

Climate Change Law and Governance  
Droit et Gouvernance du Changement Climatique  
Klimaschutzrecht und Governance


| 1

Schulev-Steindl | Hinteregger | Kirchengast  
Meyer | Ruppel | Schnedl | Steininger [Eds.]

# Climate Change, Responsibility and Liability



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# **Climate Change Law and Governance Droit et Gouvernance du Changement Climatique Klimaschutzrecht und Governance**

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Volume 1

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## Foreword by Verena Madner

The anthology at hand is based on conference proceedings at the Environmental Law Forum, an international conference on ‘Climate Change, Responsibility and Liability’ that took place at the University of Graz in 2018. The Conference, I had the opportunity to attend in person, was an outstanding success, constituting a major contribution to the scientific discourse on climate change and the law. Over two days, renowned speakers from Austria and around the world addressed the legal responsibilities of states, enterprises and cities in the context of climate change and its growing impacts. Thereby, the focus was on the climate liability of actors, detection, attribution and causation. In the light of ever-advancing climate change and its drastic consequences, which we increasingly experience today, the establishment of clear (legal) obligations is of utmost importance. It is, therefore, a great honour and special pleasure for me to contribute a ‘Foreword’ to this unique and forward-looking anthology.

Attempts to identify responsible actors and to determine their (legal) obligations still face many hurdles: First and foremost, the enforcement of climate change-related claims through legal action requires a legal basis, for example, human rights or the general rules on damages. In light of this, a multitude of (preliminary) questions still need to be answered: These *inter alia* relate to what extent was a given loss and damage caused by climate change? Can this be attributed to a particular actor in a legally convincing way? To what extent do human rights oblige states to protect individuals from the adverse impacts of climate change? To answer such questions, recourse to other scientific disciplines is indispensable as legal statements require strong empirical claims. However, scientific claims themselves are not seldomly fraught with uncertainty, which makes the role of the Intergovernmental Panel on Climate Change (IPCC) more relevant than ever.

The complex ‘legal playing field’ of climate change is marked by various uncertainties, which becomes inherent in the context of increasing climate litigation. Climate lawsuits, often brought by concerned individuals or environmental NGOs, seek to bridge the gap between recommendations by climate science and (often unambitious) climate policies. They aim not only at enforcing stricter climate protection measures but also at raising awareness for the delicate issue of climate change. Litigants either sue states for non-existent or insufficient climate protection legislation or businesses for their contribution to global climate change. As of today, several noteworthy successes have been achieved: In the well-known *Urgenda* decision, the *Hoge Raad* (Supreme Court) of the Netherlands obliged the state to reduce its greenhouse gas emissions by 25% until 2020. And in the recent *Neubauer* decision, the

*Bundesverfassungsgericht* (Federal Constitutional Court) of Germany declared the Federal Climate Protection Law to be unconstitutional as the freedom of future generations was not sufficiently considered. Climate lawsuits against carbon majors have, so far, been less successful as they usually revolve around claims for damages and the difficult issues of causation (*sine qua non*) or the attribution of concrete damages to allegedly responsible actors. However, a recent case took a whole new approach: In its 2021 *Milieudefensie* decision, a Dutch District Court ordered Royal Dutch Shell to drastically cut its emissions, which potentially impacts future suits against multinational companies.

These recent climate litigation efforts, among many others, highlight the special importance of this volume, which aims to provide current and future generations of lawyers and judges with legal tools and arguments to advance climate protection and guarantee a decent life for all. The volume thereby takes an interdisciplinary approach where prominent scholars from different disciplines of academia, such as law, economics or philosophy, join hands. Accordingly, the contributions cover a multitude of topics and range from the attribution of moral and political responsibilities and the foreseeability of climate change to responsibility and liability under international, European Union and national law, with the latter *inter alia* focusing on Austria, China, Germany, Kenya and South Africa. The individual contributions are devoted to novel approaches, such as the Oslo Principles on Climate Change and a variety of cross-cutting issues like state responsibility in climate change; legal standing in climate lawsuits; causation in tort law; or the liability risks for carbon majors. As a whole, this remarkable book publication provides a distinct comprehensive overview and timely analysis of current developments in the field of climate change law, responsibility and liability. Ultimately, it also sheds light on areas where future research is still needed to tackle the greatest challenge of our time.

I want to express my sincere gratitude to the editors and authors who make this book a great success and a valuable contribution to the legal and interdisciplinary discourse on climate change.

Verena Madner

Vice-President of the Austrian Constitutional Court

Vienna, October 2021



## Foreword by Christoph Bezemek

The volume at hand unites numerous presentations given at a Conference of the same name, held at the University of Graz in November 2018. Several such events labelled ‘Environmental Law Forum’, took place here in Graz over time, bringing together renowned experts, leading scientists and lawyers from around the world in our beautiful town, allowing them to get to know our venerable *Alma Mater* and its excellent researchers. Events like these prove particularly successful in stimulating the interdisciplinary discourse on divergent issues and in fostering innovation and novel solutions in law and beyond. At the 2018 Conference, climate change and particularly the identification of those responsible for taking (or neglecting to take) much-needed action as well as the determination of their respective obligations were in the focus.

The aforementioned Conference represents one of the University’s many efforts in its Field of Excellence ‘Climate Change’, which unites over a hundred researchers from different disciplines across faculties. Climate change research at University of Graz is concerned with a multitude of questions, including the scientific basis of climate change and its effects, transformation processes, innovations, and carbon storage technologies, but also climate justice, climate law and climate litigation. Within the Field of Excellence, researchers from a range of disciplines identify a wide range of options for a sustainable transformation and elaborate the respective changes required in the technical, social, political, or legal sphere.

Yet, strategies to deal with climate change are still clouded by uncertainties and challenges. Climate litigation struggles with difficulties to prove and assign responsibility and liability for specific impacts of climate change. This book takes an attempt to untangle this complex web by taking an interdisciplinary approach in understanding the necessary basis of responsibility and liability and narrowing down the interface between law and other disciplines.

Enforcing legal claims presupposes legal rights and legal duties/obligations. Additionally, it is important to identify the responsible agent (and the extent of responsibility) for the anthropogenic climate change which caused the loss in a manner that would be legally convincing. Legal statements on duties and responsibilities require a strong foundation on empirical claims such as those arising from attribution science. But then again, scientific claims are also faced with the challenge of uncertainties, creating a complex web on identification of actors and the extent of their contribution that would provide a basis for assigning a legal duty and consequently for enforcing legal claims against such specific actors. This publication significantly contributes to trends and developments in law, relevant to climate liability and responsibility but also contains important insights at the intersection of law and other disciplines. The

international approach underlying this volume gives the opportunity to compare (and learn from) different jurisdictions both from an academic and a practical perspective. University of Graz takes the responsibility to provide students and academics with knowledge of the grand global challenges of the 21<sup>st</sup> century seriously. This mission encompasses, particularly, climate change, the loss of biodiversity and sustainability. In doing so, our aim is to raise even more awareness for these delicate issues and to further strengthen our capabilities to significantly assist in meeting the Austrian goals in fighting climate change and to support the aims of the Paris Agreement and the 2030 Agenda of the United Nations Sustainable Development Goals.

In 2020, our new Research Center for Climate Law (ClimLaw: Graz) was founded to further deepen the University's efforts within the 'Field of Excellence Climate Change'. The Field of Excellence Climate Change @ Graz comprises over a hundred researchers who are investigating climate change and the economic, production-related, social, political and legal changes that are necessary for a sustainable transformation. As part of this coalition, ClimLaw: Graz is devoted to climate change-related (legal) research. Its establishment is a significant achievement; an achievement that makes me, as Dean of the Faculty of Law, particularly proud.

ClimLaw: Graz, as part of the Faculty of Law, aims to advance social, political, diplomatic and legal responses to climate change through research and teaching. It further actively contributes to local, national and global academic and professional efforts to combat climate change and its consequences. ClimLaw: Graz adopts a transdisciplinary approach and unites national and international experts from law from various fields of academia in its projects. In its current JustDeCarb project researchers are concerned with a socially just and politically robust decarbonisation, whereas the LEXAT project inquires legitimate expectations throughout the transformation to a low-carbon society and economy.

In addition to research, ClimLaw: Graz engages in various other activities: Teaching constitutes an essential pillar as ClimLaw: Graz offers a wide range of courses in environmental and climate law and thereby reinforces the objective of the University's respective field of excellence. As scientific conferences are an indispensable part of scientific discourse and exchange, the Research Center regularly organises and hosts Conferences that connect national and international experts to discuss the complex and multi-faceted challenge of climate change and its legal implications. It is a great pleasure that the 2018 Conference on Climate Change, Responsibility and Liability has resulted in the publication at hand, and, thus, makes a valuable contribution to the legal discourse on climate change. I would like to thank and to congratulate the organisers of the Conference, the editors and authors of this volume and the whole team of ClimLaw: Graz.

Christoph Bezemek  
Dean, Faculty of Law, University of Graz

Graz, October 2021

## Preface by the editors

In November 2018, an Environmental Law Forum titled ‘Climate change, responsibility and liability’ was held at the University of Graz. In the course of this international Conference, distinguished experts from different continents addressed, from an interdisciplinary perspective, the complex questions climate change raises in terms of responsibility and liability of states and enterprises.

After a pandemic-related delay, we, the editors, are now all the more pleased to reflect the outcomes of the Conference and present them to the scientific community, policymakers, legal practitioners and students. The present anthology covers many aspects pertaining to climate change responsibility and liability; it follows the structure of the Conference and is divided into three interconnected and mutually dependent parts:

Part I deals with the foundations for climate change responsibility and liability: ‘Climate change, its impacts, and attribution of causes: Current status and challenges’ provides an introduction to attribution science and the key question of how concrete climate damage might be assigned to certain activities or actors. ‘Climate change and pandemics: Feasibility constraints on mitigation and adaptation’ conducts a comparative analysis of the current COVID-19 pandemic and the climate crisis in terms of implementation hurdles respective countermeasures face. Two contributions are devoted to the economic perspective, highlighting how climate damages might be quantified in financial terms and how insufficient climate protection causes economic loss – ‘The cost of carbon: Economic approaches to damage evaluation’ and ‘Foreseeability of economic damage related to inadequate climate mitigation and adaptation’.

Part II sheds light on the legal basis for climate change responsibility and liability, covering international aspects, the German and Austrian perspective and private law and related climate litigation. Several contributions cover the international dimension, relating to international climate law as well as non-binding documents, namely ‘Climate change responsibility and liability in international law’ and ‘Oslo Principles and Climate Principles for Enterprises’. Further, three contributions provide country-specific insights for China, South Africa and Kenya: ‘China’s climate change law: History, current situation and key issues’, ‘South Africa – climate change, responsibility and liability: The legal system, public and private law considerations’ and ‘A rights-basis for climate compensatory claims in Kenya’. Articles on the national Austrian and German perspective range from ‘Climate change law in Germany and Austria’ and ‘State responsibility for climate change under EU and German law’ to ‘Oslo Principles in Austrian and EU climate change law’ and ‘Climate action – polit-

ical question or a case for the courts?’ or ‘The first Austrian climate lawsuit’. Further, private law climate litigation is comprehensively covered with contributions titled ‘Climate change and tort law’, ‘Legal standing in climate-related lawsuits’ and ‘Climate change litigation and the private sector – assessing the liability risk for multinational corporations and the way forward for strategic litigation’.

Part III comprises cross-cutting issues relating to climate change litigation and enforcement. One contribution deals with the problem of enforcement under international law, more precisely with ‘Fostering responsibility for compliance mechanisms’, whereas two authors focus on Chinese climate change law and elaborate on a Chinese climate case and mitigation policies: ‘Climate change, public interest litigation and the development of renewable energy law in China – based on the analysis of *Friends of Nature v Ningxia Grid Company*’ and ‘China’s carbon emissions reduction policies: An industrial structural adjustment approach’.

The super-wicked problem of climate change presents humanity with an unprecedented global and inter-temporal challenge. Finding answers to the most pressing questions, namely responsibility and liability for climate change, requires interdisciplinary dialogue and cooperation.

The need for joining of strengths is particularly evident in the context of climate litigation, which is on the rise globally but has, so far, only led to a limited number of successes. The enforcement of legal claims is difficult and requires not only the existence of legal rights and duties but also necessitates the determination and quantification of climate-related damage and the identification of a responsible agent.

Legal claims thus not only require strong empirical claims on climate damages (like those provided by attribution science) but also methods for the (economic) valuation of climate damages (as economics provides). The equitable shaping of the transition to low-carbon economies and societies further calls for consideration of (distributional) justice, predominantly dealt with by philosophers.

Against this background, the present anthology goes beyond a mere legal analysis – it attempts to foster international and interdisciplinary dialogue on climate change and to provide viable concepts for the liability of specific actors based on their role in causing climate change and responsibility of specific actors to respond to climate change, irrespective of their role in causing it. The book also reflects ongoing research conducted by leading scientists at the University of Graz within its Field of Excellence: Climate Change and the Research Centre ClimLaw: Graz, which is devoted to legal and interdisciplinary research on climate change.

We would like to express our gratitude to the organisers and sponsors of the 2018 Conference on climate change, responsibility and liability, which constituted the starting point for this publication. We would also like to thank all the contributors to this publication, Nomos for their professional services and Julia Wallner for the valuable assistance in making this book formally publishable. Last but not least, we

wish to thank the Rector of the University of Graz, Peter Riedler, and the Dean of the Faculty of Law, Christoph Bezemek, for their continued support.

The editors

Graz, March 2022



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