change
 litigation, 97–98
 climate change in human rights terms, 101–3
 Juliana case, 99
 Leghari case, 99
 targeting corporations, 99
 Urgenda case, 99
 young plaintiffs and future generations, 99
 See also *Juliana v. United States*; *Leghari*
 v. Pakistan; *Urgenda v. the*
 Netherlands
- Strategic Environmental Assessment Directive
 (EU)
 airport expansion, 309
 environmental assessments, 326
- strategic litigation, 115–16, 386
 balancing development with environmental
 protection, 372–75
 broader plan for change, 108–10
 carbon majors, 208
 definition, 104–5
 history, 105–6
 impact assessment processes, 374
 implementation challenges, 111–13
 legal context, 108
 political context, 108
 public activism, 110–11
 risk assessment, importance of, 113–15
 social change, relationship with,
 105–6
 social context, 108, 353–55
 “structural” court actions, 355, 362
 Brazil, 355, 360
 Subhash Kumar v. State of Bihar, 369
- subsidiarity principle
 margin of appreciation, 342
- subsidies
 clean energy suppliers, 19, 181, 185
 fossil fuels, 181, 186, 248, 332
 resource allocation, 181
- supply-side accountability. *See* accountability:
 carbon majors
- taxation and tax exemption measures, 181
 air travel, 32
 carbon taxes, 185
- technological advancements
 bioenergy with carbon capture and storage,
 185
 judicial proceedings, impact on, 256
 law enforcement, 258–60, 266
Teitiota v. New Zealand, 2, 13, 143, 149
- temporal dimensions of climate change, 125
- temporality of human rights law, 37–39
- Thunberg, Greta, 2, 13, 247
- Torres Strait islanders, 158–60
 ICCPR complaint, 160–65
 Adaptation Claim, 162–63
 Australia's human rights obligations,
 164–65
 Mitigation Claim, 163–64
 loss of culture, 161–62
- tort law
 cases against carbon majors, 211
- trends in climate litigation
 strategic cases, 99–101
- UN Committee on Economic, Social and
 Cultural Rights (CESCR)
 adequacy of efforts to reduce emissions,
 186
 whether a state has taken/is taking all
 rights-respecting steps, 178–80
 whether avoiding regression, 182–83
 whether climate plan appropriately
 ambitious, 181–82
 whether emissions reductions consistent
 with human rights, 185
 whether progressive increase in ambition,
 182–83
 whether state giving adequate priority to
 human rights, 181
 whether state planning to reduce
 emissions in line with global target,
 183–85

- UN Committee on the Rights of the Child (CRC), 3, 13, 228–29, 234
 climate change as a human rights duty, 153–54
- UN Convention on Biological Diversity's (CBD), 380
- UN Convention on the Rights of the Child (CRC)
Sacchi v. Argentina, 225, 228–29
- UN Declaration on the Rights of Indigenous Peoples (UNDRIP), 380
- UN Declaration on the Rights of Peasants and Other People Working in Rural Areas (2018), 380
- UN Framework Convention on Climate Change (UNFCCC 1992), 30, 244–45, 332
- Africa, 380
- Brazil, 356
- good faith, 173
- India, 373
- international cooperation, 153
- Kenya, 382
- no-harm principle, 332
- South Africa, 381
- Torres Strait* case, 163–64
- Urgenda* case, 345
- UN Guiding Principles on Business and Human Rights, 35, 213
- UN Human Rights Committee
 harmonization of international law, 149–50
 physical integrity and climate harms, 2, 13
Portillo Cáceres case, 149–50
 right to life, 311
Teitiota case, 2, 13, 143, 149
 Torres Strait islanders, 160–65
- UNEP Emissions Gap Report, 321
- United Nations Charter
 international cooperation, 153
- United States
 administrative climate litigation
 National Environmental Policy Act (NEPA), 124
 civil law cases, 119–20
 climate change inequalities, 133–37, 143
 climate forced displacement, 235
 criminal and corporate liability law cases, 120
Juliana case. *See Juliana v. United States*
Kanuk case. *See Kanuk v. State of Alaska*
- Urgenda v. the Netherlands*, 2, 9, 84, 189, 191, 193, 203–4, 207, 227
 duty of care, 128, 142
 ECHR claims, 311, 345–47
 emissions reduction plans, 9, 167
 insufficient government pledges, 9, 32
 margin of appreciation, 346
 minimum fair share norm, 30, 167
 separation of powers argument, 155
 shared responsibility, 347
 strategic ambitions of climate change, 99
 temporal dimensions of climate change, 38
- Velasquez Rodriguez v. Honduras*, 150
- visual evidence, importance of, 287–88
Feather River Lumber Co. case, 273
Kanuk case, 280–83
Kichwa Indigenous People of Sarayaku case, 276–80
Kofan Indigenous People of Sinangoe case, 274–76
 public opinion, impact on, 270–73, 284–85
Bushfire Survivors case, 285–87
- Volkswagen
 Dieselgate scandal, 217
- We the People v. Union of India*, 368
- WildEarth Guardians v. United States Forest Service et al.*
 perfect substitution argument, 330
- wildfires
 Australia, 227, 285–87
 Canada, 227
 causality and human rights–based climate litigation, 227
 visual evidence, importance of
 Australia, 285–87
- Wildlife First and Others v. Ministry of Environment and Forests*, 369
- women
 African patriarchy, 379
 disproportionate impacts of climate change, 135–36 *See also* climate justice: disproportionate impacts of global warming; Committee on the Elimination of Discrimination against Women (CEDAW)
- Youth Climate Movement, 299

BOOKS IN THE SERIES

Litigating the Climate Emergency: How Human Rights, Courts, and Legal Mobilization Can Bolster Climate Action César Rodríguez-Garavito

Through Thin and Thick: From Human-Rights Principles to Politics Across the Americas and Beyond Angel R. Oquendo

Human Rights and Economic Inequalities Edited by Gillian MacNaughton, Diane F. Frey and Catherine Porter

At the Margins of Globalization: Indigenous Peoples and International Economic Law Sergio Puig

War Economies and International Law: Regulating the Economic Activities of Armed Conflict Mark B. Taylor

The Future of Economic and Social Rights Edited by Katharine G. Young

Business and Human Rights: Beyond the End of the Beginning Edited by César Rodríguez-Garavito

Contesting World Order? Socioeconomic Rights and Global Justice Movements Joe Wills