

## Introduction

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The second decade of the twenty-first century marked a turning point in the landscape of climate change law and governance, with the judiciary rising to prominence in climate action.<sup>1</sup> Born from profound dissatisfaction – if not outright frustration – with the sluggish pace at which the executive and legislative branches of governments are addressing climate change, this legal frontier has seen more than a thousand new filings since the adoption of the Paris Agreement.<sup>2</sup> This surge represents more than just a rise in litigation: it is a strategic movement, increasingly aiming for systemic, transformative changes rather than merely targeting specific instances of pollution.<sup>3</sup>

High-profile victories, such as the judgments in *State of the Netherlands v Urgenda Foundation*<sup>4</sup> and *Leghari v Pakistan*,<sup>5</sup> have lent momentum to this trend. These landmark judgments have inspired a multitude of similar initiatives across jurisdictions, shaping policy discussions and public debates outside the courtroom.<sup>6</sup> Researchers have found that successful ‘framework cases’ of this kind have significantly influenced government decision-making on climate change, leading to the development and implementation of more ambitious policies.<sup>7</sup> For instance, courts have ordered

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<sup>1</sup> Joyeeta Gupta, *The History of Global Climate Governance* (Cambridge University Press 2014).

<sup>2</sup> Jacqueline Peel and Hari M. Osofsky, ‘Climate Change Litigation’ (2020) 16(1) *Annual Review of Law and Social Science* 21.

<sup>3</sup> Lucy Maxwell, Sarah Mead, and Dennis van Berkel, ‘Standards for Adjudicating the Next Generation of Urgenda-Style Climate Cases’ (2022) 13(1) *JHRE* 35.

<sup>4</sup> *State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Stichting Urgenda* [2019] ECLI:NL:HR:2019:2007 (Supreme Court of the Netherlands).

<sup>5</sup> *Asghar Leghari v Federation of Pakistan etc* PLD 2018 Lahore 364 [11].

<sup>6</sup> Jacqueline Peel and Jolene Lin, ‘Transnational Climate Litigation: The Contribution of the Global South’ (2019) 113 *AJIL* 679.

<sup>7</sup> Joana Setzer, Catherine Higham, and Emily Bradeen, ‘Challenging Government Responses to Climate Change through Framework Litigation’ (*LSE Grantham Research Institute on Climate Change and the Environment*, September 2022) <[www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/09/Challenging-government-responses-to-climate-change-through-framework-litigation-final.pdf](https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/09/Challenging-government-responses-to-climate-change-through-framework-litigation-final.pdf)> accessed 10 March 2024.

governments to increase emissions reduction efforts,<sup>8</sup> to clarify climate plans,<sup>9</sup> and to implement existing targets.<sup>10</sup> Reflecting these developments, the International Panel on Climate Change has concluded that ‘climate litigation can affect the stringency and ambitiousness of climate governance’.<sup>11</sup> This trend has continued to accelerate, with groundbreaking decisions from the European Court of Human Rights (ECtHR) in the cases of *KlimaSeniorinnen*, *Carême*, and *Duarte Agostinho* in April 2024,<sup>12</sup> and the Advisory Opinion of the International Tribunal for the Law of the Sea (ITLOS) on climate change and marine protection in May 2024.<sup>13</sup>

Amid this burgeoning landscape of climate litigation, an increasingly diverse set of cases is being brought to the courts. The range of litigation, in terms of both geography and legal substance, presents a complex area of law that requires specialised legal knowledge and guidance.

Recognising this need, *The Cambridge Handbook on Climate Litigation* was designed to guide judges, lawyers, scholars, and other actors in navigating the labyrinth of legal intricacies that define the climate change litigation landscape. The question at heart: in what ways could the judiciary play a constructive role in fighting the climate crisis and addressing its consequences? Drawing on a vast array of cases, the book delineates ‘emerging best practice’ from multiple jurisdictions worldwide. It not only identifies the scalable aspects of emerging best practice from various significant and lesser-known judgments but also explores how these practices might influence and inspire legal reasoning in future cases.

Acutely aware of the extensive cultural, socio-economic, and legal diversity across countries and jurisdictions, this book does not aim to prescribe one-size-fits-all solutions to the challenges that climate change litigation poses. Instead, it uncovers and analyses common themes and critical differences within this rapidly evolving field. By offering a comprehensive analysis, this book provides insights into the future of climate litigation worldwide and its potential to contribute to law, policy, and, ultimately, the survival of our planet and the well-being of its inhabitants.

## 1.1 METHODOLOGY

*The Cambridge Handbook on Climate Litigation* traces its roots to the International Union for the Conservation of Nature (IUCN) World Commission on Environmental

<sup>8</sup> For example, in the Netherlands, Germany, and Belgium.

<sup>9</sup> For example, in Ireland and the United Kingdom.

<sup>10</sup> For example, in France.

<sup>11</sup> Intergovernmental Panel on Climate Change, *AR6 Synthesis Report: Climate Change 2023* 13.4.2 <[www.ipcc.ch/report/sixth-assessment-report-cycle/](https://www.ipcc.ch/report/sixth-assessment-report-cycle/)> accessed 10 March 2024.

<sup>12</sup> *Verein KlimaSeniorinnen Schweiz and Others v Switzerland* App no 53600/20 (ECtHR); *Duarte Agostinho v Portugal* and 32 other States App no 39371/20 (ECtHR); *Carême v France* App no 7189/21 (ECtHR).

<sup>13</sup> *Request for an Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law (Request for Advisory Opinion Submitted to the Tribunal)*, ITLOS Case No 31 (Advisory Opinion of 21 May 2024).

Law (WCEL) and, more specifically, its Climate Change Law Specialist Group (CCLSG). The need for a comprehensive guide to aid the judiciary in navigating the complex terrain of climate litigation was first identified by Justice Antonio Benjamin during his time as the Chair of the WCEL, an idea that was embraced by Christina Voigt when she assumed leadership of the CCLSG. Their shared commitment to this initiative has never wavered, with Christina Voigt contributing a chapter and nurturing its development during her tenure as the Chair of the WCEL. Their dedication and guidance have been instrumental in bringing this project to fruition. This collaborative spirit was carried forward by Francesco Sindico and Fabiano De Andrade Correa, who took up the leadership of the CCLSG and have provided ongoing support for the initiative.

The WCEL, an international network of professionals spanning lawyers, judges, and scholars across disciplines and geographies, offered the ideal platform for this project. The WCEL advances environmental law around the globe, contributing to its progressive development through expert knowledge and assistance, and building the capacity of communities to benefit from the environmental rule of law.<sup>14</sup> The CCLSG, as a specialist group of the WCEL, functions as the principal source of legal technical advice to the IUCN, its members, and the WCEL on legal aspects of addressing climate change and its adverse impacts.<sup>15</sup> Members of the WCEL and its specialist groups serve in a personal and voluntary capacity. The collective global expertise of these groups has proven to be instrumental in realising the ambitious vision of this project: to produce a resource that encapsulates climate jurisprudence from across the globe, catering to a global audience.

Building on Justice Benjamin's initial vision, the primary aim of the Handbook is to augment judicial understanding and proficiency in matters related to climate change law. Beyond the judiciary, it serves as a reservoir of knowledge for parties involved in climate lawsuits, aiding in the design and strategy of future cases, and providing a rich foundation for further legal scholarship and teaching in this rapidly evolving field.

The project unfolded in two interconnected stages. The first stage entailed the establishment of the empirical basis for the project, drawing on the vast global network of the WCEL and CCLSG to identify contributors who reported on climate change case law in their respective jurisdictions. In this process, we used a template to collect detailed information on how judges have navigated key issues that commonly arise in climate change litigation, such as: the political question doctrine; scientific uncertainty; human rights; extraterritoriality; causation; and attribution. The issues addressed in the template were purposefully broad-ranging, encouraging

<sup>14</sup> For more information, see 'World Commission on Environmental Law' (IUCN) <[www.iucn.org/commissions/world-commission-environmental-law](http://www.iucn.org/commissions/world-commission-environmental-law)> accessed 10 March 2024.

<sup>15</sup> 'IUCN WCEL Climate Change Law Specialist Group' (IUCN) <[www.iucn.org/our-union/commissions/group/iucn-wcel-climate-change-law-specialist-group](http://www.iucn.org/our-union/commissions/group/iucn-wcel-climate-change-law-specialist-group)> accessed 10 March 2024.

members to identify any and all potentially scalable approaches that arise from the cases in question. Over 200 reports were completed, each reviewed by the project leads, with gaps in coverage and quality addressed with the support of the Cyrus R Vance Center for International Justice and various academic institutions.

The second stage commenced with the development of an analytical framework aimed at ensuring a consistent structure across chapters. A workshop was convened with all authors, each a leading expert in their respective field, to discuss and refine our methodology. One of the central themes of our discussion was the notion of ‘best practice’. After scrutinising this term, we decided to adopt the more flexible and versatile term ‘emerging best practice’, reflecting the nascent and dynamic nature of the field. We defined ‘emerging best practice’ as legal reasoning that is not only rigorous but also contributes to the protection of the climate system or enhances resilience in the face of the climate crisis. Despite the potential limitations of this definition, its simplicity and flexibility allowed authors to delve into a nuanced exploration of the judicial decisions shaping the field of climate litigation across the world. Following the workshop, authors were tasked with discerning ‘emerging best practice’ on each issue from the data collected in the first stage.

The diverse cohort of authors, hailing from various disciplines, jurisdictions, and backgrounds, has added depth and breadth to this Handbook. Each author has interpreted ‘emerging best practice’ within their respective contexts, weaving their perspectives and deep-seated knowledge into the larger fabric of the Handbook. In cases where their understanding deviates from our general definition, the authors explicitly outline the reason for this deviation.

Ultimately, *The Cambridge Handbook on Climate Litigation* is an expedition that charts unexplored territories, unearths innovative pathways, and navigates potential roadblocks in climate litigation. Our hope is that this Handbook does more than merely document the current landscape. We aspire for it to inspire dialogue, spur innovative legal reasoning, and shape the future discourse and practice of climate litigation.

## 1.2 OVERVIEW

The book commences with two foundational chapters that bridge the science–law divide. Sarah Connors and others – in Chapter 2, ‘A Scientific Overview of Climate Change’ – provide a primer on climate science for legal practitioners and scholars, offering essential scientific background to understand the context of climate litigation. Carly A. Phillips, L. Delta Merner, and Friederike Otto, in Chapter 3 on ‘Attribution Science’, build upon this foundation and delve deeper into the scientific underpinnings of attributing climate change impacts to specific causes. They illustrate how these scientific developments are enhancing our ability to pinpoint the causes of climate impacts, an evolution crucial to a range of procedural and substantive issues that may arise in climate litigation.

Part I of the Handbook, ‘Preliminary Issues’, begins with a chapter by Randall S. Abate on ‘Standing’ (Chapter 4). Abate explores the intricacies of the legal principle of standing, its role in climate litigation, and how it impacts the ability of parties to bring climate change-related lawsuits. He discusses how different interpretations of standing across various jurisdictions can either impede or facilitate climate litigation. Abate distils emerging best practice from this analysis, providing an insightful guide for future climate lawsuits. He identifies emerging best practice in interpreting standing rules in a flexible manner, thus allowing a broader range of actors to bring climate-related lawsuits and enhancing access to justice.

Following this, Juan Auz, in the chapter on ‘Admissibility’ (Chapter 5), delves into the factors determining whether a climate case can be heard in court. He provides a clear understanding of the criteria for admissibility and their potential implications on the trajectory of climate litigation. He also delves into the interplay between domestic and international legal rules and norms and their influence on the criteria for admissibility. Auz’s analysis reveals that a restrictive interpretation of admissibility criteria can present formidable barriers to access to justice, particularly for those who are most impacted by climate change. In light of these challenges, Auz’s distillation of emerging best practice highlights instances where courts and quasi-judicial bodies have interpreted admissibility criteria to ensure access to justice. Specifically, he highlights cases where these bodies have considered human rights and justice imperatives in their decisions on admissibility. These decisions highlight the potential for an inclusive and equitable approach to climate litigation, one that aligns with the global nature of the climate crisis and the urgent need for climate justice.

Concluding the first part, Christina Eckes, Jasmina Nedevska, and Joana Setzer examine the ‘Separation of Powers’ (Chapter 6). Their chapter offers a comprehensive exploration of how the balance of power between the judiciary and other branches of government plays out in climate litigation. The authors critically analyse key cases where these doctrines have been invoked, shedding light on how these doctrines shape courts’ approaches to climate cases. They underscore the significant variation in how this issue is dealt with across jurisdictions, acknowledging the diversity of constitutional and legal frameworks globally. Despite this diversity, they distil an emerging best practice where courts are increasingly recognising their crucial role in safeguarding fundamental rights and constitutional values in the context of climate change. This recognition, they note, is not a one-directional or universal trend but a nuanced evolution detectable across various jurisdictions and legal systems.

In Part II, titled ‘Merits’, the book shifts its focus to the substantive aspects of climate litigation. Margaretha Wewerinke-Singh and Lucy Maxwell initiate this part with Chapter 7 on ‘Human Rights’. They dissect how human rights laws have been harnessed in climate cases, scrutinising key judgments that have applied human rights frameworks to climate change and the implications of these legal strategies

for both claimants and defendants. Their analysis of emerging best practice reveals a growing acceptance of the notion that a State's failure to take adequate action to address climate change constitutes a breach of human rights obligations, and this recognition is shaping legal strategies in climate litigation at the national and international levels.

Subsequently, Mark Gibney, in his chapter on 'Extraterritoriality' (Chapter 8), discusses how the cross-border nature of climate impacts is addressed within climate litigation. He scrutinises the interpretation of 'jurisdiction' and related procedural and substantive issues, such as standing and the territorial scope of human rights obligations, in the context of these transboundary impacts. His thorough analysis showcases how these legal principles and procedural rules either facilitate or constrain courts and quasi-judicial bodies in grappling meaningfully with these impacts. In his exploration of key decisions, Gibney unravels their implications for the global governance of climate change and the challenges and opportunities they present for transboundary climate lawsuits. He distils emerging best practices that reveal how courts and quasi-judicial bodies, through judicious interpretation of legal principles, are grappling with the global dimensions of climate change.

Despite the complexities inherent in integrating extraterritorial considerations into climate litigation, Gibney posits an optimistic outlook. He highlights how visionary legal reasoning can tackle these complexities in a manner that is both legally sound and conducive to ensuring access to justice for those most affected by climate impacts. This optimism is further bolstered by recent developments in climate litigation, including advisory opinion proceedings pending before several international courts and tribunals. These developments hold significant promise for the future of climate litigation, with the potential emergence of novel jurisprudence transforming our approach to litigating and adjudicating climate change as a global problem.

Continuing in this part, 'Duty of Care' by Christina Voigt and Joe Udell (Chapter 9) examines the principle of the duty of care in the context of climate litigation. They explore how this principle has been invoked in a growing range of jurisdictions, in different ways, to hold governments and corporations accountable for their respective contributions to climate change. By analysing judicial decisions in prominent cases such as *Urgenda* in the Netherlands and *Neubauer* in Germany, they explore the potential of the principle to compel more ambitious climate action in pending and future cases. The emerging best practice they identify suggests a growing willingness of courts to recognise a duty of care for governments and corporations towards citizens in relation to climate change.

Following this, Rachel M. Pemberton and Michael C. Blumm's chapter on 'International Atmospheric Trust' (Chapter 10) delves into the application of the public trust doctrine in climate litigation. Historically, this doctrine has maintained that certain natural and cultural resources should be held in trust for the public, with the government acting as a trustee. Mary Wood's seminal work on atmospheric

trust litigation has been pivotal in extending the public trust doctrine to the realm of climate change, by conceptualising the climate system as an atmospheric trust that governments are entrusted to preserve for present and future generations.<sup>16</sup> Building upon Wood's theoretical framework, Pemberton and Blumm delve into the practical application and interpretation of this doctrine in climate litigation, examining key cases across various jurisdictions, including the United States, Canada, India, Pakistan, and Uganda. Through their examination, the authors distil emerging best practices, revealing the successes and challenges encountered when invoking the public trust doctrine in climate litigation. They underscore the potential of this doctrine to shape future climate cases and inspire more robust climate action, reflecting a growing recognition among courts worldwide of their own role in safeguarding the atmospheric trust.

In Chapter 11, Susana Borràs-Pentinat delves into the 'Rights of Nature', an emerging legal paradigm that ascribes legal rights to natural entities. This approach, which marks a radical departure from anthropocentric legal frameworks, represents a pioneering stride towards acknowledging and safeguarding the inherent worth of the natural world. Borràs-Pentinat presents an in-depth exploration of how this innovative legal approach has been employed in climate litigation. Drawing on concrete examples from countries such as Ecuador and Colombia, she elucidates the transformative potential of this paradigm in the realm of climate litigation. One of the most compelling aspects of this approach, as Borràs-Pentinat underscores, is the shift it instigates in our legal and ethical relationship with the natural world. By conferring rights upon nature, it challenges the traditional conception of nature as mere property or resource, promoting a more holistic and respectful relationship with our environment. This shift, as Borràs-Pentinat argues, can play a critical role in achieving climate justice, by ensuring that the rights and interests of nature itself are upheld and protected in the face of climate change. The analysis of emerging best practice reveals that, while still in its early stages, the rights of nature approach is starting to gain traction in climate litigation around the world. The chapter also highlights the promising potential of this paradigm to spur further innovation in climate law and policy, and to deepen our understanding and respect for the natural world.

Part III, 'Regime Interaction and Interpretation', commences with a chapter by Sarah Mead and Meinhard Doelle on 'International Law' (Chapter 12). They examine how international law is interpreted and applied in climate litigation, discussing cases where international climate obligations have been invoked in domestic courts. They explore the interplay between international and domestic law, and how it can shape the outcomes of climate litigation. Mead and Doelle's exploration of emerging best practice reveals a progressive trend: domestic courts are increasingly incorporating international climate obligations into their rulings. This trend not

<sup>16</sup> Mary Christina Woods, 'Atmospheric Trust Litigation Across the World' in Ken Coghill and others (eds) *Fiduciary Duty and the Atmospheric Trust* (Ashgate Publishing 2012).

only underscores the significance of international law in shaping domestic legal responses to climate change but also amplifies the capacity of domestic legal systems to address the impacts of climate change more effectively. Moreover, they spotlight emerging best practices from regional and international bodies. They argue that these practices demonstrate the potency of international legal norms in influencing the trajectory of climate litigation, fostering a global legal landscape that is increasingly responsive to the climate crisis. Their analysis offers insights into how the synergetic relationship between international and domestic law can be harnessed to forge stronger and more effective legal responses to climate change.

Patricia Galvao Ferreira's discussion on 'Common but Differentiated Responsibilities and Respective Capabilities' (Chapter 13) provides a critical analysis of this cornerstone principle of international climate law and its implications for climate litigation. The principle recognises the differentiated responsibilities and capabilities of countries in addressing climate change, acknowledging the historical contribution of developed nations to global greenhouse gas emissions and the greater capacity these nations possess to mitigate climate change and adapt to its impacts.<sup>17</sup> Ferreira offers a comprehensive examination of how this principle has been invoked and interpreted in climate litigation. She critically analyses key cases where the principle has been raised, and assesses the legal reasoning employed by courts and tribunals who have given it a specific meaning. Ferreira identifies instances of emerging best practice where the principle has been interpreted and applied in ways that enhance climate justice outcomes. She notes that such instances do not yet constitute a uniform trend. Nonetheless, these instances illustrate the potential of this principle in shaping the delineation of responsibilities in climate lawsuits, considering fairness, equity, and historical responsibility. Through her analysis, Ferreira underscores the potential of the principle to contribute to the development of a more equitable and just climate jurisprudence. She highlights how the nuanced interpretation and application of this principle in legal judgments can significantly influence the outcomes of climate litigation.

The section concludes with Chapter 14 on 'Intergenerational Equity' by Sam Bookman and Margaretha Wewerinke-Singh. The chapter sheds light on how this principle, which posits a responsibility to ensure that future generations inherit a habitable planet, has been invoked in climate cases. The authors examine how this principle has been interpreted and applied across different jurisdictions, highlighting the notable contributions of jurisprudence from the Global South in shaping the development and understanding of the principle. Through an examination of leading cases from around the world, they highlight how courts in these jurisdictions have infused their decisions with a consideration for future generations, thereby advancing a more inclusive and long-term perspective on climate justice.

<sup>17</sup> Patricia Galvao Ferreira, "Common but Differentiated Responsibilities" in the National Courts: Lessons from *Urgenda v The Netherlands* (2022) 5(2) TEL 329–351.



The authors distil instances of emerging best practice where the principle of inter-generational equity has been invoked to guide legal reasoning and judicial decisions in climate cases. They underscore the potential of this principle to shape future climate litigation, particularly as the impacts of climate change increasingly span across generations. The analysis reveals how this principle can be operationalised to ensure a fairer distribution of climate-related burdens and benefits between current and future generations.

Part IV, 'Liability and Evidence', begins with a chapter by Annalisa Savaresi on 'State Responsibility' (Chapter 15). Savaresi provides an in-depth exploration of the circumstances under which States can be held responsible for climate change. Savaresi starts by outlining the fundamental principles and conditions for State responsibility under international law. She then extends this discussion to explore how these principles are translated and applied in domestic legal contexts. Her analysis bridges the gap between international and domestic law, shedding light on how each legal sphere influences the shape and contours of State responsibility in relation to climate change. Further, she explores the legal consequences that flow from the establishment of State responsibility. This includes obligations to cease wrongful conduct, provide guarantees of non-repetition, and repair the damage caused. Savaresi enriches her analysis with insights drawn from key climate cases that have tested the limits of State responsibility. These cases reveal how courts and quasi-judicial bodies are grappling with the challenges of attributing climate harms to State actions and omissions, and the implications of holding States accountable for these harms. In distilling emerging best practice, Savaresi identifies innovative judicial interpretations and legal strategies that have expanded the ambit of State responsibility in climate litigation. These include approaches that consider the cumulative contribution of a State's actions and policies to global greenhouse gas emissions, as well as those that take into account a State's capacity and responsibility to prevent foreseeable climate harms. Through her chapter, Savaresi provides readers with a deeper understanding of the evolving landscape of State responsibility in climate litigation, and its potential to drive more effective and equitable responses to climate change.

Following on from this exploration of State responsibility, Lisa Benjamin and Sara Seck discuss the intricate issue of 'Causation' in the context of climate litigation (Chapter 16). They explore the challenges of proving causation in a complex and interconnected system like the climate, where multiple actors contribute to the overall impacts. The authors highlight the significance of probabilistic approaches, recognising that establishing direct causation can be challenging due to the nature of climate change and the cumulative nature of greenhouse gas emissions. In their exploration of emerging best practices, Benjamin and Seck underscore the growing recognition among courts of the need for flexible and nuanced interpretations of causation requirements in climate litigation. They highlight innovative judicial strategies that utilise scientific evidence and expert testimony to assess the contribution

of specific actors to climate impacts, even in the absence of direct causation. They emphasise the importance of interdisciplinary collaboration between legal and scientific experts to navigate the complexities of causation in climate cases. By incorporating and further developing these emerging best practices, courts can facilitate an accurate and fair distribution of responsibilities through the cases they adjudicate.

In her chapter on ‘Climate Causality: From Causation to Attribution’ (Chapter 17), Petra Minnerop delves into one of the most challenging aspects of climate litigation: attributing climate change impacts to specific actors or actions. This exploration builds on the insights provided in the earlier chapter on ‘Attribution Science’ (Chapter 3), which outlines the scientific process of attributing climate phenomena to human activities. Shifting focus to the legal realm, Minnerop explores how courts and quasi-judicial bodies grapple with the scientific complexities of attribution. In particular, she analyses how these legal bodies assess and weigh the scientific evidence, navigate the inherent uncertainties, and determine the legal relevance of attribution findings in climate cases. Through a detailed review of key climate cases from around the world, Minnerop uncovers a variety of approaches to the issue of attribution. These cases highlight the diverse legal strategies employed by litigants to establish the causal links necessary for liability and the evolving understanding of courts in grappling with scientific complexities. In distilling emerging best practice, Minnerop identifies instances where courts have acknowledged the collective and cumulative nature of climate harms, accepted partial attribution as a basis for liability, and applied innovative legal doctrines to overcome attribution-related challenges. Throughout her chapter, Minnerop underscores the critical role of attribution in climate litigation, noting its potential to hold both States and corporations accountable for their contributions to climate change.

Juan Auz and Marcela Zúñiga’s chapter on ‘Remedies’ in climate litigation (Chapter 18) provides a critical analysis of the types of remedies sought and awarded in climate cases and reflect on the implications of current trends. Drawing on a comprehensive analysis of climate lawsuits from around the world, Auz and Zúñiga provide insights into the diverse range of remedies that have been sought to address the adverse impacts of climate change. They then shed light on the different considerations and approaches that courts have taken when determining appropriate remedies. In their exploration of emerging best practices, Auz and Zúñiga highlight instances where courts have adopted innovative and transformative approaches to remedies in climate litigation. They examine creative legal mechanisms that go beyond traditional compensatory measures and explore the potential of remedies such as injunctive relief, restitution, and declaratory judgments to address the multifaceted challenges posed by climate change.

The section concludes with a chapter by Margaretha Wewerinke-Singh and Joe Udell on ‘Recent Landmark Decisions: Advancing Climate Litigation and State Obligations’ (Chapter 19). This chapter provides an in-depth analysis of two groundbreaking decisions that were handed down after the completion of the main body

of the Handbook: the ITLOS Advisory Opinion on climate change and marine protection, and the judgment of the ECtHR in *Verein KlimaSeniorinnen Schweiz and Others v Switzerland*. The authors situate these decisions within the broader context of climate litigation, examining their implications for future cases and drawing connections to the themes explored in other chapters. They demonstrate how these decisions both reflect and advance emerging best practice in climate jurisprudence, potentially inspiring further innovation based on science and rigorous legal reasoning.

In our concluding chapter, ‘The Future of Climate Litigation’ (Chapter 20), we reflect on the evolving landscape of climate litigation and speculate on its future trajectory. We begin by underscoring the remarkable progress that has been made in climate litigation, highlighting the significant role it has played in shaping legal responses to the climate crisis. We emphasise that the journey of climate litigation is far from over and that the field is poised for continued advancements and innovations.

One significant area that we identify as holding immense potential is loss and damage-related litigation. We explore the growing recognition of loss and damage as a critical aspect of climate impacts and discuss how legal actions seeking compensation for losses and damages could gain momentum in the future. We also highlight the importance of integrating principles of justice, equity, and human rights into the legal framework for addressing loss and damage. We then discuss the prospects of advancing cases against a wide range of private polluters for their contributions to climate change and the implications of these cases for driving systemic change – before turning to how litigation against governments will likely evolve. Furthermore, we explore the emerging intersection between climate impacts and biodiversity loss, highlighting the potential for cases that link these two critical global challenges. We discuss the evolving legal frameworks that recognise the interconnections between climate change and biodiversity, and the opportunities for litigation that seeks to protect and restore ecosystems as a means of addressing climate impacts. We underscore the importance of holistic approaches that integrate climate and biodiversity considerations in legal strategies and highlight the potential for novel legal arguments and precedents in this area. Finally, we touch upon the potential for inter-State litigation to play a significant role in addressing the global nature of the climate crisis. We explore the potential avenues for resolving disputes and the potential for litigation to shape international climate governance and cooperation. In wrapping up, we underscore the importance of continued innovation, collaboration, and strategic legal approaches to address the urgent challenges posed by the climate crisis.

Advancing from the specifics of each chapter, we hope that this Handbook will serve as an essential catalyst, stimulating scholarly dialogue and encouraging the continued growth and dynamism of this field. From the outset, our aim has been to scrutinise a range of substantive issues that traverse jurisdictions, offering a rich

exploration of the intersections between climate litigation and other legal domains and capturing national, regional, and international case law. However, we are aware that our coverage of issues has not been exhaustive – for example, we have paid relatively little attention to corporate law and competition law. Moreover, as the breadth and complexity of climate case law and related legal scholarship continue to evolve, new issues will arise, all meriting further scrutiny. One example is legal issues emerging from the development and implementation of novel carbon-neutral or carbon capture technologies.<sup>18</sup> Scholarship focusing on specific jurisdictions or regions will also remain relevant and needed as climate litigation evolves. In the meantime, we envisage this Handbook will act as a pivotal milestone in scholarship and practice on climate change litigation.

Finally, as we reflect on the journey of creating this Handbook, we cannot help but note the profound personal significance it has held for us. During the course of this project, we each welcomed a new child into our lives – Margaretha's son Amaian in 2021, and Sarah's son Rafael in 2023. The presence of these new lives, alongside Margaretha's daughter Adira, has served as a constant reminder of the vital importance of caregiving in the struggle for climate justice. It has underscored the need for transformative action across all sectors of society, including the legal and academic spheres.

In this context, we offer this Handbook as a resource for all those engaged in caregiving through the power of the law. We hope that the legal strategies and insights compiled here will not only inform and inspire those engaged in climate litigation but also contribute to the broader struggle for climate justice. Ultimately, our aim is to help build a world that fully supports and values the work of caregivers in all their diverse roles.

<sup>18</sup> Ian Havercroft and others (eds), *Carbon Capture and Storage: Emerging Legal and Regulatory Issues* (Bloomsbury Publishing 2018).