

Factors Determining the Viability of Rights Claims in Climate Change Litigation

Samvel Varvastian

School of Law and Politics

Cardiff University

July 2022

This thesis is being submitted in partial fulfilment of the requirements for the
degree of Doctor of Philosophy (Law)

Summary

From the ground-breaking Inuit petition to the Inter-American Commission on Human Rights challenging the United States national climate policy in 2005, to the historic high-profile court wins in rights-based climate change cases against the governments of the Netherlands and Pakistan in 2015, and to the spread of such cases across dozens of jurisdictions by the 2020s, rights claims in climate change litigation have become a truly global phenomenon. However, although climate change litigation has attracted considerable attention in legal scholarship, there is a very limited understanding of what makes rights claims in climate change cases successful or unsuccessful. It is precisely this gap in the literature that this thesis aims to fill.

By conducting a systematic and in-depth analysis of relevant cases litigated in more than a dozen jurisdictions, this thesis identifies three common factors that determine the viability of rights claims in climate change cases: the types of claims, the invoked rights, and the litigation forum. The analysis reveals three general scenarios for the viability of rights claims in climate change cases: a) litigation in Europe, dominated by challenges to unambitious greenhouse gas emissions reduction targets that allegedly violate the rights to life and to respect for private and family life under the European Convention on Human Rights, with courts using different approaches to such claims; b) litigation in North America, dominated by sweeping challenges to inadequate climate policy that allegedly violates the constitutional right to life, and where courts are extremely cautious towards such claims; and c) cases in the Global South, with no single dominating type of claims, yet all brought under the right to a healthy environment, and where courts have been generous in terms of their interpretation of this right.

The thesis concludes that the above-mentioned rights can be successfully invoked in various types of claims, even though not all litigation forums are equally favourable to such claims.

Acknowledgments

Throughout my PhD journey, I have always enjoyed the support of many colleagues and staff members at Cardiff School of Law and Politics.

I am most grateful to my dream duo of supervisors, Professor Anna Grear and Professor Val Fogleman, for their constant mentorship and guidance.

I am also very grateful to my independent reviewer, Dr Richard Caddell, who has always been extremely friendly.

I am very grateful to members of the management team, Professor Urfan Khaliq, Professor Stewart Field, Professor Russell Sandberg, emerita Professor Annette Morris, Dr Demetra Arsalidou, Dr Lucy Hammond, who have helped create an ideal environment for my professional growth and development.

I would like to thank my wonderful colleagues, particularly Professor Nicky Priaulx, Professor Ben Pontin, Professor Elen Stokes, Dr Huw Pritchard, Dr Bharat Malkani, Dr Bernie Rainey, Dr Louise Austin, Professor Jo Hunt, Professor Ambreena Manji, Dr Sara Drake, emeritus Professor Richard Lewis, Professor Stijn Smismans, Professor John Harrington, Dr Rachel Minto, Dr Jess Mant, Dr Barbara Hughes-Moore, Dr Jen Allan, Dr Caer Smyth, Dr Ben Turner, Dr Alison Tarrant, Ruth Payne, Lizzy Wilmington, for research or teaching-related advice or just for always keeping me motivated.

I am also very grateful to Sharron Alldred, Sarah Kennedy, and to other members of the professional services team for always being extremely helpful.

Last, but not least, I would like to thank members of the School PGR community for sharing together many wonderful moments of our PhD journey.

Contents

1. Introduction	1
1.1 Background and relevance	1
1.2 Literature review	7
1.3 Research objective, hypothesis, and questions	11
1.4 Research methodology	11
1.4.1 Definitions	12
1.4.2 Scope of the analysis	18
1.4.3 Data collection and analysis	21
1.5 Structure of the thesis	22
2. Types of rights claims in climate change litigation and obstacles to them	23
2.1 Introduction	23
2.2 Why pursue rights claims in climate change litigation?	25
2.3 Types of claims	27
2.3.1 Sweeping challenges to climate policy	29
2.3.2 Challenges to GHG emissions reduction targets	31
2.3.3 Challenges to sectors contributing to climate change	32
2.3.4 Challenges to permits	34
2.4 Common obstacles	36
2.4.1 Separation of powers	37
2.4.2 Scientific uncertainty	39
2.4.2.1 Injury-in-fact	40
2.4.2.2 Causation	45
2.4.3 Litigation before supranational courts and treaty bodies ..	53
2.5 Conclusion	55
3. Which rights?	58
3.1 Introduction	58
3.2 The rights claimed	60
3.2.1 Right to life	62
3.2.1.1 International Covenant on Civil and Political Rights	
.....	62
3.2.1.1.1 <i>Portillo Cáceres v Paraguay</i>	63
3.2.1.1.2 <i>Teitiota v New Zealand</i>	64
3.2.1.2 European Convention on Human Rights	69
3.2.1.3 African Charter on Human and Peoples' Rights	71
3.2.1.4 American Convention on Human Rights	72
3.2.2 Right to a healthy environment	73
3.2.2.1 Towards a recognition of the right to a healthy	
environment at the UN level	75
3.2.2.2 Recognition at the regional level	76
3.2.2.3 Constitutions	78
3.2.2.4 Potential difficulties with recognition	80

3.2.3 Right to respect for private and family life	82
3.3 Conclusion	84
4. Europe	86
4.1 Introduction	86
4.2 The first successful challenge to national GHG emissions reduction targets in the world: <i>Urgenda v The Netherlands</i>	87
4.2.1 The initial failure of right claims despite a favourable outcome	88
4.2.2 The successful appeal	89
4.2.3 The final triumph of rights claims	90
4.3 Trying to replicate Urgenda's success outside the Netherlands: a failed attempt in Switzerland	92
4.3.1 Justiciability and standing	93
4.3.2 The threshold for triggering violation of the ECHR rights	94
4.4 Testing the unwritten constitutional right to a healthy environment to challenge national GHG emissions reduction targets in Ireland	95
4.4.1 Justiciability as a key concern	96
4.4.2 Margin of discretion	98
4.4.3 The prominent role of climate science	99
4.4.4 Can NGOs bring rights claims?	100
4.4.5 Criticism of unwritten constitutional right to a healthy environment	101
4.5 Challenging permits: the Norwegian experience	103
4.5.1 Interpreting the constitutionally recognised right to a healthy environment under Article 112	104
4.5.2 Causation	105
4.5.3 Justiciability of Article 112	106
4.5.4 Traditional arguments against climate action	106
4.5.5 Setting the threshold for the ECHR rights very high	108
4.5.6 Limited application of Article 112	111
4.5.7 Declining to adopt the Dutch courts' approach	112
4.6 Divergent approaches	113
4.7 Supranational courts	117
4.7.1 Sweeping challenge to European Union climate policy	117
4.7.2 The European Court of Human Rights	120
4.8 Conclusion	122
5. North America	124
5.1 Introduction	124
5.2 Sweeping challenges to climate policy in the US	126
5.2.1 The Fifth and the Ninth Amendments to the US Constitution in <i>Juliana v United States</i>	132
5.2.1.1 The political question	134
5.2.1.2 Standing under Article III of the US Constitution ...	135

5.2.1.3 The ‘danger creation’ exception under the Due Process Clause	137
5.2.1.4 An unenumerated right to a stable climate system	138
5.2.1.5 The Ninth Circuit’s position on redressability ...	139
5.2.1.6 Critique of the Ninth Circuit’s line of reasoning	141
5.2.2 The Environmental Rights Amendment to the Constitution of Pennsylvania	142
5.2.2.1 Standing	144
5.2.2.2 Restrictive interpretation of the Environmental Rights Amendment	146
5.3 Section 7 of the Canadian Charter	149
5.3.1 Sweeping challenges to Canada’s national climate policy	149
5.3.1.1 Justiciability	150
5.3.1.2 Redressability	152
5.3.1.3 Applicability of Section 7	154
5.3.2 Challenge to Ontario’s GHG emissions reduction targets	158
5.3.2.1 Justiciability	159
5.3.2.2 Applicability of Section 7	160
5.3.2.3 Standing on behalf of future generations	162
5.4 Two trends in courts’ approaches	163
5.4.1 Politicisation of governmental approach to climate change	163
5.4.2 Interpretation of the written or unwritten constitutional rights in the context of governmental climate obligations	166
5.5 Conclusion	168
6. The Global South	169
6.1 Introduction	169
6.2 Expansive interpretation of constitutional rights in India and Pakistan	173
6.2.1 Judicial activism as an impetus for rights-based climate change litigation in India	173
6.2.1.1 Deriving the right to a healthy environment from the right to life	175
6.2.1.2 Identifying deforestation as a sector contributing to climate change	177
6.2.2 The first successful sweeping challenge to national climate policy in the world: <i>Leghari v Pakistan</i>	178
6.2.2.1 Rights-based approach	178
6.2.2.2 Water justice	179
6.2.2.3 Ground-breaking, but not unexpected?	180
6.2.3 What makes Indian and Pakistani courts a favourable forum?	181
6.3 A specific environmental clause in the constitution: the case of Nepal	183
6.3.1 Climate change impacts	184

6.3.2 Need for comprehensive climate legislation	185
6.3.3 Environmental clause of the Constitution: the similarity between Nepal and India	186
6.4 Sectoral challenges in Colombia and Mexico	188
6.4.1 Deforestation: the main source of GHG emissions in Colombia	188
6.4.1.1 The right to a healthy environment as a collective right and its relationship with fundamental rights	190
6.4.1.2 The obligation to protect the environment	192
6.4.1.3 The impacts of deforestation on fundamental rights of present and future generations	194
6.4.1.4 Human rights and rights of nature	195
6.4.2 Applying the right to a healthy environment in the renewable energy sector: the case of Mexico	197
6.4.2.1 The two dimensions of the right to a healthy environment	198
6.4.2.2 Policy considerations	200
6.4.3 The transferrable value of successful sectoral challenges ...	201
6.5 Challenging permits: the case of South Africa	202
6.5.1 Assessment of climate change impacts	204
6.5.2 Does the constitutional right to a healthy environment require climate change impact assessment?	205
6.5.3 Can <i>Earthlife</i> be indicative of future developments in Sub- Saharan Africa?	207
6.5.3.1 National and regional recognition of the right to a healthy environment	208
6.5.3.2 The contribution of individual projects to climate change	209
6.5.3.3 Large-scale challenges	210
6.6 Conclusion	211
7. Overall conclusion	212
7.1 The three factors	212
7.1.1 Types of claims	213
7.1.2 Invoked rights	215
7.1.2.1 Right to life	215
7.1.2.2 Right to a healthy environment	217
7.1.2.3 Right to respect for private and family life	222
7.1.3 Litigation forum	223
7.1.3.1 Europe	223
7.1.3.2 North America	225
7.1.3.3 The Global South	226
7.2 Theoretical and practical significance of the findings	228
7.3 Looking ahead	230
Bibliography	234

Abbreviations

ACHPR – African Charter on Human and Peoples’ Rights

ECHR – European Convention on Human Rights

ECtHR – European Court of Human Rights

EU – European Union

GHG – Greenhouse gas

IACtHR – Inter-American Court of Human Rights

ICCPR – International Covenant on Civil and Political Rights

IPCC – Intergovernmental Panel on Climate Change

NGO – Non-governmental organisation

UK – United Kingdom

UN – United Nations

UNFCCC – United Nations Framework Convention on Climate Change

US – United States

CHAPTER 1. INTRODUCTION

1.1 Background and relevance

In early November 2013, Typhoon Haiyan hit the Philippines, killing over six thousand people and leaving millions of people displaced.¹ During a summer 2003 heatwave in Europe, nearly fifteen thousand heat-related deaths were recorded in France alone, and around seventy thousand such deaths throughout the continent.² The exposure to air pollution caused by forest fires in 2019 resulted in increased hospitalisation for respiratory health in children and the elderly in the southern Amazon.³ Hurricane Katrina left hundreds of people dead and around eighty per cent of New Orleans, United States (US), under water.⁴ A prolonged drought in eastern Africa led to agricultural and livestock losses and food insecurity for over eleven million people.⁵ The contribution of anthropogenic climate change to the likelihood of occurrence, and the severity, of these and related disasters is currently being investigated by scientists, and in recent years, some studies have estimated the excessive deaths during heatwaves,⁶ damage during wildfires,⁷ and the spread of vector-borne diseases,⁸ attributable to climate change. While further scientific

¹ Alfredo Mahar Francisco Lagmay and others, 'Devastating Storm Surges of Typhoon Haiyan' [2015] 11 International Journal of Disaster Risk Reduction 1.

² Jean-Marie Robine and others, 'Death Toll Exceeded 70,000 in Europe during the Summer of 2003' [2008] 331 Comptes Rendus Biologies 171.

³ Edward W Butt and others, 'Large Air Quality and Human Health Impacts due to Amazon Forest and Vegetation Fires' [2020] 2 Environmental Research Communications 2.

⁴ Joan Brunkard, Gonza Namulanda and Raoult Ratard, 'Hurricane Katrina Deaths, Louisiana, 2005' [2008] 2 Disaster Medicine and Public Health Preparedness 215.

⁵ Regina Below, Emily Grover-Kopec and Maxx Dilley, 'Documenting Drought-Related Disasters: A Global Reassessment' [2007] 16 The Journal of Environment & Development 329.

⁶ Daniel Mitchell and others, 'Attributing Human Mortality during Extreme Heat Waves to Anthropogenic Climate Change' [2016] 11 Environmental Research Letters 74006; Ana M Vicedo-Cabrera and others, 'The Burden of Heat-Related Mortality Attributable to Recent Human-Induced Climate Change' [2021] 11 Nature Climate Change 492.

⁷ Marshall Burke and others, 'The Changing Risk and Burden of Wildfire in the United States' [2021] 118 Proceedings of the National Academy of Sciences 2.

⁸ Cyril K Caminade, Marie McIntyre and Anne E Jones, 'Impact of Recent and Future Climate Change on Vector-Borne Diseases' [2019] 1436 Annals of the New York Academy of Sciences 157.

research in this area is still needed, it is already clear that at the very least, climate change can cause catastrophic harms to human communities all around the world. These harms can affect human interests in a myriad of ways and, ultimately, result in violations of rights protected by both national and international law.

But can lack of governmental action on climate change, or action that actually worsens it, amount to violation of these rights? A growing number of courts have to grapple with this question, as rights-based climate change cases against governments are becoming increasingly common globally.⁹ Answering this question may pose certain difficulties. Anthropogenic climate change is the result of cumulative greenhouse gas (GHG) emissions caused by human activities since the Industrial Revolution.¹⁰ No single country or corporate entity is thus solely responsible for climate change, and no single country or corporate entity can stop climate change all by itself. Also, climate change is a problem of an extremely diffuse nature, as GHG emissions are transboundary.¹¹ These factors might explain why so far, international or regional human rights claims and constitutional rights claims (rights claims) in climate change litigation have almost exclusively demanded greater efforts to reduce GHG emissions, and not compensation for individual loss and damage suffered from the impacts of climate change.¹²

⁹ Annalisa Savaresi and Joana Setzer, 'Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers' [2022] 13 *Journal of Human Rights and the Environment* 7, 8.

¹⁰ See Intergovernmental Panel on Climate Change (IPCC), '2021: Summary for Policymakers' in Valérie Masson-Delmotte and others (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2021).

¹¹ Abel Chavez and Anu Ramaswami, 'Progress toward Low Carbon Cities: Approaches for Transboundary GHG Emissions' Footprinting' [2011] 2 *Carbon Management* 471; Abel Chavez and Anu Ramaswami, 'Articulating a Trans-boundary Infrastructure Supply Chain Greenhouse Gas Emission Footprint for Cities: Mathematical Relationships and Policy Relevance' [2013] 54 *Energy Policy* 376.

¹² It has to be observed though that claims concerning compensation do exist in climate change litigation, however, they are exclusively brought under tort law against the world's largest fossil fuel producing companies. See, for example: *Lliuya v RWE AG* 1-5 U 15/17 (Higher Regional Court of Hamm, 2017); *City of New York v BP Plc* 325 F.Supp.3d 466 (S.D. New York 2018); *City of Oakland v BP Plc* 325 F.Supp.3d 1017 (N.D. California 2018); *Rhode Island v Chevron Corp* 393 F.Supp.3d 142 (D. Rhode Island 2019). For a discussion on these cases see: Geetanjali Ganguly, Joana Setzer and Veerle Heyvaert, 'If at First You Don't Succeed: Suing Corporations for Climate Change' [2018] 38 *Oxford Journal of Legal Studies* 841; Samvel Varvastian and Felicity Kalunga, 'Transnational Corporate

While holding individual states accountable for individual harms from climate change may be difficult, states still have obligations with regard to climate change, namely, common, but differentiated responsibilities to address it, which is the key principle of the international climate regime.¹³ Although climate change is the result of cumulative GHG emissions from countless sources, taking measures to prevent its further worsening ('climate change mitigation') and to protect the human communities from its current and future impacts ('climate change adaptation') remain squarely within the purview of the world governments. As awareness of the human impact on the climate has grown over the last few decades, the international community agreed to tackle this problem by gradually curbing global GHG emissions – the result of a massive use of fossil fuels, and the primary driver for global warming.¹⁴ This governance response, developed over the last three decades, has been multi-level: global climate deals,¹⁵ regional action,¹⁶ national climate legislation,¹⁷ as well as action by non-state actors¹⁸ have all been

Liability for Environmental Damage and Climate Change: Reassessing Access to Justice after *Vedanta v Lungowe*' [2020] 9 Transnational Environmental Law 323, 338-344. See also section 2.4.2.2 of this thesis.

¹³ The principle of common but differentiated responsibilities is established under art 3(1) of the United Nations Framework Convention on Climate Change (UNFCCC): 'The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.' The Parties should take into account 'common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances' when performing their commitments on climate change mitigation and adaptation under art 4 of the UNFCCC. United Nations Framework Convention on Climate Change (New York, 9 May 1992), United Nations, *Treaty Series*, vol 1771, p 107.

¹⁴ *ibid.* See also Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol) (Kyoto, 11 December 1997), United Nations, *Treaty Series*, vol 2303, p 162; Paris Agreement under the United Nations Framework Convention on Climate Change (Paris Agreement) (Paris, 12 December 2015), CCCC/CP/2015/L.9/Rev.1.

¹⁵ *ibid.*

¹⁶ See, for example, European Commission, 'European Green Deal' <https://ec.europa.eu/clima/eu-action/european-green-deal_en> accessed 30 June 2022

¹⁷ Michal Nachmany and Joana Setzer, *Global Trends in Climate Change Legislation and Litigation: 2018 Snapshot* (London School of Economics and Political Science 2018) <<https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-change-legislation-and-litigation-2018-snapshot/>> accessed 30 June 2022

¹⁸ Sander Chan and others, 'Effective and Geographically Balanced? An Output-based Assessment of Non-state Climate Actions' [2018] 19 Climate Policy 24.

used to mitigate climate change and adapt to its impact.¹⁹ The number of national climate laws across the globe, in particular, has seen a significant increase following the adoption of the 2015 Paris Agreement.²⁰ However, this growth in national legislation has not yielded any decisive results so far.²¹

Persisting inadequacies in regulatory responses have resulted in the emergence of litigation revolved around climate change,²² a legal strategy that first emerged in the US in the late 1980s to early 1990s.²³ Hence, as early as 1986, Los Angeles and New York City sued the National Highway Traffic Safety Administration, challenging the latter's decision not to prepare an environmental impact assessment of its then-adopted corporate average fuel economy standards and claiming that these standards would have a significant impact on global warming.²⁴ In the following years and decades, litigation concerning climate change, or in other words, climate

¹⁹ Overall, the variety of adopted measures includes regulations, standards, environmental impact assessment and planning, financial schemes such as taxes and subsidies, emissions trading, etc. For scholarly works, see, for example: Erkki J Hollo, Kati Kulovesi and Michael Mehling (eds), *Climate Change and the Law* (Springer 2013); Cinnamon P Carlarne, Kevin R Gray and Richard Tarasofsky (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016); Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (Oxford University Press 2017).

²⁰ Michal Nachmany and Joana Setzer, *Global Trends in Climate Change Legislation and Litigation: 2018 Snapshot* (London School of Economics and Political Science 2018) 7 <<https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-change-legislation-and-litigation-2018-snapshot/>> accessed 30 June 2022

²¹ Thus, recent GHG emissions are the highest in history. See International Energy Agency, 'Global Energy Review: CO2 Emissions in 2021' (March 2022) <www.iea.org/reports/global-energy-review-co2-emissions-in-2021-2> accessed 30 June 2022. Also, the gap between what governments have promised to do on GHG emissions and the total level of actions they have undertaken to date remains substantial, while both the current policy and pledge trajectories lie well above emissions pathways consistent with the Paris Agreement long-term temperature goal (see Climate Action Tracker <<https://climateactiontracker.org/>> accessed 30 June 2022). For a discussion on difficulties surrounding climate change governance see: Richard J Lazarus, 'Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future' [2009] 94 Cornell Law Review 1153; Elizabeth Fisher, Eloise Scotford and Emily Barritt, 'The Legally Disruptive Nature of Climate Change' [2017] 80 Modern Law Review 173.

²² Hari M Osofsky, 'The Continuing Importance of Climate Change Litigation' [2010] 1 Climate Law 3; Harro van Asselt, Michael Mehling and Clarisse Kehler Siebert, 'The Changing Architecture of International Climate Change Law' in Geert Van Calster, Wim Vandenberghe and Leonie Reins (eds), *Research Handbook on Climate Change Mitigation Law* (Edward Elgar Publishing 2015) 24.

²³ Jacqueline Peel and Hari M Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press 2015) 19; Meredith Wilensky, 'Climate Change in the Courts: An Assessment of Non-US Climate Litigation' [2015] 26 Duke Environmental Law & Policy Forum 131.

²⁴ *City of Los Angeles v National Highway Traffic Safety Admin* 912 F.2d 478 (DC Cir 1990)

change litigation²⁵ has significantly expanded, chiefly revolving around compliance with environmental impact assessment legislation and air quality legislation.²⁶ Such litigation has been used with mixed success, mostly to challenge the authorisation of fossil fuel development and operations as well as action with regard to GHG emissions standards.²⁷

In recent years, a new wave of cases has emerged, where claimants have pursued rights claims to challenge governmental failure to address climate change or action that contributed to it.²⁸ Compared to the traditional litigation avenues, rights claims may have a range of potential advantages, particularly because they could allow claimants to challenge national policies and because they could render the respective climate change cases of national, or even international, importance.²⁹ However, rights claims may also encounter considerable difficulties. Yet despite any such difficulties, the number of such cases has dramatically increased over the last several years, attracting the attention of both legal scholars and practitioners.³⁰ But how viable are rights claims in climate change litigation? What factors determine their viability?

At first glance, the answer to the question of whether rights claims are viable is certainly yes. Climate change is globally recognised as a problem that could significantly and irreversibly change the global ecological system.³¹ Furthermore, there has been a growing recognition of the fact that climate change should be

²⁵ The thesis uses the terms 'climate change litigation' and 'climate change cases' interchangeably.

²⁶ David Markell and JB Ruhl, 'An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?' [2012] 64 Florida Law Review 15, 38-47.

²⁷ Samvel Varvastian, 'Access to Justice in Climate Change Litigation from a Transnational Perspective: Private Party Standing in Recent Climate Cases' in Jerzy Jendrośka and Magdalena Bar (eds), *Procedural Environmental Rights: Principle X of the Rio Declaration in Theory and Practice* (Intersentia 2017) 485.

²⁸ Annalisa Savaresi and Joana Setzer, 'Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers' [2022] 13 Journal of Human Rights and the Environment 7, 8.

²⁹ See section 2.2 of this thesis.

³⁰ See Jacqueline Peel and Hari M Osofsky, 'Climate Change Litigation' [2020] 16 Annual Review of Law and Social Science 21.

³¹ Valérie Masson-Delmotte and others, '2021: Summary for Policymakers' in Valérie Masson-Delmotte and others (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2021) 21.

treated as a human rights issue, even though international climate law itself has traditionally lacked rights' language.³² In fact, it was concern over climate change that ultimately catalysed action on environmental human rights within the United Nations (UN) and got the UN Human Rights Council involved in environmental protection discourse.³³ But most importantly, there are already a number of successful rights-based climate change cases in which the respective courts have ruled that governments need to address climate change to protect the rights enshrined in constitutional and/or international human rights law.³⁴ These successful cases have emerged in different countries with different legal systems, thus demonstrating that rights-based climate change litigation is more than just momentary opportunism by those who seek to achieve climate action by any means possible. Rather, it can be viewed as a specific and innovative trend within the larger wave of climate change litigation.

Yet these developments do not automatically reveal the factors that determine the viability of rights claims in climate change litigation. While the international recognition of climate change as a potential threat to rights and the first successful cases against the governments certainly indicate that such claims have a certain prospect for success, there are various hurdles that can stand in the way of claimants.³⁵ These hurdles can be related to the scientific, political, or legal aspects of climate change.³⁶ The complexities of rights-based climate change litigation require an in-depth analysis that would help identify the factors that determine whether such claims are viable, beyond merely incidental individual wins or losses.

³² Lavanya Rajamani, 'Human Rights in the Climate Change Regime' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 238.

³³ Marc Limon, 'The Politics of Human Rights, the Environment, and Climate Change at the Human Rights Council' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 195.

³⁴ Discussed in detail in chapters 4-6 of this thesis.

³⁵ The thesis uses the term 'claimant' as equivalent to 'plaintiff' or 'petitioner' and meaning a party who initiates legal action.

³⁶ See section 2.4 of this thesis.

1.2 Literature review

Before discussing the analysis covered in this thesis it is useful to look at the existing literature on rights-based climate change litigation. The reasons for considering this literature are three-fold. First of all, the idea for the topic of the thesis stemmed from my engagement with the earlier literature on climate change litigation³⁷ and with more recent scholarly works on certain specific trends in it, most notably, the avenues offered by common law public trust doctrine for such litigation in the US.³⁸ Second, considering the existing literature makes it easier to correctly position this thesis and its contribution to the scholarship. Finally, this section will explain why the thesis employs the existing literature to only a limited extent and primarily focuses on analysis of the relevant cases themselves.

The first scholarly works on rights-based climate change litigation emerged about fifteen years ago. These works focused either on the initial attempts to apply a rights approach to climate change action against individual countries, namely the Inuit petition against the US,³⁹ or on the prospects of such litigation.⁴⁰ But it was not until the first major victories in such cases in 2015 to 2018 that the topic of rights-based climate change litigation gained widespread and ever-growing

³⁷ For example: Hari M Osofsky, 'Climate Change Litigation as Pluralist Pegal Dialogue' [2007] 26 Stanford Environmental Law Journal 181; Brian J Preston, 'Climate Change Litigation (Part 1)' [2011] 5 Carbon & Climate Law Review 3; David Markell and JB Ruhl, 'An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?' [2012] 64 Florida Law Review 15; Jolene Lin, 'Climate Change and the Courts' [2012] 32 Legal Studies 35.

³⁸ Particularly, the works by Mary Christina Wood, who championed the idea of utilising the public trust doctrine in support of the right to a clean and healthy atmosphere, free from carbon pollution: Mary Christina Wood and Dan Galpern, 'Atmospheric Recovery Litigation: Making the Fossil Fuel Industry Pay to Restore a Viable Climate System' [2015] 45 Environmental Law 259; Mary Christina Wood and Charles W Woodward IV, 'Atmospheric Trust Litigation and the Constitutional Right to a Healthy Climate System: Judicial Recognition at Last' [2016] 6 Washington Journal of Environmental Law and Policy 647; Michael C Blumm and Mary Christina Wood, 'No Ordinary Lawsuit: Climate Change, Due Process, and the Public Trust Doctrine' [2017] 67 American University Law Review 20. See also section 5.2 of this thesis.

³⁹ *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* No P-1413-05 (7 December 2005). See Hari M Osofsky, 'Inuit Petition as a Bridge? Beyond Dialectics of Climate Change and Indigenous Peoples' Rights' [2007] 31 American Indian Law Review 675. See also section 5.2 of this thesis.

⁴⁰ For example, Eric Posner, 'Climate Change and International Human Rights Litigation: A Critical Appraisal' [2007] 155 University of Pennsylvania Law Review 1925.

scholarly attention. However, these scholarly works have largely been rather narrow in focus. Hence, most works have focused almost exclusively on individual cases, particularly *Urgenda v The Netherlands*⁴¹ and *Juliana v United States*,⁴² or on

⁴¹ *Urgenda Foundation v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015); *The Netherlands v Urgenda Foundation* case 200.178.245/01 (The Hague Court of Appeal, 9 October 2018); *The Netherlands v Urgenda Foundation* case ECLI:NL:HR:2019:2007 (Supreme Court of the Netherlands, 20 December 2019). The case attracted enormous attention. For example: Jolene Lin, 'The First Successful Climate Negligence Case: A Comment on Urgenda Foundation v The State of the Netherlands (Ministry of Infrastructure and the Environment)' [2015] 5 Climate Law 65; Kars J de Graaf and Jan H Jans, 'The Urgenda Decision: Netherlands Liable for Role in Causing Dangerous Global Climate Change' [2015] 27 Journal of Environmental Law 517; Josephine van Zeven, 'Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?' [2015] 4 Transnational Environmental Law 339; Anne-Sophie Tabau and Christel Cournil, 'New Perspectives for Climate Justice: District Court of The Hague, 24 June 2015, Urgenda Foundation versus the Netherlands' [2015] 12 Journal for European Environmental & Planning Law 221; Lucas Bergkamp and Jaap C Hanekamp, 'Climate Change Litigation against States: The Perils of Court-made Climate Policies' [2015] 24 European Energy and Environmental Law Review 102; Marjan Peeters, 'Urgenda Foundation and 886 Individuals v The State of the Netherlands: The Dilemma of More Ambitious Greenhouse Gas Reduction Action by EU Member States' [2016] 25 Review of European, Comparative & International Environmental Law 123; Jesse Lambrecht and Claudia Ituarte-Lima, 'Legal Innovation in National Courts for Planetary Challenges: Urgenda v State of the Netherlands' [2016] 18 Environmental Law Review 57; Roger Cox, 'A Climate Change Litigation Precedent: Urgenda Foundation v The State of the Netherlands' [2016] 34 Journal of Energy & Natural Resources Law 143; Suryapratim Roy, and Edwin Woerdman 'Situating Urgenda v the Netherlands Within Comparative Climate Change Litigation' [2016] 34 Journal of Energy & Natural Resources Law 165; Patrícia Galvão Ferreira, 'Common but Differentiated Responsibilities' in the National Courts: Lessons from Urgenda v The Netherlands' [2016] 5 Transnational Environmental Law 329; Marc MA Loth, 'Climate Change Liability After All: A Dutch Landmark Case' [2016] 21 Tilburg Law Review 5. The subsequent (and unsuccessful) appeal of the decision to the Hague Court of Appeal and ultimately to the Supreme Court of the Netherlands has been extensively covered in the scholarship as well: 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 & International Environmental Law 94; Ingrid Leijten, 'Human Rights v Insufficient Climate Action: The Urgenda Case' [2019] 37 Netherlands Quarterly of Human Rights 112; 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; Ole W Pedersen, 'The Networks of Human Rights and Climate Change: The State of the Netherlands v Stichting Urgenda, Supreme Court of the Netherlands, 20 December 2019 (19/00135)' [2020] 22 Environmental Law Review 227; Naomi Spoelman, 'Urgenda: A How-To Guide for Enforcing Greenhouse Gas Emission Targets by Protecting Human Rights' [2020] 47 Ecology Law Quarterly 751; Lucy Maxwell, Sarah Mead and Dennis van Berkel, 'Standards for Adjudicating the Next Generation of Urgenda-Style Climate Cases' [2022] 13 Journal of Human Rights and the Environment 35. See also section 4.2 of this thesis.

⁴² *Juliana v United States* 217 F.Supp.3d, p. 1224 (D. Or. 2016); *Juliana v United States*, 947 F.3d 1159 (9th Cir. 2020). See, for example: Melissa Powers, 'Juliana v United States: The Next Frontier in US Climate Mitigation?' [2018] 27 Review of European, Comparative & International Environmental Law 199; Bradford C Mank, 'Does the Evolving Concept of Due Process in Obergefell Justify Judicial Regulation of Greenhouse Gases and Climate Change: Juliana v United States' [2018] 52 UC Davis Law Review 855; Don C Smith, 'No Ordinary Lawsuit': Will Juliana v United States Put the Judiciary at the Centre of US Climate Change Policy? [2018] 36 Journal of Energy & Natural Resources Law 259; Bronson J Pace, 'The Children's Climate Lawsuit: A Critique of the Substance and Science of the

other high-profile rights-based climate change cases,⁴³ or on the prospects of such cases in individual countries,⁴⁴ or have discussed several such high-profile cases in different countries,⁴⁵ or specific issues in such litigation — for example, the role of science, climate justice, and so forth.⁴⁶

But while scholarly interest in rights-based climate change litigation has increased dramatically over the last several years, the existing literature does not answer the fundamental question: what factors determine the viability of a rights claim in

Preeminent Atmospheric Trust Litigation Case, *Juliana v United States*’ [2019] 55 *Idaho Law Review* 85; Renee N Salas, Wendy Jacobs and Frederica Perera, ‘The Case of *Juliana v US*—Children and the Health Burdens of Climate Change’ [2019] 380 *New England Journal of Medicine* 2085. See also section 5.2.1 of this thesis.

⁴³ For example: Cordelia Christiane Bähr and others, ‘KlimaSeniorinnen: Lessons from the Swiss Senior Women’s Case for Future Climate Litigation’ [2018] 9 *Journal of Human Rights and the Environment* 194; Alvarado Acosta, Paola Andrea 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; 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; Louis J Kotzé, ‘Neubauer et al. versus Germany: Planetary Climate Litigation for the Anthropocene?’ [2021] 22 *German Law Journal* 1423.

⁴⁴ For example: Jacqueline Peel, Hari M Osofsky and Anita Foerster, ‘Shaping the Next Generation of Climate Change Litigation in Australia’ [2017] 41 *Melbourne University Law Review* 793; Marc AR Zemel, ‘The Rise of Rights-Based Climate Litigation and Germany’s Susceptibility to Suit’ [2018] 29 *Fordham Environmental Law Review* 484; Camille Cameron and Riley Weyman, ‘Recent Youth-Led and Rights-Based Climate Change Litigation in Canada: Reconciling Justiciability, Charter Claims and Procedural Choices’ [2022] 34 *Journal of Environmental Law* 195; Lisa Benjamin and Sara L Seck, ‘Mapping Human Rights-based Climate Litigation in Canada’ [2022] 13 *Journal of Human Rights and the Environment* 178; Sara K Phillips and Nicole Anschell, ‘Building Business, Human Rights and Climate Change Synergies in Southeast Asia: What the Philippines’ National Inquiry on Climate Change Could Mean for ASEAN’ [2022] 13 *Journal of Human Rights and the Environment* 238.

⁴⁵ For example: Myanna Dellinger, ‘See You in Court: Around the World in Eight Climate Change Lawsuits’ [2018] 42 *William & Mary Environmental Law and Policy Review* 525; Brian J Preston, ‘The Evolving Role of Environmental Rights in Climate Change Litigation’ [2018] 2 *Chinese Journal of Environmental Law* 131; Jacques Hartmann and Marc Willers QC, ‘Protecting Rights through Climate Change Litigation before European Courts’ [2022] 13 *Journal of Human Rights and the Environment* 90; Juan Auz, ‘Human Rights-Based Climate Litigation: A Latin American Cartography’ [2022] 13 *Journal of Human Rights and the Environment* 114; Kim Bouwer, ‘The Influence of Human Rights on Climate Litigation in Africa’ [2022] 13 *Journal of Human Rights and the Environment* 157; Mary Christina Wood, ‘“On the Eve of Destruction”: Courts Confronting the Climate Emergency’ [2022] 97 *Indiana Law Journal* 239.

⁴⁶ For example: Nicole Rogers, ‘Victim, Litigant, Activist, Messiah: The Child in a Time of Climate Change’ [2020] 11 *Journal of Human Rights and the Environment* 103; Justine Bell-James and Briana Collins, ‘Human Rights and Climate Change Litigation: Should Temporal Imminence Form Part of Positive Rights Obligations?’ [2022] 13 *Journal of Human Rights and the Environment* 212; Orla Kelleher, ‘Incorporating Climate Justice into Legal Reasoning: Shifting towards a Risk-Based Approach to Causation in Climate Litigation’ [2022] 13 *Journal of Human Rights and the Environment* 290.

climate change litigation? There are two potential explanations for this gap in the literature. First, until very recently, the number of relevant cases has been extremely small and limited to just a handful of countries, mostly located in the Global North, thus rendering any in-depth and globally relevant analysis highly speculative. This explains why the existing literature has predominantly focused on individual cases in the Global North countries such as the US or the Netherlands, as rightly observed by Jacqueline Peel and Jolene Lin.⁴⁷

Second, and perhaps more importantly, the existing works typically overlook the key similarities and differences between rights claims in different climate change cases that determine the level of viability of the respective claims. In other words, although the existing scholarship correctly observes a trend towards the increasing employment of rights claims in climate change cases, existing scholarship tends to overlook a crucial fact: that the similarities and differences between different types of claims, different types of invoked rights, and different litigation forums create a definable, yet uneven, landscape of rights-based climate change litigation. Accordingly, this gap in the literature significantly undermines its relevance across both time and space because the existing literature fails to systematically explain what determined the successful or unsuccessful outcome in these cases. In other words, the existing literature only explains the *outcomes* in rights-based climate change cases, but not the *factors determining* these outcomes. And as a result, the transferrable value of the existing literature is relatively limited and does not extend beyond the individual stories of success or failure in the cases it discusses.

It is precisely this gap in the legal literature that this thesis aims to fill. It is also the reason behind the limited use of the existing literature in the analysis in this thesis. Of course, this does not mean that the existing scholarship is irrelevant to the topic of the thesis. For example, the recent analyses of climate change litigation by

⁴⁷ Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' [2019] 113 American Journal of International Law 679, 681.

Jacqueline Peel and Jolene Lin,⁴⁸ and by Mary Wood,⁴⁹ and the collection of articles recently published in the *Journal of Human Rights and the Environment* on various aspects of rights-based climate change litigation around the world,⁵⁰ include (or are even based on) a comparative approach that helps understand the opportunities for and challenges to litigating such cases in various countries. Similarly, the existing theoretical literature on environmental rights by John Knox,⁵¹ David Boyd,⁵² and many other scholars referred to throughout the thesis helps understand the development of these rights and their application in litigation.

Still, all these works do not reveal the factors determining the viability of rights claims in climate change litigation globally, which is unsurprising, as the objective and scope of these works are different from the ones in this thesis. Therefore, these

⁴⁸ Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' [2019] 113 *American Journal of International Law* 679.

⁴⁹ Mary Christina Wood, "'On the Eve of Destruction': Courts Confronting the Climate Emergency" [2022] 97 *Indiana Law Journal* 239.

⁵⁰ See: Annalisa Savaresi and Joana Setzer, 'Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers' [2022] 13 *Journal of Human Rights and the Environment* 7; Lucy Maxwell, Sarah Mead and Dennis van Berkel, 'Standards for Adjudicating the Next Generation of Urgenda-Style Climate Cases' [2022] 13 *Journal of Human Rights and the Environment* 35; Larissa Parker and others, 'When the kids Put Climate Change on Trial: Youth-Focused Rights-Based Climate Litigation around the World' [2022] 13 *Journal of Human Rights and the Environment* 64; Jacques Hartmann and Marc Willers QC, 'Protecting Rights through Climate Change Litigation before European Courts' [2022] 13 *Journal of Human Rights and the Environment* 90; Juan Auz, 'Human Rights-Based Climate Litigation: A Latin American Cartography' [2022] 13 *Journal of Human Rights and the Environment* 114; Birsha Ohdedar, 'Climate Adaptation, Vulnerability and Rights-Based Litigation: Broadening the Scope of Climate Litigation Using Political Ecology' [2022] 13 *Journal of Human Rights and the Environment* 137; Kim Bouwer, 'The Influence of Human Rights on Climate Litigation in Africa' [2022] 13 *Journal of Human Rights and the Environment* 157; Lisa Benjamin and Sara L Seck, 'Mapping Human Rights-based Climate Litigation in Canada' [2022] 13 *Journal of Human Rights and the Environment* 178; Justine Bell-James and Briana Collins, 'Human Rights and Climate Change Litigation: Should Temporal Imminence Form Part of Positive Rights Obligations?' [2022] 13 *Journal of Human Rights and the Environment* 212; Sara K Phillips and Nicole Anschell, 'Building Business, Human Rights and Climate Change Synergies in Southeast Asia: What the Philippines' National Inquiry on Climate Change Could Mean for ASEAN' [2022] 13 *Journal of Human Rights and the Environment* 238; Nicola Silbert, 'In Search of Impact: Climate Litigation Impact through a Human Rights Litigation Framework' [2022] 13 *Journal of Human Rights and the Environment* 265; Orla Kelleher, 'Incorporating Climate Justice into Legal Reasoning: Shifting towards a Risk-Based Approach to Causation in Climate Litigation' [2022] 13 *Journal of Human Rights and the Environment* 290.

⁵¹ For example, John H Knox, 'The Past, Present, and Future of Human Rights and the Environment' [2018] 53 *Wake Forest Law Review* 649.

⁵² For example, David R Boyd, 'Catalyst for Change: Evaluating Forty Years of Experience in Implementing the Right to a Healthy Environment' in John H Knox and Ramin Pejman (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018).

works are used only to a limited extent, namely, to understand the context of the application of rights claims in climate change litigation. Similarly, this thesis cannot extensively rely on scholarly works that focus on various theories such as the rights of nature, the rights of future generations, or climate constitutionalism. While some of these theories have been employed in rights-based climate change cases, analysing these theories is beyond the scope of the research objective, because the breadth and the interdisciplinary nature of these theories require a detailed discussion in their own right.⁵³

Instead, the thesis undertakes an in-depth analysis of the relevant cases themselves, and by identifying the common denominators or common factors that determine the viability of rights claims in climate change cases, provides a much needed and globally relevant scholarly answer to the question of what makes such claims viable. Given the steady increase in the number of rights-based climate change cases across the world as well as their practical importance, the time for answering this question could not be more critical.

1.3 Research objective, hypothesis, and questions

The objective of this thesis is to identify the factors that determine the viability of rights claims in climate change litigation. The thesis hypothesises that the viability of such claims depends on three critical factors: 1) the type of the claim; 2) the rights that claimants invoke; 3) the litigation forum. Accordingly, the thesis will answer the following questions:

- What are the types of rights claims in climate change litigation?
- What are the common obstacles to such claims?

⁵³ See, for example: Lukas H Meyer (ed), *Intergenerational Justice* (Routledge 2017); Benjamin J Richardson, *Time and Environmental Law: Telling Nature's Time* (Cambridge University Press 2017); Jordi Jaria-Manzano and Susana Borràs (eds), *Research Handbook on Global Climate Constitutionalism* (Edward Elgar Publishing 2019); Craig M Kauffman and Pamela L Martin, *The Politics of Rights of Nature: Strategies for Building a More Sustainable Future* (MIT Press 2021); Anna Grear and others (eds), *Posthuman Legalities: New Materialism and Law Beyond the Human* (Edward Elgar Publishing 2021).

- Which rights are allegedly violated?
- Which rights do courts and treaty bodies consider relevant in the context of climate change?
- How do courts and treaty bodies perceive the threats posed by climate change and the impacts of these threats on the claimed rights?
- Are courts and treaty bodies willing to recognise the unwritten rights or expand the interpretation of the existing rights to cover the threats posed by climate change?
- How does the litigation forum affect the viability of rights claims?

1.4 Research methodology

The overarching methodological approach of the thesis is to analyse the viability of rights claims in climate change litigation based on existing case law. This section explains the rationale behind such an approach and defines its parameters.

1.4.1 Definitions

One of the traditional methodological questions in climate change litigation research is the very definition of climate change litigation or, in other words, the question of what counts as a ‘climate change case’.⁵⁴ For example, a broader definition of climate change litigation covers ‘cases that raise material issues of law or fact relating to climate change mitigation, adaptation, or the science of climate change [that] are brought before a range of administrative, judicial, and other adjudicatory bodies’.⁵⁵ In contrast, a narrower definition may cover only those

⁵⁴ In particular, the discussion on the definition of climate change litigation in seminal scholarly works in the early 2010s: David Markell and JB Ruhl, ‘An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?’ [2012] 64 Florida Law Review 15; Jolene Lin, ‘Climate Change and the Courts’ [2012] 32 Legal Studies 35; Jacqueline Peel and Hari M Osofsky, ‘Climate Change Litigation’s Regulatory Pathways: A Comparative Analysis of the United States and Australia’ [2013] 35 Law & Policy 150.

⁵⁵ Michael Burger and Daniel J Metzger, *Global Climate Litigation Report: 2020 Status Review* (United Nations Environment Programme and Sabin Center for Climate Change Law 2020) 6

cases where climate change is the main, or one of the main issues, and that are brought solely before judicial bodies.⁵⁶ Comparing these approaches to defining climate change litigation led to the consideration of two conditions that were crucial for the purpose of this thesis.

The first condition is that the thesis analyses the viability of *rights claims in climate change litigation*. The thesis uses the term ‘rights claims’ when referring to the rights protected by international human rights treaties and/or national constitutions. Accordingly, it was necessary to adopt a definition that would cover not only cases before national courts, but also petitions addressed by international and regional courts and treaty bodies. The rationale for such an inclusion is simple: the viability of rights claims in such international or regional climate change ‘cases’ is determined by practically the same factors that determine the viability of their counterparts addressed by national judicial bodies. Furthermore, such an inclusion was consistent with the common approach adopted by climate change litigation databases⁵⁷ as well as the existing scholarship⁵⁸.

The second and more complex condition that had to be considered when defining climate change litigation and, accordingly, rights-based climate change cases, is the extent of the role that climate change plays in the respective cases. In that regard, a useful classification of climate change cases has been proposed in a series of climate change litigation reports that distinguish between cases where climate change is: 1) a central issue; 2) a peripheral issue; or 3) an incidental issue.⁵⁹ On the

<<https://wedocs.unep.org/bitstream/handle/20.500.11822/34818/GCLR.pdf?sequence=1&isAllowed=y>> accessed 30 June 2022

⁵⁶ Joana Setzer and Rebecca Byrnes, *Global Trends in Climate Change Litigation: 2020 snapshot* (London School of Economics and Political Science 2020) 5 <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/07/Global-trends-in-climate-change-litigation_2020-snapshot.pdf> accessed 30 June 2022

⁵⁷ See section 1.4.3 of this thesis.

⁵⁸ See section 1.2 of this thesis.

⁵⁹ Joana Setzer and Rebecca Byrnes, *Global Trends in Climate Change Litigation: 2020 snapshot* (London School of Economics and Political Science 2020) 6-7 <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/07/Global-trends-in-climate-change-litigation_2020-snapshot.pdf> accessed 30 June 2022. See also Asian Development Bank, *Climate change, Coming Soon to a Court Near You. Climate Litigation in Asia and the Pacific and*

face of it, the difference between these three categories is quite straightforward. Hence, the first category covers cases where 'climate change is at the "centre" of the legal argument', the second category includes cases where 'there is explicit reference to climate change, but litigants rely on other grounds to call for climate-related behaviour change', and the third category refers to cases 'that make no specific reference to climate but that do have practical implications for climate change mitigation or adaptation'.⁶⁰ The cases from the latter category are clearly unsuitable for the present analysis, since climate change is not the legal issue at stake, thus making them irrelevant for the purpose of this thesis irrespective of these cases' importance for the climate.

For their part, cases where climate change is a peripheral issue are certainly more relevant for the analysis than are 'incidental' cases, but their relevance is highly nuanced. Since these cases do not explicitly revolve around climate change, the judicial assessment of climate change considerations may be significantly diluted or even absent altogether, as demonstrated by the two following examples.

The first example, the 2005 case *Gbemre v Shell Petroleum Development Corporation of Nigeria*,⁶¹ was the first, and for many years the only case before a national court in Africa where the claimant explicitly referred to climate change. Apart from its pioneering nature in the continent, the ground-breaking nature of the case was that it marked the first time, globally, that a national court was presented with an opportunity to address the question of whether an explicitly recognised climate-polluting activity can violate rights protected by a regional human rights treaty and by the Constitution of Nigeria. In *Gbemre*, the claimant alleged that local air pollution caused by the oil production activities (namely, gas

Beyond (Asian Development Bank 2020) 7-8 <<https://www.adb.org/publications/climate-litigation-asia-pacific>> accessed 30 June 2022

⁶⁰ Joana Setzer and Rebecca Byrnes, *Global Trends in Climate Change Litigation: 2020 snapshot* (London School of Economics and Political Science 2020) 6-7 <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/07/Global-trends-in-climate-change-litigation_2020-snapshot.pdf>

⁶¹ *Gbemre v Shell Petroleum Development Corporation of Nigeria Ltd* FHC/B/CS/53/05 (Federal High Court, 14 November 2005).

flaring⁶²) of the defendants, Shell Petroleum Development Company of Nigeria Ltd. and the Nigerian National Petroleum Corporation, adversely affected his life and health as well as the local environment, thus violating, among other things, his rights to life and to a healthy environment protected by Article 33(1) of the Nigerian constitution⁶³ and Articles 4⁶⁴ and 24⁶⁵ of the African Charter on Human and Peoples' Rights (ACHPR) respectively. The only reference to climate change was that carbon dioxide released in the process of gas flaring is 'the main greenhouse gas', and that both it and methane emissions, also released during gas flaring, contributed to 'adverse climate change,' causing 'warming of the environment'.⁶⁶ In other words, the claim challenged a specific sector that contributed to climate change (that is, the practice of gas flaring in Nigeria), but without explicitly referring to it as such.

The Federal High Court of Nigeria agreed with the claimant⁶⁷ and declared that the defendants' practice of gas flaring as well as the failure to carry out environmental impact assessment of this practice on the affected communities violated the above-mentioned rights.⁶⁸ Furthermore, the court declared the national legislation allowing such practice to be unconstitutional and inconsistent with the provisions of the ACHPR protecting the above-mentioned rights.⁶⁹ Remarkably, in holding for the claimant, the court not only departed from earlier Nigerian case law, which

⁶² For a discussion on the practice of gas flaring in Nigeria and its impacts on the environment and human health, as well as its contribution to climate change, see Ochuko Anomohanran, 'Determination of Greenhouse Gas Emission Resulting from Gas Flaring Activities in Nigeria' [2012] 45 Energy Policy 666.

⁶³ Nigeria's Constitution of 1999 with Amendments through 2011, art 33(1): 'Every person has a right to life, and no one shall be deprived intentionally of his life, save in execution of the sentence of a court in respect of a criminal offence of which he has been found guilty in Nigeria.'

⁶⁴ African Charter on Human and Peoples' Rights (Nairobi, 19 January 1982) United Nations, *Treaty Series*, vol 1520, p 217, art 4: 'Human beings are inviolable. Every human being shall be entitled to respect for his life and the integrity of his person. No one may be arbitrarily deprived of this right.'

⁶⁵ *ibid* art 24: 'All peoples shall have the right to a general satisfactory environment favorable to their development.'

⁶⁶ *Gbemre v Shell Petroleum Development Corporation of Nigeria Ltd* FHC/B/CS/53/05 (Federal High Court, 14 November 2005) 4-5.

⁶⁷ *ibid* 30-31.

⁶⁸ *ibid* 29-30.

⁶⁹ *ibid* 31. The third defendant – the Attorney-General – was accordingly ordered to initiate the necessary process of amending the legislation in question.

took a hard line on causation in such cases;⁷⁰ it also agreed that business activities of corporate entities, in this case a Nigerian subsidiary of the multinational corporation Royal Dutch Shell PLC and a national corporation, can violate both national and regional human rights law.⁷¹

Curiously, *Gbemre* has been widely referred to in legal scholarship in the context of climate change litigation,⁷² undoubtedly due to both its pioneering nature and to the favourable court decision.⁷³ Yet, the court only briefly referred to the contribution of gas flaring to climate change. Nor did the court discuss whether such a contribution violated or could potentially violate claimant's rights. Therefore, it is questionable how the court would have decided the case if the claimant had raised a purely climate change mitigation claim. Furthermore, the court did not even address the question of how the claimed rights are applicable in the context of

⁷⁰ Kaniye Ebeku, 'Constitutional Right to a Healthy Environment and Human Rights Approaches to Environmental Protection in Nigeria: *Gbemre v Shell* Revisited' [2007] 16 Review of European Community & International Environmental Law 312, 318.

⁷¹ *Gbemre v Shell Petroleum Development Corporation of Nigeria Ltd* FHC/B/CS/53/05 (Federal High Court, 14 November 2005) 30-31. For a discussion on transnational liability of corporations for environmental harms and the resulting human rights violations see Samvel Varvastian and Felicity Kalunga, 'Transnational Corporate Liability for Environmental Damage and Climate Change: Reassessing Access to Justice after *Vedanta v Lungowe*' [2020] 9 Transnational Environmental Law 323.

⁷² For example: Hari M Osofsky, 'Climate Change and Environmental Justice: Reflections on Litigation over Oil Extraction and Rights Violations in Nigeria' [2010] 1 Journal of Human Rights and the Environment 189; Eferiekose Ukala, 'Gas flaring in Nigeria's Niger Delta: Failed Promises and Reviving Community Voices' [2010] 2 Washington and Lee Journal of Energy, Climate, and the Environment 97; James R May and Tiwajopelo Dayo, 'Dignity and Environmental Justice in Nigeria: The Case of *Gbemre v Shell*' [2019] 25 Widener Law Review 269; Bukola Faturoti, Godswill Agbaitoro and Obinna Onya, 'Environmental Protection in the Nigerian Oil and Gas Industry and *Jonah Gbemre v Shell PDC Nigeria Limited: Let the Plunder Continue?*' [2019] 27 African Journal of International and Comparative Law 225.

⁷³ It is worth mentioning that from a practical point of view, the case was anything but 'successful', because the judgment was not implemented and did not halt the practice of gas flaring in Nigeria – for a discussion see James R May and Tiwajopelo Dayo, 'Dignity and Environmental Justice in Nigeria: The Case of *Gbemre v Shell*' [2019] 25 Widener Law Review 269.

environmental degradation. These as well as other flaws in the court's approach⁷⁴ make any assessment of the relevance of this case potentially difficult.⁷⁵

The second example is the 2005 complaint by the non-governmental organisation (NGO) Marangopoulos Foundation for Human Rights against Greece under the European Social Charter⁷⁶ before the European Committee of Social Rights.⁷⁷ The claimant alleged that by authorising a private company to operate lignite mines and power stations fuelled by lignite 'without taking sufficient account of the environmental impact and without taking all necessary steps to reduce this impact', Greece failed to comply with its obligation to protect public health against air pollution, thus violating the right to health under Article 11 of the Charter.⁷⁸ The claimant did not raise any specific claims with regard to climate change and even the reference to climate change itself was not explicit – rather, it was based on the fact that the claimant 'criticise[d] the continued massive use of lignite as being quite incompatible with the Kyoto Protocol objectives and the associated lack of tangible progress towards fulfilling these objectives'.⁷⁹ The Committee concluded that Article 11 of the Charter was indeed violated because regardless of the margin of discretion granted to national authorities in such matters, the government had failed 'to strike a reasonable balance between the interests of persons living in the lignite mining areas and the general interest'.⁸⁰ However, the Committee did not address climate change and merely observed that Greece is a party to the UNFCCC and the Kyoto Protocol.⁸¹

⁷⁴ For example, the Court's limited engagement with the evidence, failure to invite additional experts, and so forth. Kaniye Ebeku, 'Constitutional Right to a Healthy Environment and Human Rights Approaches to Environmental Protection in Nigeria: *Gbemre v Shell* Revisited' [2007] 16 Review of European Community & International Environmental Law 312, 319.

⁷⁵ Nevertheless, despite its flaws, *Gbemre* marked the first time when a court determined that a widespread activity clearly identified as contributing to climate change violated human rights and constitutional rights.

⁷⁶ European Social Charter (Turin, 18 October 1961), United Nations, Treaty Series, vol 529, p 89.

⁷⁷ *Marangopoulos v Greece* 30/2005 (European Committee of Social Rights, 6 December 2006).

⁷⁸ *ibid* [11].

⁷⁹ *ibid* [34].

⁸⁰ *ibid* [221].

⁸¹ *ibid* [205]. Notably though, the decision in *Marangopoulos* marked the first time that a regional treaty body recognised that by failing to properly abate an activity identified as contributing to

In contrast, those cases where climate change is a central issue are undoubtedly critical for the purpose of this thesis since climate change considerations play the key role. That said though, the ‘centrality’ of the climate change issue in such cases does not necessarily mean that such cases should focus exclusively on climate change. Let us consider a hypothetical case where the claimant challenges the governmental agency’s permit to build a new coal-fired powerplant, alleging that the resulting emissions would contribute to climate change and cause substantial local air pollution, violating the claimant’s rights. The court deems the alleged contribution to climate change to be negligible and dismisses that part of the claim. However, the court agrees that substantial air pollution caused by the powerplant would violate the claimant’s rights and satisfies the claim by revoking the permit. In this scenario, climate change can be considered the central issue of the case, but it is clearly not the only one, as air pollution plays an equally central role in both the claim and the court’s reasoning. Obviously, despite the fact that this hypothetical case raises the issues of both climate change and air pollution, it is highly relevant when discussing the viability of rights claims in climate change litigation. The practical importance of including such cases where climate change is among several equal concerns will be demonstrated in full in chapter 6 of this thesis, which analyses several cases that challenged sectors contributing to climate change.

1.4.2 Scope of the analysis

One of the key methodological challenges to achieving the objective of the thesis was to delineate the scope of the analysis. The dramatic and global expansion of the relevant case law over the last several years coupled with constant developments in it made the analysis a potentially moving target, thus requiring

climate change, the government had violated its obligations under international human rights law. Furthermore, the Committee’s interpretation of the right to health under art 11 of the Charter could be relevant in the context of climate change. For example, the Committee emphasised that while ‘overcoming pollution is an objective that can only be achieved gradually ... , states party must strive to attain this objective within a reasonable time, by showing measurable progress and making best possible use of the resources at their disposal’ [204].

great methodological clarity and precision. It was therefore necessary to apply certain additional parameters to the analysis that would allow the development of an in-depth study without jeopardising the soundness of the research results. These parameters are as follows.

First and foremost, the analysis covers only cases against governments. For their part, cases against corporate entities were excluded from the analysis. Obviously, the reason for such an exclusion is not because corporate entities do not contribute to climate change. On the contrary, it is well established that the world's largest corporate emitters of GHGs have caused substantial emissions since the Industrial Revolution.⁸² In fact, climate change litigation against corporate entities dates back to as early as mid-2000s,⁸³ with a new wave of such cases emerging over the last several years.⁸⁴ However, such cases are almost exclusively based on tort law.⁸⁵ Since the legal framework for holding corporate entities responsible for rights violations is still only developing,⁸⁶ including such cases into the analysis would

⁸² See Richard Heede, 'Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854–2010' [2014] 122 *Climatic Change* 229. For updated reports based on Heede's study see Climate Accountability Institute <<https://climateaccountability.org/index.html>> accessed 30 June 2022

⁸³ See, for example: *Comer v Murphy Oil USA* 585 F.3d 855 (5th Cir 2009) (where a group of property owners in Mississippi claimed that the fossil fuel companies' GHG emissions contributed to global warming and therefore to a rise in sea level, which added to the ferocity of Hurricane Katrina, ultimately causing greater damage to the claimants' property); *Native Village of Kivalina v ExxonMobil Corp* 696 F.3d 849 (9th Cir 2012) (where the Inupiat Eskimo village of Kivalina in Alaska sought to recover financial compensation from a group of the world's largest fossil fuel producers in respect of its forced relocation following the erosion of sea ice around the village).

⁸⁴ Geetanjali Ganguly, Joana Setzer and Veerle Heyvaert, 'If at First You Don't Succeed: Suing Corporations for Climate Change' [2018] 38 *Oxford Journal of Legal Studies* 841.

⁸⁵ It should be noted that tort-based climate change cases against corporate entities predate rights-based climate change cases against the government. For early scholarly works on the use of tort law in climate change litigation see, for example: David A Grossman, 'Warming Up to a not-so-Radical Idea: Tort-Based Climate Change Litigation' [2003] 28 *Columbia Journal of Environmental Law* 1; David Hunter and James Salzman, 'Negligence in the Air: The Duty of Care in Climate Change Litigation' [2006] 155 *University of Pennsylvania Law Review* 1741.

⁸⁶ For example: The UN Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework, 2011, which call for corporate responsibility to respect human rights regardless of the business structure. Furthermore, there have been some recent developments in case law. For example, the decision of the Supreme Court of Canada in non-environmental case *Nevsun Resources Ltd v Araya* 2020 SCC 5, concerning Eritrean workers' forced labour in a mine owned by a Canadian company and confirming that corporations are not immune from direct liability for human rights violations under customary international law: 'it is not "plain and obvious" that corporations today enjoy a blanket exclusion under customary international law from direct liability for violations of "obligatory, definable, and universal norms of international

most likely cause considerable methodological confusion and potentially undermine the reliability of the results.⁸⁷

Second, given the relatively small proportion of rights-based climate change cases in the general body of climate change litigation, the analysis included not only cases decided by the highest instance courts or treaty bodies, but also cases where the courts of first instance have addressed only the procedural questions, for example, justiciability and standing. The inclusion of such cases into the analysis was fully consistent with the research objective, since it reflected the viability of rights claims throughout different stages of litigation.

Third, while recognising the critical importance of the post-litigation stage, namely the implementation of courts' decisions and their (potential) policy impacts, the analysis explores the viability of rights claims exclusively at the litigation stage.

law", or indirect liability for their involvement in (...) "complicity offenses" [113]. For its part, in the case of *Vereniging Milieudéfensie v Royal Dutch Shell* C/09/571932 / HA ZA 19-379 (Hague District Court, 26 May 2021), the court held that 'due to the serious threats and risks to the human rights of Dutch residents and the inhabitants of the Wadden region, private companies such as RDS may also be required to take drastic measures and make financial sacrifices to limit CO2 emissions to prevent dangerous climate change' [4.4.54], following the unwritten standard of care under the Dutch civil law [4.5.4]. Another notable example is the national inquiry of the Commission on Human Rights of the Philippines – an independent body established under the Constitution of the Philippines with the mandate to investigate allegations of human rights violations – into the responsibility of the world's largest fossil-fuel producing companies for human rights violations resulting from climate change. The Commission started its inquiry in 2015, which included many consultations and public hearings. In its May 2022 report, the Commission recognised the adverse impacts of climate change on many human rights, and the particular vulnerability of women, children, Indigenous peoples, people living in poverty, and so forth, declared that both governments and businesses have international human rights obligations in the context of climate change, and issued a set of recommendations with regard to climate change mitigation and adaptation measures. Commission on Human Rights of the Philippines, 'National Inquiry on Climate Change Report' (6 May 2022) <<https://chr.gov.ph/wp-content/uploads/2022/05/CHRP-NICC-Report-2022.pdf>>

⁸⁷ Similarly, the analysis did not cover cases against climate activists and protesters. Such cases are typically the result of criminal charges over protests at or blockading of fossil fuels operation facilities, vehicles, and vessels, as well as blockading roads and buildings. In these cases, the defendants invoke the climate necessity defence and the rights to freedom of expression and to peaceful assembly. Such cases are very specific, because they concern climate activists' challenges to insufficient action on climate change or action that contributes to it in non-legal ways, namely, by means of civil disobedience. Therefore, including such cases into the analysis would go beyond the research objective. For a discussion on the climate necessity defence see: Lance N Long and Ted Hamilton, 'The Climate Necessity Defense: Proof and Judicial Error in Climate Protest Cases' [2018] 38 *Stanford Environmental Law Journal* 57; Grace Nosek, 'The Climate Necessity Defense: Protecting Public Participation in the US Climate Policy Debate in a World of Shrinking Options' [2019] 49 *Environmental Law* 249; Benjamin J Richardson, 'Protesting against Climate Breakdown: Novel Legal Options' [2020] 35 *Australian Environment Review* 21.

Therefore, by referring to ‘viability’ or the ‘success’ of rights claims in climate change litigation, the analysis only indicates a court decision that is favourable to the claimants. Admittedly, such an interpretation of the terms ‘viable’ or ‘successful’ does not necessarily reflect the impacts of litigation, which sometimes can be far from what the claimants could wish for. For instance, one year after the Supreme Court of Colombia declared the Amazon rainforest to be the subject of rights and ordered the Colombian government to take measures against deforestation,⁸⁸ the claimants had to return to the court to seek further action because the government failed to implement the order.⁸⁹ The latter development provides yet another reminder of the sad reality that success at the litigation stage does not necessarily lead to any decisive improvement in the real world.⁹⁰ But implementation problems are, of course, not unique to rights claims in climate change litigation.⁹¹ Nor, of course, does the above-mentioned example of Colombia reflect the general situation. For example, following Urgenda’s court victory,⁹² the Dutch government announced a package of measures to cut national GHG emissions.⁹³ Similarly, after the Constitutional Court of Germany ruled that the federal Climate Change Act lacked sufficient specifications for GHG emissions reduction after 2031, in violation of constitutional rights, the German government initiated plans to raise the reduction target from fifty-five to sixty-five per cent by

⁸⁸ *Future Generations v Ministry of Environment* no 11001-22-03-000-2018-00319-01; STC4360-2018 (Supreme Court of Colombia, 2018) 45.

⁸⁹ See Dejusticia, ‘The Colombian government has failed to fulfill the Supreme Court’s landmark order to protect the Amazon’ (5 April 2019) <<https://www.dejusticia.org/en/the-colombian-government-has-failed-to-fulfill-the-supreme-courts-landmark-order-to-protect-the-amazon/>> accessed 30 June 2022

⁹⁰ Michael Burger and Daniel J Metzger, *Global Climate Litigation Report: 2020 Status Review* (United Nations Environment Programme and Sabin Center for Climate Change Law 2020) 30-31 <<https://wedocs.unep.org/bitstream/handle/20.500.11822/34818/GCLR.pdf?sequence=1&isAllowed=y>> accessed 30 June 2022

⁹¹ Alexandra Huneus, ‘Courts Resisting Courts: Lessons from the Inter-American Court’s Struggle to Enforce Human Rights’ (2011) 44 Cornell International Law Journal 493; Dia Anagnostou and Alina Mungiu-Pippidi, ‘Domestic Implementation of Human Rights Judgments in Europe: Legal Infrastructure and Government Effectiveness Matter’ (2014) 25 European Journal of International Law 205.

⁹² See section 4.2 of this thesis.

⁹³ Jonathan Watts, ‘Dutch officials reveal measures to cut emissions after court ruling’ *The Guardian* (24 April 2020) <https://www.theguardian.com/world/2020/apr/24/dutch-officials-reveal-measures-to-cut-emissions-after-court-ruling?CMP=twl_a-environment_b-gdneco> accessed 30 June 2022.

2030.⁹⁴ And outside Europe, after the Supreme Court of Nepal ordered the government to draft and to implement comprehensive climate change legislation,⁹⁵ the Nepali government adopted the 2019 Environment Protection Act, which outlined the key policy measures to address climate change mitigation and adaptation.⁹⁶

However, analysing the above-mentioned impacts of rights-based climate change cases clearly requires separate research with a very different methodology; therefore, the questions related to implementation fall outside the scope of this thesis.

Similarly, while interviewing claimants and lawyers about their motivation for pursuing rights claims in climate change litigation as a legal strategy would shed light on the impacts of such cases, it would also dramatically expand the scope of the thesis and go beyond the research objective. For its part, interviewing judges about their motivation when deciding the respective cases was deemed inadequate due to potential concerns over judicial independence. Conversely, since the thesis seeks to identify factors that determine the viability of rights claims in climate change litigation at the litigation stage itself, a doctrinal approach was deemed fully adequate since it reflects courts' and treaty bodies' reasoning, which is elaborated in the respective decisions. Such an approach was also consistent with the approach adopted by the already mentioned scholarship on climate change litigation, which is also largely based on a doctrinal analysis. And even though, as mentioned above, these scholarly works could only be used to a limited extent, their overall methodological approach was deemed fully adequate for the purpose of this thesis.

⁹⁴ See Reuters, 'Germany to raise 2030 CO2 emissions reduction target to 65% - Spiegel' (5 May 2021) <<https://news.trust.org/item/20210505064815-fqr08/>> accessed 30 June 2022, referring to *Neubauer v Germany* Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20 (Federal Constitutional Court of Germany, 24 March 2021).

⁹⁵ See section 6.3 of this thesis.

⁹⁶ The Environment Protection Act 2019, No 9 (11 October 2019), chapters 4 and 5.

The application of these parameters allowed for the inclusion of a range of cases in different countries into the analysis, while keeping the analysis strictly within the scope of the research objective and questions.

1.4.3 Data collection and analysis

The relevant cases were systematically collected from the dedicated climate change litigation databases maintained by the Sabin Center for Climate Change Law at Columbia University⁹⁷ and the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science.⁹⁸ Both databases are regularly updated and cover global climate change litigation, including rights-based cases. The analysis covered cases in English (including high quality translations) or in Spanish, available in the databases as of 1 September 2021. For their part, the texts of national constitutions (including translations into English) were accessed through The Comparative Constitutions Project database,⁹⁹ while the texts of the relevant international or regional human rights treaties as well as the case law of international and regional courts and treaty bodies were accessed through the respective online repositories.

The process of analysing the cases selected according to the above-mentioned criteria was organised into two stages. The first stage was the general ‘mapping’ of all relevant cases to identify the types of challenges mounted by the claimants, the types of rights invoked, and the litigation forum. This stage was necessary to systematise the respective claims and to identify any relevant trends that would facilitate the qualitative analysis of the factors determining the viability of these claims. Once the ‘mapping’ stage was complete, this second stage – the qualitative analysis of the courts’ and treaty bodies’ treatment of rights claims – was carried

⁹⁷ Sabin Center for Climate Change Law, Climate Change Litigation Databases <<http://climatecasechart.com/>> accessed 30 June 2022

⁹⁸ Grantham Research Institute on Climate Change and the Environment, Climate Change Laws of the World <<https://climate-laws.org/>> accessed 30 June 2022

⁹⁹ The Comparative Constitutions Project <<https://www.constituteproject.org/?lang=en>> accessed 30 June 2022

out. With this stage complete, the data was critically assessed in accordance with research objective, hypothesis, and questions, discussed in section 1.2.

1.5 Structure of the thesis

The structure of the thesis is as follows. Chapter 2 analyses different types of rights claims and the obstacles that claimants typically face when bringing such claims. Chapter 3 assesses the rights that claimants invoke in such cases and analyses their applicability in the context of climate change. Chapters 4 to 6 analyse the courts' treatment of rights claims in climate change litigation, with each chapter focusing on a specific litigation forum: Europe (chapter 4), North America (chapter 5),¹⁰⁰ and the Global South (chapter 6). Finally, chapter 7 presents the overall conclusions.

¹⁰⁰ This thesis will use the term 'North America' to indicate the US and Canada.

CHAPTER 2. TYPES OF RIGHTS CLAIMS IN CLIMATE CHANGE LITIGATION AND OBSTACLES TO THEM

2.1 Introduction

In the late 1980s, the US courts became the first in the world to explicitly address the question of climate change.¹⁰¹ Since then, the US has become the major forum for climate change cases.¹⁰² Historically, such cases have predominantly concerned compliance with air quality legislation or environmental impact assessment legislation.¹⁰³ However, over the years, the geography and types of climate change litigation have experienced a dramatic expansion, including the emergence and rapid spread of rights claims.¹⁰⁴ The growing phenomenon of rights claims has signalled the era of ‘rights turn’ in climate change litigation.¹⁰⁵ The phrase ‘rights turn’ can indeed be aptly used in the context of such cases. Growing from single isolated attempts in the first decade of this century,¹⁰⁶ by the beginning of this decade, climate change cases featuring rights claims have spread globally.¹⁰⁷ The geographical distribution of such cases has also dramatically expanded and now

¹⁰¹ See section 1.1 of this thesis.

¹⁰² Michael Burger and Daniel J Metzger, *Global Climate Litigation Report: 2020 Status Review* (United Nations Environment Programme and Sabin Center for Climate Change Law 2020) 13 <<https://wedocs.unep.org/bitstream/handle/20.500.11822/34818/GCLR.pdf?sequence=1&isAllowed=y>> accessed 30 June 2022

¹⁰³ David Markell and JB Ruhl, ‘An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?’ [2012] 64 Florida Law Review 15, 38-47.

¹⁰⁴ Annalisa Savaresi and Joana Setzer, ‘Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers’ [2022] 13 Journal of Human Rights and the Environment 7, 8.

¹⁰⁵ Jacqueline Peel and Hari M Osofsky, ‘A Rights Turn in Climate Change Litigation?’ [2018] 71 Transnational Environmental Law 37.

¹⁰⁶ Most notably, the Inuit petition. *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* No P-1413-05 (7 December 2005). See also section 5.2 of this thesis.

¹⁰⁷ Annalisa Savaresi and Joana Setzer, ‘Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers’ [2022] 13 Journal of Human Rights and the Environment 7, 10.

covers every continent.¹⁰⁸ These cases are also becoming more diversified in their scope.¹⁰⁹

Analysing the factors determining the viability of this growing body of rights claims in climate change litigation requires, first and foremost, a classification of such cases. The existing scholarship has proposed various forms of classifying climate change litigation.¹¹⁰ However, as shall be discussed below, rights-based climate change cases have evolved beyond the established categories, and an updated classification is needed in order to reflect the specifics of different types of rights claims, factors that in practice often play a significant, if not the decisive role in determining their success or failure. One of the key reasons behind this need for an updated classification is that rights claims in climate change cases usually face a range of specific obstacles, yet these obstacles may pose greater danger to certain types of claims. Notably, though, claimants in non-rights-based climate change cases can seek the very same remedies as their counterparts who pursue rights claims. While the former rely on non-rights legal instruments, these claimants may also face the same obstacles that their counterparts who bring rights claims face. For this reason, this chapter will refer to non-rights-based climate change cases where relevant to draw the necessary parallels. The key difference is how the application of human rights or constitutional rights affects the viability of the respective claims.

The structure of this chapter is as follows. Section 2.2 will discuss the rationale for pursuing rights claims in climate change litigation. Section 2.3 will introduce a new kind of classification specifically designed for rights-based climate change cases. Section 2.4 will identify and assess the common obstacles that these cases face. Finally, section 2.5 will summarise the findings.

¹⁰⁸ *ibid.*

¹⁰⁹ *ibid* 14-16.

¹¹⁰ See section 2.3 of this thesis.

2.2 Why pursue rights claims in climate change litigation?

Despite the fact that climate change has been on the agenda of world governments for thirty years, global concentration of GHGs keep reaching new records,¹¹¹ making it increasingly clear that governments persistently fail to take sufficiently decisive measures.¹¹² The question is how to challenge this persistent failure. The effectiveness of non-legal strategies (such as the recent global phenomenon of large-scale protests by climate activists, protests spearheaded by young people all around the globe)¹¹³ is still unclear in terms of their impact on governmental climate policies. For its part, international policy under the UN climate regime has so far been unable to deliver a much-needed drastic cut in GHG emissions.¹¹⁴ Furthermore, international policy remains 'largely out of reach and irrelevant to most human beings seeking climate justice'.¹¹⁵

In contrast, litigation, particularly cases revolving around the 'traditional' legal avenues such as air quality and environmental impact assessment legislation, challenging governmental agencies' permits for the development of individual fossil fuel projects are usually fully within the grasp of individuals and NGOs.¹¹⁶ And indeed, the last fifteen years – the period of climate change litigation boom – have witnessed an ever-growing number of critical court victories for

¹¹¹ Global Monitoring Laboratory, Trends in Atmospheric Carbon Dioxide <<https://gml.noaa.gov/ccgg/trends/>> accessed 30 June 2022

¹¹² For example, Noah M Sachs, 'The Paris Agreement in the 2020s: Breakdown or Breakup' [2019] 46 Ecology Law Quarterly 865, 867 (discussing the weakening of climate action in the US, Brazil, and Australia as well as the fact that many parties to the Paris Agreement have failed to achieve even modest voluntary emissions reduction). See also Climate Action Tracker <<https://climateactiontracker.org/>> accessed 30 June 2022

¹¹³ For a discussion on the phenomenon of global climate strikes see, for example: Benjamin J Richardson (ed), *From Student Strikes to the Extinction Rebellion: New Protest Movements Shaping our Future* (Edward Elgar Publishing 2020); Benjamin J Richardson, 'Climate Strikes to Extinction Rebellion: Environmental Activism Shaping Our Future' [2020] 11 Journal of Human Rights and the Environment 1; Neil Gunningham, 'Can Climate Activism Deliver Transformative Change? Extinction Rebellion, Business and People Power' [2020] 11 Journal of Human Rights and the Environment 10.

¹¹⁴ Remi Moncel and Harro van Asselt, 'All Hands on Deck! Mobilizing Climate Change Action Beyond the UNFCCC' [2012] 21 *Review of European Community & International Environmental Law* 163.

¹¹⁵ James R May and Erin Daly, 'Global Climate Constitutionalism and Justice in Courts' in Jordi Jaria-Manzano and Susana Borràs (eds), *Research Handbook on Global Climate Constitutionalism* (Edward Elgar Publishing 2019) 236.

¹¹⁶ Provided, of course, that the claimants have the time and resources required to pursue litigation.

climate claimants. Yet despite the exponential growth in the number of (successful) climate change cases around the globe, such ‘traditional’ legal avenues for climate change litigation have one common limitation. These cases typically concern local pollution on a very small scale, whether they challenge the alleged failure to comply with the requirements of air quality, environmental impact assessment, biodiversity or any other legislation when issuing the contested permits.¹¹⁷ While local action is undeniably crucial, a more comprehensive approach is needed to successfully combat climate change. The need for such an approach explains why apart from challenges to permits, claimants in climate change litigation have also challenged national climate policies and GHG emissions reduction targets.¹¹⁸ In fact, rights claims have now become pivotal in these types of challenges.¹¹⁹

While the application of ‘rights avenues’ to climate change might have their own challenges,¹²⁰ these avenues are uniquely situated to dealing with climate change for several reasons. First, the supranational scope of human rights treaties gives any relevant action transnational significance, which reflects the transboundary nature of GHG emissions and climate change impacts. Second, the nature of human rights, enjoying apex recognition and protection at the international and regional levels, gives climate action the priority it deserves

¹¹⁷ Jacqueline Peel, Hari Osofsky and Anita Foerster, ‘Shaping the Next Generation of Climate Change Litigation in Australia’ [2017] 41 Melbourne University Law Review 793, 802-804; Jacqueline Peel and Hari M Osofsky, ‘A Rights Turn in Climate Change Litigation?’ [2018] 71 Transnational Environmental Law 37, 40-41. The ground-breaking 2007 US Supreme Court case *Massachusetts v EPA* 549 US 497, 524 (2007), concerning regulation of GHG emissions from motor vehicles, is a notable exception, since at that time, the US automobile sector accounted for more than six per cent of worldwide carbon dioxide emissions. This case will be discussed in more detail below.

¹¹⁸ See section 2.3 in this chapter.

¹¹⁹ *ibid.*

¹²⁰ The challenges related to causation, concrete states’ obligations (especially, with regard to mitigation measures), etc, have been identified as potentially problematic aspects of human rights approaches to climate change. See Sumudu Atapattu and Andrea Schapper, *Human Rights and the Environment: Key Issues* (Routledge 2019) 63-84. This may add to a broader concern over the problematics of ‘employing human rights law, with its typically anthropocentric, individualistic focus ... for addressing environmental issues’. Karen Morrow, ‘The ECHR, Environment-Based Human Rights Claims and the Search for Standards’ in Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019) 42.

and requires.¹²¹ The same applies to constitutional rights, only this time, at the national level.¹²² Third, despite the procedural differences among national courts, regional courts, and regional and international treaty bodies, these institutions are commonly open to individual complaints.¹²³ All this adds to the general advantage of climate change litigation, which involves judicial or quasi-judicial bodies in the process of dealing with climate change, thus counterbalancing the gaps left by the legislative and executive branches of government,¹²⁴ as well as allowing victims to obtain redress.¹²⁵

Because of the combination of these favourable factors, rights-based climate change litigation can be highly versatile. And, as shall be demonstrated below, rights claims have been pursued (often, successfully) in a wide range of cases.

2.3 Types of claims

Following the expansion of climate change litigation in the late 2000s and early 2010s, legal scholars analysing such cases suggested different ways of classifying them. For example, in a 2012 study that provided a comprehensive

¹²¹ Anna Grear and Louis J Kotzé, 'An Invitation to Fellow Epistemic Travellers – Towards Future Worlds in Waiting: Human Rights and the Environment in the Twenty-First Century' in Anna Grear and Louis J Kotzé (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar Publishing 2015), 1-5; Sumudu Atapattu and Andrea Schapper, *Human Rights and the Environment: Key Issues* (Routledge 2019) 69-71.

¹²² For a discussion on the relationship between human rights and constitutional rights see, for example: Christopher McCrudden, 'Common Law of Human Rights? Transnational Judicial Conversations on Constitutional Rights' [2000] 20 *Oxford Journal of Legal Studies* 499; Gerald L Neuman, 'Human Rights and Constitutional Rights: Harmony and Dissonance' [2002] 55 *Stanford Law Review* 1863; Stephen Gardbaum, 'Human Rights as International Constitutional Rights' [2008] 19 *European Journal of International Law* 749.

¹²³ Brian J Preston, 'The Contribution of the Courts in Tackling Climate Change' [2016] 28 *Journal of Environmental Law* 11; Dinah Shelton, 'Complexities and Uncertainties in Matters of Human Rights and the Environment: Identifying the Judicial Role' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 99-104.

¹²⁴ Jacqueline Peel and Hari M Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press 2015) 38; Dinah Shelton, 'Complexities and Uncertainties in Matters of Human Rights and the Environment: Identifying the Judicial Role' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 104.

¹²⁵ Sumudu Atapattu and Andrea Schapper, *Human Rights and the Environment: Key Issues* (Routledge 2019) 74.

for its time empirical assessment of climate change cases, D. Markell and J.B. Ruhl classified such cases into the following five categories based on the subject of the action, namely: 1) substantive mitigation regulation and enforcement cases; 2) substantive adaptation regulation and enforcement cases; 3) cases concerning procedural monitoring, impact assessment and information reporting; 4) cases concerning rights and liabilities; and 5) cases concerning threats posed by climate change to biodiversity.¹²⁶ In another study published the same year, J. Lin proposed classifying climate change litigation according to the claimants' pursued goals, namely, cases seeking to establish regulatory responses ('pressing for regulation' category), changing existing regulatory responses ('regulating the regulatory response' category), or attracting public attention and raising awareness about dangers posed by climate change and the fundamental values threatened by it ('articulating marginalised concerns' category).¹²⁷

Time has proved the robustness of these classifications, yet the rapid rise in the number of climate change cases and their diversification inevitably calls for an updated classification that reflects the current realities. This need is especially relevant in the context of rights-based climate change cases, almost all of which have emerged in the mid- and late- 2010s and quite often fall beyond the above-mentioned categories. At the time of writing, rights-based climate change cases have become highly diverse; therefore, a more practical way of classifying them is needed. But even more importantly, the types of rights-based climate change cases often affect their viability.

This thesis classifies the analysed rights-based climate change cases by focusing on the scope of the respective claims. Based on that criterion, four types of claims have been identified in the course of the research: 1) sweeping challenges to climate policy, or, in other words, challenges to the entirety of

¹²⁶ David Markell and JB Ruhl, 'An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?' [2012] 64 Florida Law Review 15, 30-32.

¹²⁷ Jolene Lin, 'Climate Change and the Courts' [2012] 32 Legal Studies 35, 40-56.

governmental responses to climate change; 2) challenges to GHG emissions reduction targets; 3) challenges to specific sectors contributing to climate change, most notably, deforestation; and 4) challenges to permits. As shall be demonstrated below, the unique features of each of these different types of claims play a very important or even critical role in influencing the viability of these claims.

2.3.1 Sweeping challenges to climate policy

Sweeping challenges to climate policy have two distinctive features. First, they explicitly concern climate change. Second, they are comprehensive; therefore, they do not focus on any specific areas, but rather, on the overall adequacy of national climate policy: for example, the absence of comprehensive climate legislation. In other words, sweeping challenges to climate policy is a typical example of the ‘pressing for regulation’ category of climate change litigation, as proposed by J. Lin.¹²⁸ Sweeping challenges to climate policy is the dominating type of rights-based climate change cases in North America.¹²⁹ Hence, one of the notable examples of sweeping challenges is *Juliana*, where the claimants requested the court to compel the federal government to comprehensively regulate GHG emissions.¹³⁰ Outside the US, sweeping challenges to climate policy are also prominent in Asia.¹³¹ For example, in *Leghari v Pakistan* the claimant requested the court to compel the federal government to implement national climate change policy.¹³²

Given the myriad of factors contributing to climate change and the cumulative nature of GHG emissions, sweeping challenges to climate policy may seem an

¹²⁸ Jolene Lin, ‘Climate Change and the Courts’ [2012] 32 Legal Studies 35, 40-56.

¹²⁹ See chapter 5 of this thesis.

¹³⁰ *Juliana v United States* 217 F Supp 3d, 1224 (D Or 2016); *Juliana v United States* 947 F 3d 1159 (9th Cir 2020). See section 5.2.1 of this thesis.

¹³¹ See sections 6.2.2 and 6.3 of this thesis.

¹³² *Leghari v Pakistan* WP No 25501/2015 orders 1 and 2 (Lahore High Court, 2015); *Leghari v Pakistan* WP No 25501/2015 judgment (Lahore High Court, 2018). See section 6.2.2 of this thesis.

ideal option for pursuing comprehensive climate action. While there are countless sources contributing to climate change, the extent of such contribution by different sources can be very different. A single motor vehicle running on fossil fuels, or a single coal-fired power plant contribute to global GHGs, but lack of governmental regulation of GHGs emitted by millions of such vehicles or by hundreds of such power plants – or, on the contrary, active governmental support for and promotion of these sources of pollution, for example, through subsidies – obviously contributes immeasurably more. A single cut tree means the loss of a miniscule carbon sink, but large-scale deforestation adds substantially to climate change because of the loss of a much greater carbon sink.

Taken together, a network of regulatory measures concerning GHG emissions from coal-fired power plants, motor vehicles, deforestation, and other sources, create the overall national policy that directly affects national GHG emissions. Therefore, sweeping challenges seem perfectly suitable to strike at the heart of the problem: the persisting *lawfulness* of widespread, systemic conduct that contributes to climate change. States have the unique ability to control nationwide domestic emissions and it is therefore up to governments to ensure that national climate policy is properly set and implemented.

Regardless of whether sweeping challenges to climate policy are indeed ideal for seeking comprehensive climate action, the ‘rights avenues’ to make such claims are undeniably the most critical – if not the only – pathway available to claimants with such aims. After all, when claimants challenge national policy, or the lack of such a policy, they unavoidably enter the realm of the legislative or the executive branch’s competence. Therefore, they have hardly any available legal instruments to use, other than those of the highest hierarchical value, namely, constitutional law, and international and regional human rights law.¹³³

¹³³ On the role of constitutional law, and international and regional human rights law in climate change litigation see, for example: Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019); Samvel Varvastian, ‘The Advent of

However, invoking the rights protected by constitutions or by human rights treaties does not render sweeping challenges immune to potential attacks by defendants on policy grounds, as shall be discussed further in this chapter.

2.3.2 Challenges to GHG emissions reduction targets

Challenges to GHG emissions reduction targets share much in common with sweeping challenges to climate policy. For instance, climate change is always the central issue in such cases. Similarly, the fact that they focus on large-scale nationwide emissions subject to governmental policies offers nearly the same benefits as do sweeping challenges to climate policy: namely, an opportunity to comprehensively address national GHG emissions and to affect an otherwise unavailable decision-making process. However, there is an important difference between sweeping challenges to climate policy and challenges to GHG emissions reduction targets. The latter cases are much more pinpoint since they question the ambition level of the *existing* GHG emissions reduction targets.¹³⁴ In other words, such cases correspond to the ‘regulating the regulatory response’ category of climate change litigation proposed by J. Lin.¹³⁵ The most prominent examples of such challenges are the majority of European rights-based climate change cases, including *Urgenda*, which concerned the Dutch government’s failure to adopt more ambitious GHG emissions reduction targets.¹³⁶

What does the difference between sweeping challenges to climate policy and challenges to GHG emissions reduction targets mean in terms of the viability or right claims? Quite a lot. For one, since challenges to GHG emissions reduction targets usually concern the judicial review of concrete legal acts, they have a

International Human Rights Law in Climate Change Litigation’ [2021] 38 Wisconsin International Law Journal 369.

¹³⁴ See, for example, the discussion on relevant cases in section 5.3 of this thesis.

¹³⁵ Jolene Lin, ‘Climate Change and the Courts’ [2012] 32 Legal Studies 35, 40-56.

¹³⁶ *Urgenda Foundation v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015); *The Netherlands v Urgenda Foundation* case 200.178.245/01 (The Hague Court of Appeal, 9 October 2018); *The Netherlands v Urgenda Foundation* case ECLI:NL:HR:2019:2007 (Supreme Court of the Netherlands, 20 December 2019).

much firmer legal basis and may thus have greater chances of surviving policy-related obstacles and objections: for example, justiciability.¹³⁷ Similarly, since such challenges are focused on concrete legal acts, their level of specificity arguably facilitates judicial overview of implementation and compliance.¹³⁸ In other words, since such challenges are ‘anchored’ to law and are highly specific, they could potentially be more viable than sweeping challenges to climate policy,¹³⁹ while still being instrumental because of their comprehensive nature. That said, it might be easily observed that challenges to GHG emissions reduction targets are only possible when such targets are *adopted*.¹⁴⁰ Furthermore, as discussed below, although challenges to GHG emissions reduction targets are more specific than are sweeping challenges to climate policy, they are not altogether immune to policy-related and other obstacles.

2.3.3 Challenges to sectors contributing to climate change

As suggested by the title, the cases in this category challenge specific sectors, or areas, that contribute to climate change, including climate-related policy sectors. Although this type of rights-based climate change cases is not as common as sweeping challenges to climate policy or challenges to GHG emissions reduction targets, such cases are extremely important for several reasons.

First, while these cases concern specific sectors, the contribution of such sectors to climate change is typically systemic and widespread in the respective countries. In fact, the contribution by some challenged sectors can sometimes form a very significant portion of the country’s overall contribution to global GHGs. For example, the famous non-rights-based US Supreme Court case of *Massachusetts*

¹³⁷ See section 5.3.2 of this thesis.

¹³⁸ *ibid.*

¹³⁹ *ibid.*

¹⁴⁰ For an overview of climate change legislation in different countries see Grantham Research Institute on Climate Change and the Environment, Climate Change Laws of the World <<https://climate-laws.org/>> accessed 30 June 2022

*v EPA*¹⁴¹ was a sectoral challenge as it concerned the agency's authority to regulate automobile GHG emissions under the federal Clean Air Act.¹⁴² The contested question was of nationwide, and even global importance, given the fact that at that time the US automobile sector accounted for more than six per cent of global carbon dioxide emissions.¹⁴³ For its part, the Colombian rights-based climate change case *Future Generations v Ministry of Environment* is also a typical example of a sectoral challenge of both national and global importance since it concerned inadequate policy response to deforestation in the Amazon rainforest, a vital carbon sink.¹⁴⁴

An important distinction needs to be made between sectoral challenges on the one hand and sweeping challenges to climate policy and challenges to GHG emissions reduction targets on the other hand. Unlike the two latter types of claims, sectoral challenges do not necessarily have to focus exclusively on climate change. In practice, they can raise a number of chiefly local issues that go hand in hand with global climate change, including air pollution, water and soil contamination, destruction or degradation of ecosystems, and so forth, all of which can violate the claimed rights. For example, in *Future Generations* the claimants alleged that apart from climate change, deforestation disrupts hydrological cycles; the ability of soils to absorb the rainwater; and the supply of water to cities in the Andean mountains.¹⁴⁵ Nonetheless, concern over climate change was at the heart of this case because the claimants explicitly framed the failure to address deforestation as a major threat to national climate change mitigation capability.¹⁴⁶

The shift of the respective claims' focus from purely climate change, as in the two above-mentioned types of claims, to broader environmental concerns over the contested sectoral activities inevitably leads to a certain change in the dynamics of

¹⁴¹ *Massachusetts v EPA* 549 US 497 (2007).

¹⁴² The Clean Air Act (CAA) (42 U.S.C. 7401 et seq).

¹⁴³ *Massachusetts v EPA* 549 US 497, 524 (2007).

¹⁴⁴ *Future Generations v Ministry of Environment* no 11001-22-03-000-2018-00319-01 (High Court of Bogota, 2018).

¹⁴⁵ *ibid* 4-5.

¹⁴⁶ *ibid*.

such claims' viability. The considerable contribution to national GHG emissions by the contested sectors on the one hand and the immediate local environmental problems caused by them on the other hand can arguably make it easier for the claimants to persuade the courts that these sectors violate the claimed rights.¹⁴⁷ That said though, claims challenging climate-related policy sectors may easily encounter the same obstacles faced by the sweeping challenges, while not having the same legal 'anchor' as the challenges to GHG emissions reduction targets. In other words, rights claims that challenge sectors contributing to climate change are also not devoid of obstacles that can critically undermine their viability.

2.3.4 Challenges to permits

Historically, challenges to permits have been the dominant type of cases in climate change litigation.¹⁴⁸ Typically, such cases have revolved around environmental impact assessment by alleging that governmental agencies did not adequately consider the contested projects' contribution to climate change when issuing permits for construction of new coal-fired power plants, expansion of coal mines, and so forth.¹⁴⁹ Despite the abundance of such cases where rights claims were not pursued, rights-based climate change cases challenging permits are not very common. A typical example of such a case is *Greenpeace Nordic Association v Ministry of Petroleum and Energy*,¹⁵⁰ which challenged the governmental decree that awarded licences for the production of petroleum on the Norwegian continental shelf.¹⁵¹

¹⁴⁷ See section 6.4 of this thesis.

¹⁴⁸ See David Markell and JB Ruhl, 'An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?' [2012] 64 Florida Law Review 15, 38-47.

¹⁴⁹ *ibid.*

¹⁵⁰ *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 16-166674TVI-OTIR/06 (Oslo District Court, 4 January 2018); *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 18-060499ASD-BORG/03 (Borgarting Court of Appeal, 23 January 2020); *Greenpeace Nordic Association v Ministry of Petroleum and Energy* HR-2020-2472-P, (case no. 20-051052SIV-HRET) (Supreme Court, 22 December 2020).

¹⁵¹ Royal Decree of 10 June 2016 on awarding production licences on the Norwegian continental shelf 'the 23rd licensing round'.

Challenges to permits is a very specific category of rights-based climate change cases. Unlike sweeping challenges to climate policy and challenges to GHG emissions reduction targets, and even challenges to sectors contributing to climate change, the scope of challenges to permits is typically limited to individual polluting projects. In such cases, therefore, the alleged contribution to climate change is typically low, or even very low, compared to the overall national GHG emissions.¹⁵² However, there may be situations when individual polluting projects can cause substantial contribution to national GHG emissions. Usually, this can happen in case of countries whose contribution to global GHG emissions is very low, and where a single large-scale individual project can result in a vast increase in the national GHG emissions. For example, in *Friends of the Earth v UK Export Finance*, the claimant challenged the UK government's decision to provide about one billion US dollars to finance a liquified natural gas project in Mozambique¹⁵³ – a south-eastern African country which is one of the world's smallest GHG emitters.¹⁵⁴ Among other things, it was estimated that the construction phase alone would increase the GHG emissions of Mozambique by up to ten per cent by 2022, with even larger emissions resulting from the end use of the gas,¹⁵⁵ equivalent to the total emissions from the aviation sector for all European Union (EU) member states combined.¹⁵⁶ However, individual projects can sometimes significantly increase the GHG emissions of highly emitting countries as well.¹⁵⁷

Similar to challenges to sectors contributing to climate change, challenges to permits also tend to focus on broader environmental concerns over the contested projects, not just climate change. In other words, these cases can also raise non-

¹⁵² As, for example, in *Greenpeace Nordic* – see section 4.5 of this thesis.

¹⁵³ *Friends of the Earth v UK Export Finance* [2022] EWHC 568 (Admin) [1].

¹⁵⁴ See Global Carbon Atlas, CO2 emissions <<http://www.globalcarbonatlas.org/en/CO2-emissions>> accessed 30 June 2022

¹⁵⁵ *Friends of the Earth v UK Export Finance* [2022] EWHC 568 (Admin) [63].

¹⁵⁶ See Friends of the Earth, 'Mozambique gas project: Friends of the Earth asks for oral court hearing over government support' <<https://friendsoftheearth.uk/climate/mozambique-gas-project-friends-earth-asks-oral-court-hearing-over-government-support>> accessed 30 June 2022

¹⁵⁷ See, for example, *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 65662/16 (High Court, 8 March 2017), where the estimated emissions from a coal-fired power plant in South Africa constituted about two to four per cent of the country's total GHGs. See section 6.5 of this thesis.

climate issues related to local environmental pollution,¹⁵⁸ which is a common feature of challenges to permits in general, including non-rights-based cases. Such a strategy appears to be prudent from a practical point of view, because even if the respective cases fail on climate grounds, they may still have good a chance to succeed on non-climate grounds related to local environmental and health impacts of the contested projects, for example, air pollution.¹⁵⁹ However, the body of rights-based climate change cases that raise challenges to individual polluting projects is still too small to make any concrete assumptions. What can be said with certainty though, is that the small number of such challenges is not very surprising given the fact that the existing global body of climate change cases shows that permits can be successfully challenged on non-rights-based grounds.

2.4 Common obstacles

Despite the differences between the four types of claims discussed above, all such cases often face similar obstacles. There are two types of such obstacles. The first type is related to policy considerations, most notably, the doctrine of the separation of powers. This obstacle is typically used to challenge justiciability of rights claims because of the alleged political nature of climate change, which arguably renders any decisions regarding it non-justiciable. The second type is related to the science dimension of climate change, namely, scientific uncertainty related to the diffuse and global nature of GHG pollution and climate change impacts. This section will now discuss both of these obstacles in detail.

¹⁵⁸ *ibid.*

¹⁵⁹ See, for example: Sabrina McCormick and others, 'Strategies in and Outcomes of Climate Change Litigation in the United States' [2018] 8 *Nature Climate Change* 829; Sabrina McCormick and others, 'The Role of Health in Climate Litigation' [2018] 108 *American Journal of Public Health* 104.

2.4.1 Separation of powers

The doctrine of the separation of powers is a common obstacle to rights claims in climate change litigation. When defendants invoke this doctrine, they usually allege that it is for the legislative and executive branches of the government to address climate change since it involves complex and society-wide policy decisions.¹⁶⁰ They argue that courts do not have institutional capacity to deal with or to review such policy decisions, because that would involve the courts in policymaking, thus violating the separation of powers principle.¹⁶¹

The doctrine of the separation of powers can pose a significant obstacle to rights-based climate change cases, but it is particularly formidable to sweeping challenges to climate policy. Since such cases challenge the entirety of the governmental response to climate change — for example the lack of framework climate legislation — and invite courts to consider the national climate policy, such cases become an easy target for defendants to invoke the potential violation of the separation of powers principle. In fact, the doctrine of the separation of powers has been invoked not only with regard to rights claims, but also in earlier high-profile climate change litigation that preceded the emergence of rights-based climate change cases. For example, in the case of *Alec v Jackson*, which was a common law public trust doctrine-based sweeping challenge to the US federal climate policy, and a precursor to rights-based climate change litigation in the US, the District Court for the District of Columbia outlined the following concerns that arguably rendered the claim non-justiciable:

In the present case, Claimants are asking the Court to make ... determinations regarding carbon dioxide emissions. First, in order to find that there is a violation of the public trust ... the Court must make an initial determination that current levels of carbon dioxide are too high and,

¹⁶⁰ See, in particular, chapter 5 of this thesis on rights-based climate cases in North America. See also Katrina Fischer Kuh, 'The Legitimacy of Judicial Climate Engagement' [2019] 46 Ecology Law Quarterly 731.

¹⁶¹ *ibid.*

therefore, the federal defendants have violated their fiduciary duties under the public trust. Then, the Court must make specific determinations as to the appropriate level of atmospheric carbon dioxide, as determine whether the climate recover plan sought as relief will effectively attain that goal. Finally, the Court must not only retain jurisdiction of the matter, but also review and approve the Defendants' proposals for reducing greenhouse gas emissions. Ultimately, Claimants are effectively seeking to have the Court mandate that federal agencies undertake specific regulatory activity, even if such regulatory activity is not required by any statute enacted by Congress. These are determinations that are best left to the federal agencies that are better equipped, and that have a Congressional mandate, to serve as the 'primary regulator of greenhouse gas emissions'.¹⁶²

More recently, in rights-based climate change litigation against the US and against Canadian federal and state governments, defendants have argued that judicial review of climate policy inevitably involves making political determinations, thus rendering the respective claims non-justiciable and non-redressable.¹⁶³ The most notable example of this argument is the 'successor' of *Alec*, the famous *Juliana*, in which the US Court of Appeals for the Ninth Circuit considered the claimants' requested plan to address the US federal climate policy to be beyond the power of the judiciary.¹⁶⁴ A similar position was reached by the Federal Court of Canada in two separate cases against the Canadian government: *La Rose v*

¹⁶² *Alec v Jackson* 863 F. Supp. 2D 11, 16–17 (D. D. C. 2012) (referring to the decision of the Supreme Court in *American Electric Power Co. v Connecticut* 564 U.S. 410, 428 (2011): 'Federal judges lack the scientific, economic, and technological resources an agency can utilize in coping with issues of this order'). Another example of such reasoning is *Native Village of Kivalina v ExxonMobil Corp.* 696 F.3d 849, 858 (2012), where the US Court of Appeals for the Ninth Circuit stated the following:

[T]he Supreme Court has held that federal common law addressing domestic greenhouse gas emissions has been displaced by Congressional action. That determination displaces federal common law public nuisance actions seeking damages, as well as those actions seeking injunctive relief. ... Our conclusion obviously does not aid Kivalina, which itself is being displaced by the rising sea. But the solution to Kivalina's dire circumstance must rest in the hands of the legislative and executive branches of our government, not the federal common law.

See section 5.2 of this thesis for a more detailed discussion on *Alec* and the public trust doctrine.

¹⁶³ See chapter 5 of this thesis.

¹⁶⁴ *Juliana v United States*, 947 F.3d 1159 (9th Cir. 2020). See section 5.2.1.5 of this thesis.

*Canada*¹⁶⁵ and *Dini Ze' v Canada*.¹⁶⁶ That said, it should be observed that outside North America, the doctrine of the separation of powers has been less formidable as an obstacle to sweeping challenges. For example, in *Leghari* the Lahore High Court not only satisfied the sweeping challenge to national climate policy, but also adopted a range of judicial overview measures to supervise implementation.¹⁶⁷

While the doctrine of the separation of powers has been a very prominent obstacle to sweeping challenges to climate policy, it can also be an obstacle to other types of high-profile rights claims. Hence, the doctrine has been used against claims that challenged GHG emissions reduction targets in cases before European national courts. For example, in *Urgenda*, the doctrine has been used to question the court's capacity to order the government to take any specific climate change mitigation measures.¹⁶⁸ However, in both *Urgenda* and in other similar European cases, the doctrine of the separation of powers has been a much less formidable obstacle compared to the above-mentioned sweeping challenges in North America. In fact, by invoking the rights protected by human rights treaties, or by constitutions, European claimants usually persuade the national courts that their claims are justiciable, as shall be discussed in detail in chapter 4 of this thesis.

2.4.2 Scientific uncertainty

The alleged scientific uncertainty surrounding climate change is the most common obstacle that claimants in rights-based climate change cases face. This obstacle usually includes an alleged lack of injury-in-fact or causation, or both.

¹⁶⁵ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020). See section 5.3.1 of this thesis.

¹⁶⁶ *Dini Ze' v Canada* 2020 FC 1059 (Federal Court, 16 November 2020). See section 5.3.1 of this thesis

¹⁶⁷ *Leghari v Pakistan* WP No 25501/2015 orders 1 and 2 (Lahore High Court, 2015); *Leghari v Pakistan* WP No 25501/2015 judgment (Lahore High Court, 2018). See section 6.2.2 of this thesis.

¹⁶⁸ *Urgenda Foundation v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015); *The Netherlands v Urgenda Foundation* case 200.178.245/01 (The Hague Court of Appeal, 9 October 2018); *The Netherlands v Urgenda Foundation* case ECLI:NL:HR:2019:2007 (Supreme Court of the Netherlands, 20 December 2019). See section 4.2 of this thesis.

2.4.2.1 Injury-in-fact

The obstacle of proving injury-in-fact resulting from climate change frequently appears in climate change litigation. In general, the impacts of climate change on human communities all across the globe are well-documented and recognised at the global level.¹⁶⁹ The IPCC Fifth Assessment Report concluded that climate-related extremes, including ‘heat waves, droughts, floods, cyclones, and wildfires, reveal significant vulnerability and exposure of some ecosystems and many human systems to current climate variability’.¹⁷⁰ The above-mentioned climate-related extremes can impact human communities by changing the natural ecosystems, disrupting food production and water supply, damaging infrastructure and settlements, and increasing the levels of morbidity and mortality.¹⁷¹

A closer look at different climate change impacts reveals that each of them can be highly multifaceted, depending on the climate-related extremes they stem from. Every climate change impact affects a whole spectrum of human interests. Health impacts are probably the most notable example. The three common health impacts – namely death, disease, and mental health disorders – can all be affected by different climate-related extremes.¹⁷² For example, the health impacts relating to

¹⁶⁹ Most notably, in global climate treaties. See: United Nations Framework Convention on Climate Change (New York, 9 May 1992), United Nations, *Treaty Series*, vol 1771, p 107; Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, 11 December 1997), United Nations, *Treaty Series*, vol 2303, p 162; Paris Agreement under the United Nations Framework Convention on Climate Change (Paris, 12 December 2015), CFCCC/CP/2015/L.9/Rev.1.

¹⁷⁰ Rajendra K Pachauri and Leo Meyer (eds), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) 6. Here and below, the thesis will primarily refer to the IPCC Fifth Assessment Report when discussing the impacts of climate change because this report was the one used by courts in all cases analysed in this thesis. More recent reports that are part of the IPCC work on the Sixth Assessment Report confirm the severity and global occurrence of climate change impacts. See, for example, Hans-Otto Pörtner and others, ‘Summary for Policymakers’ in Hans-Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2022) 10-21.

¹⁷¹ Rajendra K Pachauri and Leo Meyer (eds), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) 6.

¹⁷² *ibid* 69.

‘more intense heat waves and fires, increased risks from foodborne and waterborne diseases and loss of work capacity and reduced labour productivity in vulnerable populations’ can all contribute to a greater likelihood of death and injury.¹⁷³ Similarly, the very same climate-related extremes can cause numerous health disorders by increasing ‘risks from vector-borne diseases [that] are projected to generally increase with warming, due to the extension of the infection area and season’.¹⁷⁴ The impacts of climate change on food and water resources pose another formidable threat to human communities. Food impacts occur primarily with a decrease in agriculture, livestock, and fishery yields due to prolonged droughts or to changes in ocean chemistry.¹⁷⁵ The quality and availability of fresh water can be critically affected by drought and heatwaves.¹⁷⁶ Last but definitely not least, social impacts, most notably economic and security, have been identified as having the potential to cause considerable disruption to society.¹⁷⁷ While it is impossible to attribute all these impacts on human communities solely to specific climate-related extremes,¹⁷⁸ recent developments in attribution science have allowed us to estimate certain types of impacts, for example, excessive deaths during heatwaves, and to link them to anthropogenic climate change.¹⁷⁹

Another sinister aspect of climate change is its disproportionate effect on vulnerable human populations, such as children, elderly people, disabled people, rural and coastal communities, and so forth.¹⁸⁰ The IPCC Fifth Assessment Report underscored that ‘differences in vulnerability and exposure arise from non-climatic

¹⁷³ *ibid.*

¹⁷⁴ *ibid.*

¹⁷⁵ *ibid* 16.

¹⁷⁶ *ibid.*

¹⁷⁷ *ibid* 70.

¹⁷⁸ *ibid* 49.

¹⁷⁹ For example: Daniel Mitchell and others, ‘Attributing Human Mortality during Extreme Heat Waves to Anthropogenic Climate Change’ [2016] 11 *Environmental Research Letters* 74006; Daniel Mitchell and others, ‘Extreme Heat-Related Mortality Avoided under Paris Agreement Goals’ [2018] 8 *Nature Climate Change* 551; Eunice Lo and others, ‘Increasing Mitigation Ambition to Meet the Paris Agreement’s Temperature Goal Avoids Substantial Heat-Related Mortality in US Cities’ [2019] 5 *Science Advances* 4373.

¹⁸⁰ See Hans-Otto Pörtner and others, ‘Summary for Policymakers’ in Hans-Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2022) 11.

factors and from multidimensional inequalities often produced by uneven development processes' that ultimately 'shape differential risks from climate change.'¹⁸¹ Many vulnerable communities, including 'people who are socially, economically, culturally, politically, institutionally, or otherwise marginalized',¹⁸² lack the necessary capacity to adapt to the exacerbating impacts of climate change.¹⁸³ Finally, climate change mitigation measures themselves can also have an impact on human interests¹⁸⁴ — something that has to be given proper consideration when designing and implementing such measures.¹⁸⁵

Despite the global recognition of the above-mentioned climate change impacts, the obstacle of proving injury-in-fact can still sometimes be problematic, particularly in the context of rights-based climate change cases. First, not every negative impact on human interests can amount to a violation of rights: a certain threshold of severity of such a negative impact must be met.¹⁸⁶ Different countries and legal systems set different, though generally high, thresholds, with human rights treaties typically setting particularly high thresholds.¹⁸⁷ Ultimately, therefore, the main issue is whether the impacts of climate change are severe enough to endanger the rights protected by constitutions and human rights treaties.

¹⁸¹ Rajendra K Pachauri and Leo Meyer (eds), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) 54.

¹⁸² *ibid.* See also Kirsten Davis and others, 'The Declaration on Human Rights and Climate Change: A New Legal Tool for Global Policy Change' [2017] 8 *Journal of Human Rights and the Environment* 217, 222-230.

¹⁸³ Rajendra K Pachauri and Leo Meyer (eds), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) 96.

¹⁸⁴ Sumudu Atapattu and Andrea Schapper, *Human Rights and the Environment: Key Issues* (Routledge 2019) 266-273.

¹⁸⁵ See, for example, the preamble of the 2015 Paris Agreement:

[P]arties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.

¹⁸⁶ See chapter 3 of this thesis.

¹⁸⁷ *ibid.* See also Samantha Besson, 'The Extraterritoriality of the European Convention on Human Rights: Why Human Rights Depend on Jurisdiction and What Jurisdiction Amounts to' [2012] 25 *Leiden Journal of International Law* 857.

Second, and more importantly, proving injury-in-fact typically requires claimants to show that the impacts of climate change affect them in an immediate and particularised way. The most notable example of this is the US, where proving injury-in-fact is one of the three requirements for meeting the standing criteria under Article III of the US Constitution¹⁸⁸ and its state-level equivalents. The US federal courts have commonly relied on the renowned Supreme Court's case of *Lujan v Defenders of Wildlife*,¹⁸⁹ which revolved around the compliance of the US government's activities abroad with the federal endangered species legislation and resulted in a restrictive approach to environmental claimants' standing.¹⁹⁰ The US Supreme Court has since held that in environmental cases, the injury within this meaning should not be interpreted as injury to the environment itself, but rather as injury to the claimant,¹⁹¹ hence environmental claimants must be able to demonstrate their use of the affected area to adequately allege injury-in-fact.¹⁹² A similar approach is also present in other national and supranational legal systems. For example, the European Court of Human Rights (ECtHR) has stressed on multiple occasions that the fact of environmental degradation alone is insufficient to trigger the application of the relevant rights protected by the European Convention on Human Rights (ECHR); rather, it is the

¹⁸⁸ According to art III, the federal judicial power extends to cases (arising under the Constitution, laws or treaties of the US, etc) and controversies (to which the US is a party, between two or more states, between citizens of different states, etc) (United States of America's Constitution of 1789 with Amendments through 1992). In the US federal courts 'standing is both constitutional and prudential in nature, consisting of two strands: art III standing, which enforces the federal Constitution's case or controversy requirement, and prudential standing, which embodies judicially self-imposed limits on the exercise of federal jurisdiction.' *Elk Grove Unified School District v Newdow* 542 U.S. 1, 11–12 (2004).

¹⁸⁹ *Lujan v Defenders of Wildlife* 504 U.S. 555, 560-561 (1992): the Supreme Court articulated a three-element 'irreducible constitutional minimum of standing' (the *Lujan* test): 1) an injury in fact (that is, an invasion of a legally protected interest) – which is (a) concrete and particularized and (b) actual or imminent and not conjectural or hypothetical; (2) a causal connection between the injury and the conduct complained of – that is, the injury has to be fairly traceable to the challenged action of the defendant, and not the result of the independent action of some third party; and (3) a likelihood that the injury will be redressed by a favourable decision.

¹⁹⁰ Cass R Sunstein, 'What's Standing After Lujan? Of Citizen Suits, "Injuries," and Art III' [1992] 91 Michigan Law Review 163.

¹⁹¹ *Friends of the Earth Inc v Laidlaw Environmental Services* 528 U.S. 167, 181 (2000).

¹⁹² *ibid* 183 (referring to the earlier Supreme Court case of *Sierra Club v Morton* 405 U.S. 727, 735 (1972)).

effect of such environmental degradation on the claimant, and this effect must be of a certain severity and be direct and immediate.¹⁹³

In terms of climate change litigation, the application of the *Lujan* test or its non-US equivalents for proving injury-in-fact may pose certain difficulties because climate change impacts affect not only individuals but communities at large. Indeed, climate change seems to create a paradoxical ‘an injury to all is an injury to none’ situation,¹⁹⁴ where everyone is harmed by climate change impacts – albeit in different ways – but no one is able to prove that this harm is unique to them. An example of such reasoning can be observed in the Swiss case of *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications*¹⁹⁵ and the case against the European Union, *Carvalho v The European Parliament*.¹⁹⁶ In both these cases, the claimants failed to persuade the respective courts that the GHG emissions reduction targets adopted by Switzerland and the EU respectively caused concrete and particularised injuries that would amount to violations of the claimed rights.¹⁹⁷ In other words, such claims can be considered *actio popularis*, thus restricting the claimants’ (particularly, NGOs’) access to justice in those jurisdictions where *actio popularis* is not allowed.¹⁹⁸ Similar, if not greater, difficulties can arise when claimants claim to represent future generations.¹⁹⁹

¹⁹³ See, for example, *Kyrtatos v Greece* application no. 41666/98 (22 May 2003) [52]; *Fadeyeva v Russia* application no. 55723/00 (9 June 2005) [68] – [69]. See chapter 3 of this thesis for a detailed discussion.

¹⁹⁴ Bradford C Mank, ‘Standing and Global Warming: Is Injury to All Injury to None’ [2005] 35 Environmental Law 1.

¹⁹⁵ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications* A-2992/2017 (Federal Administrative Court, 27 November 2018); *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications* 1C_37/2019 (Federal Supreme Court, 5 May 2020)..

¹⁹⁶ *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019); *Carvalho v The European Parliament* C-565/19 P ECLI:EU:C:2021:252 (Court of Justice, 25 March 2021).

¹⁹⁷ See sections 4.3 and 4.7.1 of this thesis for a detailed discussion.

¹⁹⁸ For example, the *Plaumann* test under the EU law requires claimants to demonstrate direct and individual concern to bring their claims before the EU courts. *Plaumann v Commission of the European Economic Community* case 25-62 (European Court of Justice, 15 July 1963) 106-107. See sections 4.7.1 of this thesis.

¹⁹⁹ These include the problem of establishing that states owe an obligation to people who do not yet exist and are therefore outside the usual scope of state jurisdiction and control, the problem of

Yet, formidable as it appears, the obstacle of proving injury-in-fact in climate change litigation, including rights-based cases, is not necessarily a critical barrier.²⁰⁰ Even the US courts, following the restrictive approach of the *Lujan* test, have accepted injury-in-fact in rights-based climate change cases.²⁰¹ In such cases, the courts typically acknowledge that by indicating particular instances of climate change impacts, for example, observed health disorders during heatwaves or destruction of property during flooding, claimants satisfy the injury-in-fact requirement.²⁰² The only region where injury-in-fact remains a considerable obstacle is Europe, where the courts tend to apply very high threshold for the alleged injuries to violate the claimed rights, as shall be discussed in detail in chapter 4.

2.4.2.2 Causation

The obstacle of proving causation in climate change litigation is as old as the very first cases that raised the issue of climate change.²⁰³ Causation in climate change is a particularly complex and problematic issue.²⁰⁴ Anthropogenic climate change is the result of cumulative and borderless GHG emissions from human activities that have been growing exponentially since the Industrial

establishing the exact nature of such obligations, the uncertainty about the extent and nature of future impacts of climate change, and so forth. Bridget Lewis, 'The Rights of Future Generations within the Post-Paris Climate Regime' [2018] 7 Transnational Environmental Law 69, 78-82.

²⁰⁰ Including with respect to future generations. As shall be discussed in more detail further in this thesis, some national courts and supranational courts and treaty bodies have explicitly identified climate change as a threat to the rights of future generations. A particularly notable example is the case of *Future Generations v Ministry of Environment*, where the Supreme Court of Colombia considered the interdependence between the rights of future generations and the rights of nature, thus identifying the environment itself as a proxy for the rights of people who do not yet exist (see sections 6.4.1.3-6.4.1.4 of this thesis).

²⁰¹ See: *Funk v Wolf* 144 A.3d 228, 243-244 (Pa. Cmwlth. 2016); *Juliana v United States* 217 F.Supp.3d, p. 1224 (D. Or. 2016); *Juliana v United States*, 947 F.3d 1159 (9th Cir. 2020). See section 5.2 of this thesis.

²⁰² *ibid.*

²⁰³ The issue of causation was raised in what probably was the very first climate change case – *City of Los Angeles v National Highway Traffic Safety Admin* 912 F.2d 478 (D.C. Cir. 1990).

²⁰⁴ The scientific aspects have traditionally been viewed as problematic for climate claimants: Daniel A Farber, 'Uncertainty' [2010] 99 Georgetown Law Journal 901; Douglas A Kysar, 'What Climate Change Can Do about Tort Law' [2011] 41 Environmental Law 1.

Revolution.²⁰⁵ No single country is thus solely responsible for climate change. It is therefore unsurprising that since the early days of climate change litigation, courts have grappled with the question of whether someone can be held responsible for contributing to climate change. To better understand the problems with proving causation it is necessary to trace the courts' oscillating — and quite often, inconsistent — interpretation of it, including in those cases where claimants did not raise any rights-based claims.

Among the latter are common law public nuisance claims against private corporate emitters, where the obstacle of proving causation has been particularly difficult to overcome. One particularly stark example is the renowned US case of *Comer v Murphy Oil*.²⁰⁶ In that case, a group of property owners in Mississippi sued a number of fossil fuel producing companies, arguing that their GHG emissions contributed to global warming and, accordingly, to a rise in sea levels, which added to the ferocity of Hurricane Katrina, ultimately destroying claimants' property.²⁰⁷ The Court of Appeals for the Fifth Circuit agreed with claimants that there was causal link between GHG emissions, global warming, extreme weather events (namely the severity of flooding and hurricanes) and, consequently, the related damage to private property.²⁰⁸ Similarly, the court rejected allegations that GHG emissions from the defendants' activities were too negligible to consider, holding that the 'fairly traceable' test should not be used as an inquiry into whether a defendant's pollutants are the sole cause of an injury but rather whether 'the pollutant causes or *contributes to* the kinds of injuries alleged by the plaintiffs'.²⁰⁹

The case, though, was ultimately dismissed, and on remand, the District Court for the Southern District of Mississippi held that the claimants lacked standing because

²⁰⁵ Valérie Masson-Delmotte and others, '2021: Summary for Policymakers' in Valérie Masson-Delmotte and others (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2021).

²⁰⁶ *Comer v Murphy Oil USA* 585 F.3d 855 (5th Cir. 2009).

²⁰⁷ *ibid* 859.

²⁰⁸ *ibid* 861-864.

²⁰⁹ *ibid* 866-867.

their claims were not fairly traceable to the companies' conduct.²¹⁰ According to the court:

At most, the plaintiffs can argue that the types of emissions released by the defendants, when combined with similar emissions released over an extended period of time by innumerable manmade and naturally-occurring sources encompassing the entire planet, may have contributed to global warming, which caused sea temperatures to rise, which in turn caused glaciers and icebergs to melt, which caused sea levels to rise, which may have strengthened Hurricane Katrina, which damaged the plaintiffs' property.²¹¹

The court thus availed itself of the test proposed by the defendants: 1) what would the strength of Hurricane Katrina have been absent global warming; 2) how much of each Plaintiff's damages would have been attributable to Hurricane Katrina if it had come ashore at a lower strength; and 3) how much of each Plaintiff's damages was attributable to failures by others, for example governmental agencies, to prevent additional injury.²¹²

Notably, though, *Comer* was directed not against the regulating bodies, but against private corporate polluters, with claimants asserting claims for compensatory and punitive damages based on state common law actions of public and private nuisance. It must be observed that all such early climate change cases against corporate polluters were dismissed on procedural grounds,²¹³ although the

²¹⁰ *Comer v Murphy Oil USA* 839 F.Supp.2d 849 (S. D. Miss. 2012).

²¹¹ *ibid* 861.

²¹² *ibid* 862.

²¹³ For a discussion, see Geetanjali Ganguly, Joana Setzer and Veerle Heyvaert, 'If at First You Don't Succeed: Suing Corporations for Climate Change' [2018] 38 Oxford Journal of Legal Studies 841. Notably, though, such cases faced a whole range of procedural challenges, not just causation. For example, in the US case of *American Electric Power Co. v Connecticut* brought by a group of states against several electric power corporations that owned and operated fossil fuel-fired powerplants across the US, the Supreme Court held that the federal Clean Air Act, granting the US Environmental Protection Agency the power to set emission standards (following the Supreme Court's decision in *Massachusetts*), displaces federal common law nuisance claims for domestic GHG emissions. *American Electric Power Co. v Connecticut* 564 U.S. 410, 429 (2011). In another US case, *Native Village of Kivalina v ExxonMobil Corp.*, the Inupiat Eskimo village of Kivalina in Alaska sought to recover financial compensation from a group of the world's largest fossil fuel producers in respect of

difficulties faced by the claimants did not prevent a second wave of such cases in recent years, which, however, has already proven to be an uphill battle as well.²¹⁴

For their part, cases against governmental agencies seeking regulation of activities contributing to climate change have been much more successful with regard to proving causation, and the US Supreme Court's decision in *Massachusetts* seemed to foreclose subsequent obstacles to proving causation. In this case, the claimants, including the state of Massachusetts, other states, local governments and private organisations, alleged that the US Environmental Protection Agency has abdicated its responsibility under the federal air quality legislation – the Clean Air Act – to regulate automobile GHG emissions.²¹⁵ The Supreme Court agreed that there is a causal link between GHG emissions and climate change, acknowledged the impact of climate change on the environment and stated that the widely shared nature of such an injury does not diminish the interest of the concrete party.²¹⁶ Moreover, the Court held that the fact that there are other major GHG emitters such as China and India, should not preclude the US agency from its regulatory duty, even if the latter by itself is unable to solve the global problem, since '[a] reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere'.²¹⁷

its forced relocation following the erosion of sea ice around the village. The Ninth Circuit expanded this displacement rule to cover claims for damages based on oil producers' past emissions. *Native Village of Kivalina v ExxonMobil Corp.* 696 F.3d 849, 856–858 (9th Cir. 2012).

²¹⁴ A likely catalyst for a surge in climate change liability claims against private corporate emitters can be found in the recent studies tracing GHG emissions to corporate entities that produce fossil fuels: Richard Heede, 'Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854–2010' [2014] 122 *Climatic Change* 229, and the updated information available at Climate Accountability Institute <<https://climateaccountability.org/index.html>> accessed 30 June 2022. Notably, these cases focus not on the defendant's own GHG emissions (as in *American Electric Power Co. and Kivalina*), but rather on their sale of fossil fuels to those who eventually burn them) – see, for example, *City of New York v BP PLC* 325 F.Supp.3d 466, 473 (S.D. New York 2018); *City of Oakland v BP Plc* 325 F.Supp.3d 1017, 1024 (N.D. California 2018). See the discussion in Samvel Varvastian and Felicity Kalunga, 'Transnational Corporate Liability for Environmental Damage and Climate Change: Reassessing Access to Justice after *Vedanta v Lungowe*' [2020] 9 *Transnational Environmental Law* 323.

²¹⁵ *Massachusetts v EPA* 549 US 497, 505 (2007).

²¹⁶ *ibid* [499], [553] – [555].

²¹⁷ *ibid* [499] – [500].

However, in subsequent years, the lower US courts' interpretation of causation in climate change litigation has not always been consistent with the Supreme Court's ruling in *Massachusetts*.²¹⁸ An example of this is the case of *Washington Environmental Council v Bellon*, where environmental organisations sought to compel the Washington State Department of Environmental Quality and other agencies to regulate GHG emissions from the state's five oil refineries, by claiming that the agencies failed to define emission limits and apply those limits to the oil refineries in question in violation of the Clean Air Act.²¹⁹ Although the defendants admitted that in Washington, GHGs have caused climate-related changes, such as 'rising sea levels, coastal flooding, acidification of marine waters, declines in shellfish production, impacts to snow pack and water supplies, agricultural impacts on the east side of the Cascades, and changes in forest fires' and did not dispute the fact that the oil refineries in question emit GHGs,²²⁰ they contended that the case must be dismissed because of an alleged lack of causation.²²¹

The Court of Appeals for the Ninth Circuit held that the claimants did not satisfy the causation requirement.²²² The court delved into a lengthy discussion on how the claimants' position was compromised by the global scale and nature of climate change, its drivers and effects. Thus it held that claimants offered only 'vague, conclusory statements' that the agencies' failure to set standards at the oil refineries contributed to GHG emissions, which in turn, contributed to climate change that resulted in their purported injuries.²²³ Specifically, the court held that claimants' causal chain from the lack of the above-mentioned standards to their personal injuries consisted of 'a series of links strung together by conclusory, generalized statements of contribution, without any plausible scientific or other

²¹⁸ Samvel Varvastian, 'Access to Justice in Climate Change Litigation from a Transnational Perspective: Private Party Standing in Recent Climate Cases' in Jerzy Jendrośka and Magdalena Bar (eds), *Procedural Environmental Rights: Principle X of the Rio Declaration in Theory and Practice* (Intersentia 2017).

²¹⁹ *Washington Environmental Council v Bellon* 732 F.3d 1131, 1135 (9th Cir. 2013).

²²⁰ *ibid* 1136.

²²¹ *ibid* 1138-1139.

²²² *ibid* [1147].

²²³ *ibid* [1142].

evidentiary basis that the refineries' emissions are the source of their injuries'.²²⁴ The court concluded that 'attempting to establish a causal nexus in this case may be a particularly challenging task' due to the 'natural disjunction between plaintiffs' localized injuries and the greenhouse effect,' as GHGs, 'once emitted from a specific source, quickly mix and disperse in the global atmosphere and have a long atmospheric lifetime' and there is 'limited scientific capability in assessing, detecting, or measuring the relationship between a certain GHG emission source and localized climate impacts in a given region'.²²⁵

Furthermore, the Ninth Circuit stressed that 'there are numerous independent sources of GHG emissions, both within and outside the [US], which together contribute to the greenhouse effect', while the above-mentioned oil refineries in Washington are responsible for less than six per cent of GHG emissions in Washington, which renders the effect of this emission on global climate change 'scientifically indiscernible'.²²⁶ In the court's view, in contrast to the situation in *Massachusetts*, where the US Supreme Court held that the GHG emission levels from motor vehicles were a 'meaningful contribution' to global GHG concentrations given the fact that the US automobile sector accounted for more than six per cent of world-wide carbon dioxide, the GHG emissions' contribution in the present case was not meaningful from a global perspective.²²⁷

Causation has also been known to pose difficulties in climate change litigation outside the US. Thus, for example, in an early case *Wildlife Preservation Society of Queensland Proserpine v Minister for the Environment and Heritage*, where environmental conservation groups challenged administrative decisions concerning the development of two new coal mines, contending that the resulting GHG emissions would contribute to global warming and thus cause harm to important and vulnerable ecosystems including the Great Barrier Reef World Heritage Area, the Federal Court of Australia refused to acknowledge the contested projects'

²²⁴ *ibid.*

²²⁵ *ibid* [1143].

²²⁶ *ibid* [1143] – [1144].

²²⁷ *ibid* [1145] – [1146].

detrimental effect to the environment and dismissed the case.²²⁸ Specifically, the court stated that the connection between the burning of coal at some particular place in the world, the resulting GHG emissions, their contribution to global warming and the latter's impact on the environment, was far from obvious.²²⁹

The above-mentioned examples suggest that rights claims with 'narrower' scope, namely, challenges to permits, can face similar problems with satisfying the causation requirement. And indeed, *Greenpeace Nordic* seems to corroborate this: the Norwegian courts held that the GHG emissions resulting from the contested petroleum production permit would make no meaningful contribution to global emissions, and thus not have any practical impacts on the claimants' rights.²³⁰ However, it should be observed that *Greenpeace Nordic* is not necessarily indicative of the overall trend. In fact, in recent years, many courts have held that there is a causal chain between individual polluting projects on the one hand, and climate change impacts on the other hand. For example, in the Australian non-rights-based climate change case *Gloucester Resources Limited v Minister for Planning*, the Land and Environment Court of New South Wales dismissed a mining company's appeal concerning the denial of its application to construct an open cut coal mine in New South Wales on environmental grounds, and stressed that 'the GHG emissions of the coal mine and its coal 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'.²³¹ In another notable non-rights-based climate change case of *Wildearth Guardians v US Bureau of Land Management* the Montana Federal District Court found that the agency failed to consider the cumulative impacts of GHG emissions from individual projects

²²⁸ *Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch Inc v Minister for the Environment and Heritage* [2006] FCA 736 (Federal Court of Australia, 2006).

²²⁹ *ibid* [72].

²³⁰ *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 16-166674TVI-OTIR/06 (Oslo District Court, 4 January 2018); *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 18-060499ASD-BORG/03 (Borgarting Court of Appeal, 23 January 2020); *Greenpeace Nordic Association v Ministry of Petroleum and Energy* HR-2020-2472-P, (case no. 20-051052SIV-HRET) (Supreme Court, 22 December 2020). See section 4.5 of this thesis.

²³¹ *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7 (Land and Environment Court of New South Wales, 2019) [699].

on climate change when issuing oil and gas leases in Montana, and vacated these leases.²³² As for rights-based climate change cases, the most notable example is *Earthlife Africa Johannesburg v Minister of Environmental Affairs*, where the High Court held that climate change needs to be considered when issuing a permit to construct a new coal-fired power station.²³³

For its part, satisfying causation is usually much easier in cases where rights claims are of ‘large scale’ and where courts tend to follow the above-mentioned US Supreme Court’s line of reasoning in *Massachusetts*.²³⁴ For instance, claimants in the US and Europe have easily satisfied the causation requirement when pursuing sweeping challenges to climate policy²³⁵ and challenges to GHG emissions reduction targets²³⁶ respectively. One notable exception to this is the Canadian case of *Dini Ze’*, where the Federal Court was concerned about ‘causation issues’ raised by the sweeping challenge to Canada’s climate policy, given the ‘polycentric and international nature’ of climate change.²³⁷ That said, it should be observed that the court perceived these ‘causation issues’ mainly as an obstacle to the claim’s redressability.²³⁸ Which leads to the final point of consideration with regard to causation, namely, its relevance to the claim’s redressability.

The fact that the question of causation can go hand in hand with the question of redressability, is, of course, not entirely unusual. After all, redressability concerns the potential of the requested relief to mitigate the harms suffered by the

²³² *Wildearth Guardians v US Bureau of Land Management* 457 F. Supp. 3d 880 (D. Mont. 2020).

²³³ *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 65662/16 (High Court, 8 March 2017).

²³⁴ *Massachusetts v EPA* 549 US 497 (2007).

²³⁵ *Juliana v United States* 217 F.Supp.3d 1224 (D. Or. 2016); *Juliana v United States*, 947 F.3d 1159 (9th Cir. 2020).

²³⁶ *Urgenda*, of course, is the most notable example. *Urgenda Foundation v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015); *The Netherlands v Urgenda Foundation* case 200.178.245/01 (The Hague Court of Appeal, 9 October 2018); *The Netherlands v Urgenda Foundation* case ECLI:NL:HR:2019:2007 (Supreme Court of the Netherlands, 20 December 2019).

²³⁷ *Dini Ze’ v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [57].

²³⁸ See section 5.3.1.2 of this thesis.

claimants.²³⁹ Coupled with causation, demonstrating redressability can therefore pose an additional hurdle to cases with a narrower scope, namely, challenges to permits whose contribution to climate change may be considered a drop in the ocean. In fact, this is exactly what happened in the above-mentioned US case of *Bellon*, where the Ninth Circuit held that as the effect of collective emissions from the contested oil refineries on global climate change is ‘scientifically indiscernible,’ the claimants’ injuries were likely to continue unabated even if the oil refineries were subject to the requested standards.²⁴⁰ However, *Dini Ze’* was clearly not a ‘small case’. True enough, the question of redressability was also critical in other sweeping challenges – including in another rights-based case against the Canadian federal government, *La Rose*,²⁴¹ as well as in *Juliana*.²⁴² But in these cases, the respective courts made clear that redressability was problematic because of the separation of powers doctrine, and they deemed the causation requirement satisfied,²⁴³ which makes the Canadian Federal Court’s questioning of causation in *Dini Ze’* an outlier.

2.4.3 Litigation before supranational courts and treaty bodies

Considering the increased reliance on human rights law in climate change litigation before national courts in recent years, it was only a matter of time before state obligations with regard to climate change would be addressed by supranational courts and treaty bodies. And indeed, over the last three years, there has been a surge in the number of climate change cases submitted to supranational courts and treaty bodies.²⁴⁴ In particular, the highly important role of human rights claims in Europe has received further impetus through the very recent

²³⁹ See *Juliana v United States*, 947 F.3d 1159, 1170 (9th Cir. 2020). See also sections 5.2.1.5 and 5.2.1.6 of this thesis.

²⁴⁰ *Washington Environmental Council v Bellon* 732 F.3d 1131, 1147 (9th Cir. 2013).

²⁴¹ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020).

²⁴² *Juliana v United States*, 947 F.3d 1159, 1170 (9th Cir. 2020).

²⁴³ See sections 5.3.1.2 and 5.2.1.5 of this thesis respectively.

²⁴⁴ Annalisa Savaresi and Joana Setzer, ‘Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers’ [2022] 13 *Journal of Human Rights and the Environment* 7, 8.

submission of several rights-based climate change cases to the ECtHR, some of which stemmed from unsuccessful litigation at the national level.²⁴⁵

Compared to rights-based climate change cases before national courts, climate change cases litigated at the supranational level open some new possibilities yet also face additional challenges. On the one hand, such cases may prove a particularly useful pathway for combating climate change, given the global nature of climate change and the importance of transnational cooperation when dealing with it. On the other hand, pursuing rights claims in supranational courts and treaty bodies can be even more challenging than litigating such cases in national courts. Despite the fact that many supranational courts and treaty bodies have developed case law concerning different forms of environmental pollution, the threshold for establishing violation of human rights under the respective treaties is typically very high, as is discussed in chapter 3 of this thesis. Furthermore, human rights treaties usually require the exhaustion of domestic remedies before turning to supranational courts and treaty bodies,²⁴⁶ thus adding additional time and resource constraints for claimants.

A particularly interesting aspect of this growing wave of rights claims before supranational courts and treaty bodies that may affect their viability is the fact that many such cases are being directly filed before the respective courts and treaty bodies. While some supranational cases, most notably those in Europe, were initially litigated before national courts,²⁴⁷ a considerable proportion of cases at the supranational level have originally been pursued in the respective international and

²⁴⁵ See section 4.7.2 of this thesis.

²⁴⁶ For example, according to art 41(1)(c) of the International Covenant on Civil and Political Rights, the UN Human Rights Committee 'shall deal with a matter referred to it only after it has ascertained that all available domestic remedies have been invoked and exhausted in the matter, in conformity with the generally recognized principles of international law.' International Covenant on Civil and Political Rights (New York, 16 December 1966), United Nations, *Treaty Series*, vol 999, p 171. Regional human rights treaties set similar requirements: Art 56(5) of the African Charter on Human and Peoples' Rights (Nairobi, 19 January 1982) United Nations, *Treaty Series*, vol 1520, p 217; Art 46(1)(a) of the American Convention on Human Rights (San José, 22 November 1969), United Nations, *Treaty Series*, vol 1144, p 123; Art 35(1) of the European Convention for the Protection of Human Rights and Fundamental Freedoms (Rome, 4 November 1950), United Nations, *Treaty Series*, vol 213, p 221. See also section 4.7.2 of this thesis.

²⁴⁷ Namely, *Greenpeace Nordic* and *KlimaSeniorinnen*. See section 4.7.2 of this thesis.

regional courts and treaty bodies without going through national courts first.²⁴⁸ Unlike cases against individual governments – whether at the national or supranational level – such cases have often challenged several governments²⁴⁹ or, as in *Carvalho*, the institutions of a supranational organisation.²⁵⁰ Similarly, the claimants in such cases are typically a group of individuals or NGOs from more than a single country.²⁵¹ While such cases could face greater procedural hurdles than those filed before national courts first, as demonstrated by both *Carvalho*²⁵² and *Sacchi*,²⁵³ this direct application to supranational courts and treaty bodies should not automatically render them unviable.²⁵⁴ However, almost all these cases are still pending and the overall number of rights-based climate change cases addressed by treaty bodies remains very low.

²⁴⁸ Among the most notable examples are:

- *Agostinho v Portugal* application no. 39371/20 (pending), brought by a group of Portuguese children against 33 European states before the ECtHR, and discussed in more detail in section 4.7.2 of this thesis
- *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019); *Carvalho v The European Parliament* C-565/19 P ECLI:EU:C:2021:252 (25 March 2021), brought by a group of families against the EU institutions and challenging the EU GHG emissions reduction targets, as discussed in detail in section 4.7.1 of this thesis
- *Sacchi v Argentina* CRC/C/88/D/104/2019 (8 October 2021), filed by a group of children to the UN Committee on the Rights of the Child against Argentina, Brazil, France, Germany and Turkey, alleging violation of their rights under the UN Convention on the Rights of the Child by making insufficient GHG emissions reduction and failing to encourage the world's biggest emitters to curb such emissions.

²⁴⁹ *Agostinho v Portugal* application no. 39371/20 (pending); *Sacchi v Argentina* CRC/C/88/D/104/2019 (8 October 2021).

²⁵⁰ *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019); *Carvalho v The European Parliament* C-565/19 P ECLI:EU:C:2021:252 (25 March 2021).

²⁵¹ *Agostinho v Portugal* application no. 39371/20 (pending); *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019); *Carvalho v The European Parliament* C-565/19 P ECLI:EU:C:2021:252 (25 March 2021); *Sacchi v Argentina* CRC/C/88/D/104/2019 (8 October 2021).

²⁵² See section 4.7.1 of this thesis.

²⁵³ In *Sacchi v Argentina* CRC/C/88/D/104/2019 (8 October 2021) [10.15] – [10.21], the Committee declared the petition inadmissible for failure to exhaust domestic remedies.

²⁵⁴ See, for example, *Agostinho v Portugal* application no. 39371/20 (pending), as discussed in section 4.7.2 of this thesis. An even more notable example is the UN Human Rights Committee's case of *Billy v Australia* CCPR/C/135/D/3624/2019 (22 September 2022) [8.9] – [9], brought by a group of Torres Strait islanders against Australia, that was published in September 2022. The Committee found that Australia's inaction on climate change violated the claimants' rights to private and family life under art 17 and to culture under art 27 of the International Covenant on Civil and Political Rights.

2.5 Conclusion

The growing number and diversity of rights claims have now made feasible the classification of such claims into four types based on their scope: sweeping challenges to climate policy that concern the entirety of governmental response to climate change; challenges to GHG emissions reduction targets that focus on the level of ambition of such targets; challenges to sectors contributing to climate change that can go hand in hand with concerns about conventional environmental harms; and challenges to permits that are the 'smallest' types of challenges. Each of these different types of claims offers a unique perspective in terms of dealing with climate change. However, despite being different, these claims often face similar obstacles. Yet, these obstacles can affect different types of claims in different ways. Analysing the viability of rights claims in climate change litigation by focusing on their types and on the obstacles they face yields important, though, sometimes, counterintuitive results that reveal a broad spectrum of complexities that come into play as this thesis will demonstrate.

The fact that sweeping challenges to climate policy; challenges to GHG emissions reduction targets and challenges to sectors contributing to climate change focus on national emissions might render such claims more immune to causation counterarguments. However, of these three types of claims, sweeping challenges to climate policy might be particularly vulnerable to attacks on justiciability grounds. For their part, proving causation may be more difficult in challenges to permits, as the contribution of individual polluting projects might not be that significant on the national scale. At the same time, all the above-mentioned types of claims are prone to be challenged on the grounds that climate change impacts affect everyone, while the harms will fully materialise only at some point in the future. Accordingly, claimants are arguably unable to demonstrate injury-in-fact.

Overall, it is notable that none of the above-mentioned obstacles are insurmountable. However, there is some degree of inconsistency in different

courts' approaches to different types of rights claims, an inconsistency that makes it clear that, as important as they are, the types of rights claims alone do not determine the viability of such claims. Therefore, it is necessary to consider other factors that determine their viability. One such factor is the *rights* that claimants invoke when making such claims. This factor will be discussed in detail in the next chapter.

CHAPTER 3. WHICH RIGHTS?

3.1 Introduction

Having discussed the types of rights claims in climate change cases and common obstacles that they face, the next major question is identifying the very rights that claimants invoke in such claims. The recognition of the fact that environmental degradation can affect a range of rights is, of course, not new. The gradual convergence between concerns over human rights and environmental protection has been growing since the adoption of the 1972 UN Stockholm Declaration that for the first time recognised the link between the environment and human rights.²⁵⁵ This process has become known as the ‘greening of rights.’²⁵⁶

The links between climate change and human rights have been discussed at the international level since 2000.²⁵⁷ In 2015, the Paris Agreement became ‘the first

²⁵⁵ UN General Assembly, Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972, A/CONF.48/14/Rev.1, Declaration of the United Nations Conference on the Human Environment, Chapter I:

The United Nations Conference on the Human Environment, ... having considered the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment, proclaims that: Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the manmade, are essential to his well-being and to the enjoyment of basic human rights-even the right to life itself.

²⁵⁶ Alan Boyle, ‘Human Rights and the Environment: Where Next?’ [2012] 23 *European Journal of International Law* 613.

²⁵⁷ John H Knox, ‘Linking Human Rights and Climate Change at the United Nations’ [2009] 33 *Harvard Environmental Law Review* 477; Marc Limon, ‘The Politics of Human Rights, the Environment, and Climate Change at the Human Rights Council’ in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018); John H Knox, ‘The United Nations Mandate on Human Rights and the Environment’ in James R May and Erin Daly (eds), *Human Rights and the Environment: Legality, Indivisibility, Dignity and Geography* (Edward Elgar Publishing 2019).

legally binding climate instrument that refers to human rights'.²⁵⁸ This reference, however, was made only in its preamble and concerned human rights aspects of response measures only.²⁵⁹ Also, the reference is rather vague and does not create any new human rights obligations for states.²⁶⁰ For their part, the UN Human Rights Council and the Office of the High Commissioner for Human Rights have drafted a series of resolutions and reports, as well as carried out activities promoting a human rights approach to climate change.²⁶¹ Most recently, the first and second UN Special Rapporteurs on human rights and the environment, John Knox and David Boyd, prepared a series of reports addressing the issue of climate change and human rights.²⁶² These reports highlighted the following human rights that are being threatened and violated as a result of climate change:²⁶³

- Right to life
- Right to health
- Right to food
- Right to water and sanitation
- Right to a healthy environment

²⁵⁸ Sam Adelman, 'Human Rights in the Paris Agreement: Too Little, Too Late?' [2018] 7 Transnational Environmental Law 17, 23. This is true not only for the climate treaties, but to any global environmental treaties: Sumudu Atapattu, 'The Right to a Healthy Environment and Climate Change' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 258.

²⁵⁹ Notably, the draft version of the Paris Agreement contained a stronger provision on human rights in its operative part, which, however, was eventually scrapped due to some countries' objections against it. Sam Adelman, 'Human Rights in the Paris Agreement: Too Little, Too Late?' [2018] 7 Transnational Environmental Law 17, 26-27.

²⁶⁰ *ibid.*

²⁶¹ See, for example, UN Human Rights Council resolution 29/15 (30 June 2015) UN Doc A/HRC/29/L.21; 'Understanding Human Rights and Climate Change. Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change'.

²⁶² 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/31/52 (2016); Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment: Framework Principles on Human Rights and the Environment, UN Doc. A/HRC/37/59 (2018); Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, No. A/74/161 (2019).

²⁶³ Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, No. A/74/161 (2019) 10.

- Right to an adequate standard of living
- Right to housing
- Right to property
- Right to self-determination
- Right to development
- Right to culture

All these rights currently enjoy recognition and protection at the international, regional, or at least national level, even though their degree of recognition and protection by states varies.²⁶⁴ The question is whether courts and treaty bodies are ready to interpret these rights as imposing concrete obligations on states with regard to climate change.

This chapter will discuss the categories of rights commonly invoked in climate change litigation and their relevance in the light of developments at the international, regional, and national levels, and will assess the use of these rights as a factor determining the viability of rights claims in climate change litigation.

3.2 The rights claimed

As discussed in section 2.4.2.1 of this thesis, climate change already impacts a whole spectrum of human interests, including the most fundamental interests of life, health, and property. These impacts are only expected to worsen in the future. Hence, invoking the rights to life, health, housing, food, water, and so forth, seems well-justified and the threat to them seems self-evident. However, the application of these rights in the context of climate change may not always be obvious. After all, only a tiny handful of national constitutions make reference to climate change,²⁶⁵ while human rights treaties do not refer to climate change at

²⁶⁴ For a discussion on socio-economic rights, see, for example: Jackie Dugard and others (eds), *Research Handbook on Economic, Social and Cultural Rights as Human Rights* (Edward Elgar Publishing 2020).

²⁶⁵ These include the constitutions of the Ivory Coast, Cuba, the Dominican Republic, Ecuador, Thailand, Tunisia, Venezuela, Vietnam, and Zambia. See UN General Assembly A/HRC/43/53, Right to

all. Nevertheless, as is discussed below, courts and treaty bodies are becoming increasingly protective of the above-mentioned rights against environmental threats,²⁶⁶ thus justifying their application in the context of climate change.

Rights claims in climate change litigation typically allege violation of several rights²⁶⁷ as a result of inaction or insufficient action on climate change, or alternatively, as a result of actions that contribute to climate change. Notably, the majority of such claims are based on constitutional rights.²⁶⁸ In contrast, cases where claimants invoke the rights protected by human rights treaties are much rarer — with the very notable exception of Europe, where claimants in almost all analysed cases invoked rights protected by the ECHR.²⁶⁹

So far, only three categories of rights have been invoked systematically: 1) the right to life; 2) the right to a healthy environment; and 3) the right to respect for private and family life. Of these rights, the right to life and the right to a healthy environment are invoked universally or nearly universally. In contrast, the right to respect for private and family life is largely invoked before European courts under the ECHR. As shall be demonstrated below, courts and treaty bodies have already developed rich jurisprudence on the respective rights in the context of environmental harms, which fully justifies their application in climate change litigation.

a healthy environment: good practices. Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (2019) 9.

²⁶⁶ See, for example, Evadne Grant, 'International Courts, and Environmental Human Rights: Re-imagining adjudicative Paradigms' in Anna Grear and Louis J Kotzé (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar Publishing 2015) 379-400.

²⁶⁷ For example, rights to life and to respect for private and family life under the ECHR (see chapter 4 of this thesis) or rights to life and to a healthy environment (see chapter 6 of this thesis).

²⁶⁸ Hence, all claims in North America and the Global South are based on constitutional rights (see chapters 5 and 6 of this thesis). Constitutional rights claims are also very common in Europe, as discussed in chapter 4 of this thesis.

²⁶⁹ See chapter 4 of this thesis

3.2.1 Right to life

The right to life is among the most commonly invoked rights in rights-based climate change litigation. This should hardly be surprising: the right to life is globally protected by human rights treaties and constitutions,²⁷⁰ and its application in the context of environmental degradation is undergoing constant development.

3.2.1.1 International Covenant on Civil and Political Rights

At the international level, the right to life, enshrined in Article 6 of the International Covenant on Civil and Political Rights (ICCPR),²⁷¹ is commonly invoked in cases concerning environmental degradation and related threats brought before the UN Human Rights Committee,²⁷² even though Article 6 contains no references to the environment. While such cases have traditionally been unsuccessful,²⁷³ recent developments clearly suggest that environmental degradation will be considered with greater attention in future cases brought under Article 6. Hence, during its 124th session in 2018, the UN Human Rights Committee adopted General Comment No. 36 on Article 6, which explicitly recognised environmental degradation and climate change as factors ‘that may give rise to direct threats to life or prevent individuals from enjoying their right to life with dignity’,²⁷⁴ triggering positive obligations of the states:

Environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of

²⁷⁰ See Svitlana Kravchenko, ‘Right to Carbon or Right to Life: Human Rights Approaches to Climate Change’ [2008] 9 Vermont Journal of Environmental Law 513, 527.

²⁷¹ International Covenant on Civil and Political Rights (New York, 16 December 1966), United Nations, *Treaty Series*, vol 999, p 171, art 6(1): ‘Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life.’

²⁷² Sumudu Atapattu, ‘Environmental Rights and International Human Rights Covenants: What Standards are Relevant?’ in Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019) 22-23.

²⁷³ *ibid* 23.

²⁷⁴ UN Human Rights Committee, General comment no. 36, Article 6 (Right to Life), 3 September 2019, CCPR/C/GC/35 para 26.

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.²⁷⁵

Subsequently, the Committee adopted two highly important decisions, interpreting the scope of Article 6 of the ICCPR in the context of local environmental pollution and climate change respectively, and confirming the applicability of the right to life.

3.2.1.1.1 *Portillo Cáceres v Paraguay*

The first of these two cases concerned environmental pollution with toxic agrochemicals that resulted in death and health disorders in a small farming community in Paraguay.²⁷⁶ The case was initially addressed by national courts, which ruled that the government violated the claimants' human rights by not

²⁷⁵ *ibid* para 62. Notably, the fact that states have positive obligations with regard to the right to life as well as the fact that this right should not be interpreted narrowly were confirmed in the 1982 General Comment No 6, later replaced by General Comment No 36. See *Toussaint v Canada* CCPR/C/123/D/2348/2014 (24 July 2018) [11.3].

²⁷⁶ *Portillo Cáceres v Paraguay* CCPR/C/126/D/2751/2016 (25 July 2019).

properly regulating environmental pollution, thus allowing various harms to the claimants.²⁷⁷ Unfortunately, the authorities did not take any steps to enforce this decision.²⁷⁸ The claimants subsequently petitioned the UN Human Rights Committee. The Committee found that the government violated Article 6 and referred to a range of factors in this respect. For instance, heavily spraying the area in question with toxic agrochemicals posed a reasonably foreseeable threat to the claimants' lives because such large-scale fumigation has contaminated the rivers that the claimants used for fishing, the well water that they drank and the fruit trees, crops, and farm animals that they used for food.²⁷⁹ The Committee also noted that governmental authorities had known about the fumigations and their impact on local residents for at least five years preceding the events in this case but had taken no action, even after the national court had found violation of the claimants' rights.²⁸⁰

3.2.1.1.2 *Teitiota v New Zealand*

The second case – *Teitiota v New Zealand* – explicitly concerned climate change, namely, climate change-induced displacement of a person from the Republic of Kiribati, who was subsequently denied refugee asylum in New Zealand.²⁸¹ The case concerned a well-recognised and exceptionally difficult problem that was previously raised in the renowned US case of *Native Village of Kivalina v ExxonMobil Corp.*²⁸² namely, the high vulnerability of specific human communities to climate change impacts and the unpreparedness of the international legal order

²⁷⁷ *ibid* [2.20] – [2.22].

²⁷⁸ *ibid* [2.23].

²⁷⁹ *ibid* [7.5].

²⁸⁰ *ibid*.

²⁸¹ *Teitiota v New Zealand* CCPR/C/127/D/2728/2016 (24 October 2019).

²⁸² In this well-known case, an Inupiat Eskimo village of Kivalina in Alaska sued a group of fossil fuel producers for their contribution to climate change, seeking to recover money damages related to the village's forced relocation due to the erosion of sea ice protecting it. The case was dismissed on procedural grounds. See *Native Village of Kivalina v ExxonMobil Corp.* 696 F.3d 849 (9th Cir. 2012).

to properly address it.²⁸³ In *Teitiota*, the claimant, a citizen of the Republic of Kiribati, sought refugee status in New Zealand, alleging multiple threats to him and his family posed by the ever-exacerbating impacts of climate change on their home country, namely sea level rise that has caused the intrusion of saltwater resulting in a lack of fresh water, and erosion of inhabitable land — resulting in a housing crisis.²⁸⁴ The claimant maintained that removing him back to Kiribati would violate his right to life under Article 6 of the ICCPR. The case was initially addressed by national immigration authorities that refused the claimant the status of a refugee.²⁸⁵ The case was subsequently addressed by the High Court and, ultimately, by the Supreme Court of New Zealand, which both agreed with the Tribunal that the claimant did not face ‘serious harm’ upon his return to Kiribati.²⁸⁶

²⁸³ The intersectional nature of vulnerability (for example, poverty, malnutrition, political instability) to adverse environmental conditions, including climate change, has long been observed by scholars. See, for example: Elisabeth Meze-Hausken, ‘Migration Caused by Climate Change: How Vulnerable Are People in Dryland Areas?’ [2000] 5 *Mitigation and Adaptation Strategies for Global Change* 379, 389-390; Birsha Ohdedar, ‘Climate Adaptation, Vulnerability and Rights-Based Litigation: Broadening the Scope of Climate Litigation Using Political Ecology’ [2022] 13 *Journal of Human Rights and the Environment* 137, 141-145. For a detailed discussion on state international obligations to protect climate refugees see, for example: Jane McAdam, *Climate Change, Forced Migration, and International Law* (Oxford University Press 2012).

²⁸⁴ *Teitiota v New Zealand* CCPR/C/127/D/2728/2016 (24 October 2019) [2.1] – [2.7].

²⁸⁵ The national Immigration and Protection Tribunal, considering the claimant’s request under the 1951 Refugee Convention, observed that ‘while in many cases the effects of environmental change and natural disasters will not bring affected persons within the scope of the [Convention], no hard and fast rules or presumptions of nonapplicability exist [and] [c]are must be taken to examine the particular features of the case.’ In determining the latter, the Tribunal concluded that the absence of any evidence of systematic housing or land disputes that the claimant would face or any evidence that the ‘environmental conditions that he ... would face on return were so perilous that his life would be jeopardized’ indicated that he was not a ‘refugee’ as defined by the Refugee Convention (*Teitiota v New Zealand* CCPR/C/127/D/2728/2016 (24 October 2019) [2.8]). Overall, the Tribunal seemed to give more weight to political factors, namely to the active role of the government of Kiribati on the international stage with regard to climate change, rather than to impacts of climate change on Kiribati itself: acknowledging the gravity of the situation in Kiribati but refusing to treat such a situation as falling ‘well short of the threshold required to establish substantial grounds for believing that [the claimant and his family] would be in danger of arbitrary deprivation of life within the scope of article 6 of the [ICCPR]’. *ibid* [2.9].

²⁸⁶ *Teitiota v The Chief Executive of the Ministry of Business, Innovation and Employment* [2015] NZSC 107 (20 July 2015) [12]. At the same time, the Supreme Court noted that ‘both the Tribunal and the High Court, emphasized their decisions did not mean that environmental degradation resulting from climate change or other natural disasters could never create a pathway into the Refugee Convention or protected person jurisdiction’, and held that its ‘decision in this case should not be taken as ruling out that possibility in an appropriate case’. *ibid* [13].

Following this decision, the claimant submitted a petition to the UN Human Rights Committee, invoking the above-mentioned Article 6 of the ICCPR. The Committee stressed that the right to life under Article 6 should not be interpreted in a restrictive manner, hence that ‘the obligation of States parties to respect and ensure the right to life extends to reasonably foreseeable threats and life-threatening situations that can result in loss of life’.²⁸⁷ However, such risk must be personal and ‘cannot derive merely from the general conditions in the receiving State, except in the most extreme cases’.²⁸⁸ Therefore, the threshold for providing substantial grounds to establish that there is a real risk of irreparable harm is high. This, of course, does not mean that environmental degradation cannot affect the right to life.²⁸⁹

These considerations, however, did not prevent the Committee from agreeing with the national immigration authorities and the Supreme Court that it is the political situation in the country and not the environmental one, which triggers the application of Article 6.²⁹⁰ True enough, the Committee did engage in a discussion on whether the environmental conditions in Kiribati presented a grave danger to

²⁸⁷ *Teitiota v New Zealand* CCPR/C/127/D/2728/2016 (24 October 2019) [9.4].

²⁸⁸ *ibid* [9.3].

²⁸⁹ *ibid* [9.4] – [9.5]:

[T]he Committee recalls 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 Committee also observes that it, in addition to regional human rights tribunals, have established that environmental degradation can compromise effective enjoyment of the right to life and that severe environmental degradation can adversely affect an individual’s well-being and lead to a violation of the right to life.

²⁹⁰ *ibid* [9.7]:

[T]he Committee considers that a general situation of violence is only of sufficient intensity to create a real risk of irreparable harm under [article 6] of the Covenant in the most extreme cases, where there is a real risk of harm simply by virtue of an individual being exposed to such violence on return, or where the individual in question is in a particularly vulnerable situation. In assessing the author’s circumstances, the Committee notes the absence of a situation of general conflict in the Republic of Kiribati. It observes that the author refers to sporadic incidents of violence between land plaintiffs that have led to an unspecified number of casualties, and notes the author’s statement before the domestic authorities that he had never been involved in such a land dispute. The Committee also notes the Tribunal’s statement that the author appeared to accept that he was alleging not a risk of harm specific to him, but rather a general risk faced by all individuals in Kiribati.

the claimant,²⁹¹ but ultimately determined that according to the existing information, ‘there was [no] real and reasonably foreseeable risk that he would be exposed to a situation of indigence, deprivation of food, and extreme precarity that could threaten his right to life, including his right to a life with dignity’.²⁹²

Despite these findings, the potential implications of *Teitiota* for future climate change cases are very considerable. First, the Committee gave a lengthy consideration of the future situation in Kiribati and how it may affect similar applications in the future:

[C]limate change-induced harm can occur through sudden-onset events and slow-onset processes. Reports indicate that sudden-onset events are discrete occurrences that have an immediate and obvious impact over a period of hours or days, while slow-onset effects may have a gradual, adverse impact on livelihoods and resources over a period of months to years. Both sudden-onset events (such as intense storms and flooding) and slow-onset processes (such as sea level rise, salinization, and land degradation) can propel cross-border movement of individuals seeking protection from climate change-related harm. The Committee is of the view that without robust national and international efforts, the effects of climate change in receiving states may expose individuals to a violation of their rights under [articles 6] of the Covenant, thereby triggering the *non-refoulement* obligations of sending states. Furthermore, 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.²⁹³

²⁹¹ *ibid* [9.8]. On the issue of water availability, for example, the Committee noted the following: [w]hile recognizing the hardship that may be caused by water rationing ... , the author has not provided sufficient information indicating that the supply of fresh water is inaccessible, insufficient or unsafe so as to produce a reasonably foreseeable threat of a health risk that would impair his right to enjoy a life with dignity or cause his unnatural or premature death.’

²⁹² *ibid* [9.9].

²⁹³ *ibid* [9.11].

This finding clearly suggests that the Committee left the door open to further developments on the right to life in the context of climate change.

Second, the Committee also addressed a very important aspect of states' responsibility to act on climate change – namely, by taking adequate adaptation measures:

In the present case, the Committee accepts the author's claim that sea level rise is likely to render the Republic of Kiribati uninhabitable. However, it notes that the timeframe of 10 to 15 years, as suggested by the author, could allow for intervening acts by the Republic of Kiribati, with the assistance of the international community, to take affirmative measures to protect and, where necessary, relocate its population. The Committee notes that the State party's authorities thoroughly examined this issue and found that the Republic of Kiribati was taking adaptive measures to reduce existing vulnerabilities and build resilience to climate change-related harms. Based on the information made available to it, the Committee is not in a position to conclude that the assessment of the domestic authorities that the measures taken by the Republic of Kiribati would suffice to protect the author's right to life under article 6 of the Covenant was clearly arbitrary or erroneous in this regard, or amounted to a denial of justice.²⁹⁴

This conclusion explicitly points out the fact that the lack of national or international climate change adaptation measures may indeed constitute violation of the right to life under Article 6 of the ICCPR. This finding is consistent with the Committee's adopted General Comment No. 36²⁹⁵ and with the existing case law of regional human rights courts, emphasising the positive obligations of states to take active precautionary measures to protect the human lives in the context of environmental hazards.²⁹⁶ However, this finding does not eliminate the problematic aspect of the Committee's conclusion – that the state can take precautionary

²⁹⁴ *ibid* [9.12].

²⁹⁵ See section 3.2.1.1 in this chapter.

²⁹⁶ See sections 3.3.1.2 – 3.3.1.4 in this chapter.

measures that will only postpone, and to very short period of time, the manifestation of such environmental hazards at worst. The question, therefore, is what constitutes the threshold – the tipping point – that should prompt states to take drastic measures, such as the evacuation of an entire country’s population, to ensure that the right to life is properly secured? In the words of the dissenting Committee member Duncan Laki Muhumuza, ‘[i]t would indeed be counterintuitive to the protection of life, to wait for deaths to be very frequent and considerable in order to consider the threshold of risk as met’.²⁹⁷

3.2.1.2 European Convention on Human Rights

For their part, regional courts have also been developing jurisprudence addressing the right to life in the context of environmental degradation. For example, the ECtHR has found violations of the right to life under Article 2 of the ECHR²⁹⁸ in several ‘environmental’ cases. In each of these cases, authorities knew about the existing environmental threats that could lead to deaths but did not take adequate measures to prevent them.²⁹⁹ The ECtHR has emphasised

²⁹⁷ *Teitiota v New Zealand* CCPR/C/127/D/2728/2016 (24 October 2019), Individual Opinion of Committee member Duncan Laki Muhumuza [5]. The conclusion is quite eloquent:

[W]hile it is laudable that Kiribati is taking adaptive measures to reduce the existing vulnerabilities and address the evils of climate change, it is clear that the situation of life continues to be inconsistent with the standards of dignity for the author, as required under the Covenant. The fact that this is a reality for many others in the country, does not make it any more dignified for the persons living in such conditions. New Zealand’s action is more like forcing a drowning person back into a sinking vessel, with the “justification” that after all there are other voyagers on board. Even as Kiribati does what it takes to address the conditions; for as long as they remain dire, the life and dignity of persons remains at risk. *ibid* [6].

²⁹⁸ European Convention for the Protection of Human Rights and Fundamental Freedoms (Rome, 4 November 1950), United Nations, *Treaty Series*, vol 213, p 221, art 2(1): ‘Everyone’s right to life shall be protected by law.’

²⁹⁹ See: *Öneryildiz v Turkey* [GC] application no. 48939/99 (30 November 2004) [71], [89] – [90], [118] (methane explosion at a municipal rubbish tip that resulted in deaths of local residents); *Budayeva v Russia* application nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02 (20 March 2008) [128] – [130], [133], [159] (mudslides that flooded residential areas, causing deaths of local residents); *Kolyadenko v Russia* application nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05 and 35673/05 (28 February 2012) [151], [157] (flash flood, caused by the authorities’ opening of improperly operated water reservoir near residential areas during a heavy rainfall); *Özel v Turkey* application nos. 14350/05, 15245/05 and 16051/05 (17 November 2015) [170] – [171], [200] (destruction of residential buildings during an earthquake that resulted in deaths of claimants’

that states have positive obligations to take all appropriate steps to safeguard the right to life under Article 2,³⁰⁰ including instances where this right is threatened by hazardous industrial activities³⁰¹ or by a natural disaster:

[I]n connection with natural hazards, ... the scope of the positive obligations imputable to the State in the particular circumstances would depend on the origin of the threat and the extent to which one or the other risk is susceptible to mitigation, and clearly affirmed that those obligations applied in so far as the circumstances of a particular case pointed to the imminence of a natural hazard that had been clearly identifiable, and especially where it concerned a recurring calamity affecting a distinct area developed for human habitation or use ... Therefore, the applicability of Article 2 of the Convention and the State's responsibility have been recognised in cases of natural disasters causing major loss of life.³⁰²

The imminence of the threat, therefore, is not necessarily confined to a short period of time as long as the authorities are aware that this risk will eventually materialise.³⁰³ Furthermore, the right to life under Article 2 is applicable 'both

relatives); *Brincat v Malta* application nos. 60908/11, 62110/11, 62129/11, 62312/11 and 62338/11 (24 July 2014) [79] – [80], [117] (asbestos exposure and the resulting death).

³⁰⁰ See, for example, *Öneryildiz v Turkey* [GC] application no. 48939/99, RCHR 2004 XII (30 November 2004) [71]; *Budayeva v Russia* application nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02 (20 March 2008) [128]; *Kolyadenko v Russia* application nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05 and 35673/05 (28 February 2012) [151]; *Brincat v Malta* application nos. 60908/11, 62110/11, 62129/11, 62312/11 and 62338/11 (24 July 2014) [79].

³⁰¹ *Brincat v Malta* application nos. 60908/11, 62110/11, 62129/11, 62312/11 and 62338/11 (24 July 2014) [80].

³⁰² *Özel v Turkey* application nos. 14350/05, 15245/05 and 16051/05 (17 November 2015) [171]; see also *Budayeva v Russia* application nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02 (20 March 2008) [137].

³⁰³ For example, in *Kolyadenko v Russia* application nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05 and 35673/05 (28 February 2012) [165] – [166], the ECtHR made the following observation:

[I]n so far as the Government may be understood as having asserted that they could not have foreseen that it would be necessary to evacuate such a large quantity of water from the Pionerskoye reservoir on 7 August 2001, because such heavy rainfall as on that day had never occurred in that region before, the Court finds this argument unconvincing. Indeed, it is clear from the adduced materials that in the years preceding the flood, the authorities knew that it might be necessary urgently to release water from the reservoir Against this background, even if it is prepared to accept that the rain on 7 August 2001 was of an

where an individual has died ... and where there was a serious risk of an ensuing death, even if the applicant was alive at the time of the application', such risk including 'a natural catastrophe which left no doubt as to the existence of a threat to the applicants' physical integrity'.³⁰⁴ Such an interpretation also justifies applying Article 2 to situations where there is a grave risk to human health and, accordingly, states have a positive obligation to prevent harm:

The Court has stressed many times that, although the right to health – recognised in numerous international instruments – is not as such among the rights guaranteed under the Convention and its Protocols ... the [positive obligation to take appropriate steps to safeguard the lives of those within its jurisdiction] must be construed as applying in the context of any activity, whether public or not, in which the right to life may be at stake.³⁰⁵

exceptional intensity, the Court is not persuaded that the authorities could claim to have been taken unaware by the rain in so far as the operation of the Pionerskoye reservoir was concerned. It considers that, irrespective of the weather conditions, they should have foreseen the likelihood as well as the potential consequences of releases of water from the reservoir. Overall, the Court finds that the authorities had positive obligations under Article 2 of the Convention to assess all the potential risks inherent in the operation of the reservoir, and to take practical measures to ensure the effective protection of those whose lives might be endangered by those risks.

Similarly, in *Brincat v Malta* application nos. 60908/11, 62110/11, 62129/11, 62312/11 and 62338/11 (24 July 2014) [105] – [106], [110], concerning asbestos-related deaths, the Court examined the evidence concerning the Maltese government's knowledge of the dangers of asbestos in the early 1970s and concluded that 'enacting specific legislation fifteen years after the time in the mid-1980s when the Government accept that they were aware of the risks can hardly be seen as an adequate response in terms of fulfilling a State's positive obligations.'

³⁰⁴ *Brincat v Malta* application nos. 60908/11, 62110/11, 62129/11, 62312/11 and 62338/11 (24 July 2014) [82]; see also *Budayeva v Russia* application nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02 (20 March 2008) [146]; *Kolyadenko v Russia* application nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05 and 35673/05 (28 February 2012) [155]:

[I]n the Court's opinion, these circumstances leave no doubt as to the existence of an imminent risk to the lives of the ... applicants, which brings their complaint on that account within the scope of Article 2 of the Convention. The fact that they survived and sustained no injuries has no bearing on this conclusion.

³⁰⁵ *Lopes De Sousa Fernandes v Portugal* [GC] application no. 56080/13 (19 December 2019) [164] – [165] (referring to *Vasileva v Bulgaria* application no. 23796/10 (17 March 2016) [63] and *Centre for Legal Resources on behalf of Valentin Câmpeanu v Romania* [GC] application no. 47848/08 (17 July 2014) [130]).

3.2.1.3 African Charter on Human and Peoples' Rights

The positive obligations of states to protect the right to life in situations where it is threatened by environmental degradation are also explicitly mentioned in other regional systems. For instance, when interpreting the right to life under Article 4 of the ACHPR,³⁰⁶ the African Commission on Human and Peoples' Rights has stressed environmental concerns and disasters as factors that states should adequately consider in order to protect the right to dignified life:

[T]he Charter envisages the protection not only of life in a narrow sense, but of dignified life. This requires a broad interpretation of States' responsibilities to protect life. Such actions extend to preventive steps to preserve and protect the natural environment and humanitarian responses to natural disasters, famines, outbreaks of infectious diseases, or other emergencies. The State also has a responsibility to address more chronic yet pervasive threats to life, for example with respect to preventable maternal mortality, by establishing functioning health systems. Such an approach reflects the Charter's ambition to ensure a better life for all the people and peoples of Africa through its recognition of a wide range of rights, including the right to dignity, economic, social and cultural rights, and peoples' rights such as the right to existence and the right to peace. It is also rooted in widely shared communal values of the continent, according to which the value of one person's life is tied to the value of the lives of others.³⁰⁷

3.2.1.4 American Convention on Human Rights

The concept of the right to life with dignity is also present in the Inter-American system and is especially relevant in the context of environmental degradation and

³⁰⁶ African Charter on Human and Peoples' Rights (Nairobi, 19 January 1982) United Nations, *Treaty Series*, vol 1520, p 217, Art 4: 'Human beings are inviolable. Every human being shall be entitled to respect for his life and the integrity of his person. No one may be arbitrarily deprived of this right.'

³⁰⁷ African Commission on Human and People's Rights, general comment No. 3 on the African Charter on Human and Peoples' Rights: The Right to Life (article 4), 57th Ordinary Session of the African Commission on Human and Peoples' Rights, 2015, para 3.

climate change, particularly following the 2017 Advisory Opinion of the Inter-American Court of Human Rights (IACtHR) on the environment and human rights (hereinafter 2017 Advisory Opinion).³⁰⁸ In this opinion, the IACtHR acknowledged that environmental degradation endangers a whole spectrum of human rights, explicitly referring to the Court's prior opinions as well as to the jurisprudence of other international and regional courts and treaty bodies.³⁰⁹ However, the fundamental issue the Court had to answer was the applicability of the American Convention on Human Rights' Article 4(1) right to life³¹⁰ in the context of transnational environmental damage and state parties' related obligations.³¹¹ The IACtHR discussed various obligations of states to protect the above-mentioned rights, including the duty to regulate and monitor dangerous polluting practices and to establish adequate environmental impact assessment requirements,³¹² and concluded that states have the obligation to prevent significant environmental damage within or outside their territory and that states also have other related duties.³¹³

3.2.2 Right to a healthy environment

The right to a healthy environment is one of the most frequently invoked rights in climate change litigation. The interpretation of this right has been the key element of rights-based climate change cases in the Global South,³¹⁴ as well as a prominent

³⁰⁸ *The 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) of the American Convention on Human Rights)*, Advisory Opinion OC-23/18, Inter-Am. Ct. H.R., (ser. A) No. 23 (15 November 2017).

³⁰⁹ *ibid* [66].

³¹⁰ American Convention on Human Rights (San José, 22 November 1969), United Nations, *Treaty Series*, vol 1144, p 123, art 4(1): 'Every person has the right to have his life respected. This right shall be protected by law and, in general, from the moment of conception.'

³¹¹ *The 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) of the American Convention on Human Rights)*, Advisory Opinion OC-23/18, Inter-Am. Ct. H.R., (ser. A) No. 23 (15 November 2017) [32] – [38].

³¹² *ibid* [127] – [174].

³¹³ *ibid* [242].

³¹⁴ See chapter 6 of this thesis.

feature in litigation before European national courts.³¹⁵ There are two reasons why the right to a healthy environment may be particularly well-suited for demanding governmental action with regard to climate change.

First, this right offers a comprehensive framework for addressing the multiple challenges posed by the magnitude of climate change and its impacts. For instance, the right to a healthy environment can encompass such substantive elements as safe climate, clean air, healthy and sustainably produced food, access to safe water and adequate sanitation, non-toxic living environment, and healthy ecosystems and biodiversity.³¹⁶ All these elements are already critically endangered by climate change and will be put under even more pressure in the future.³¹⁷ The fact that the right to a healthy environment covers elements that might not be covered by other rights (for example, the rights to life or to respect for private and family life) puts it in a unique position to deal with environmental harms of diffuse and cumulative nature.

Second, by focusing on the protection of a healthy environment, be it a safe climate, good air quality, or healthy ecosystems, the right to a healthy environment automatically becomes a prerequisite for other rights, since the full enjoyment of all human rights depends on a favourable environment.³¹⁸ This is especially true for

³¹⁵ See sections 4.4 and 4.5 of this thesis.

³¹⁶ UN General Assembly A/HRC/43/53, Right to a healthy environment: good practices. Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (30 December 2019) 8-18.

³¹⁷ Hans-Otto Pörtner and others, 'Summary for Policymakers' in Hans-Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2022) 10-21.

³¹⁸ *The 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) of the American Convention on Human Rights)*, Advisory Opinion OC-23/18, Inter-Am. Ct. H.R., (ser. A) No. 23 (15 November 2017) [64]. Hence, the IACtHR referred to various categories of rights that may become endangered by environmental degradation [66]:

The Court considers that the rights that are particularly vulnerable to environmental impact include the rights to life, personal integrity, private life, health, water, food, housing, participation in cultural life, property, and the right to not be forcibly displaced. Without prejudice to the foregoing, according to Article 29 of the Convention, other rights are also vulnerable and their violation may affect the rights to life, liberty and security of the individual, and infringe on the obligation of all persons to conduct themselves fraternally,

vulnerable and disadvantaged groups, including ‘Indigenous peoples, children, women, people living in extreme poverty, minorities, and people with disabilities’, and

communities that, essentially, depend economically or for their survival on environmental resources from the marine environment, forested areas and river basins, or run a special risk of being affected owing to their geographical location, such as coastal and small island communities.³¹⁹

3.2.2.1 Towards a recognition of the right to a healthy environment at the UN level

The right to a healthy environment is globally recognised, albeit that this recognition is still rather fragmented. For example, until recently, the right to a healthy environment has not been recognised at the international level,³²⁰ which led the UN Special Rapporteur on human rights and the environment to call for the international recognition of this right.³²¹ The push towards this international recognition culminated in October 2021, when during its 48th session, the UN Human Rights Council adopted Resolution 48/13, recognising, for the first time, the ‘the right to a clean, healthy and sustainable environment as a human right that is important for the enjoyment of human rights’³²² as well as encouraging states ‘to

such as the right to peace, because displacements caused by environmental deterioration frequently unleash violent conflicts between the displaced population and the population settled on the territory to which it is displaced. Some of these conflicts are massive and thus extremely grave.

³¹⁹ *ibid* [67].

³²⁰ Sumudu Atapattu, ‘Environmental Rights and International Human Rights Covenants: What Standards are Relevant?’ in Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019) 21-22, discussing the protection offered by treaty bodies.

³²¹ See Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (A/73/188) (2018). See also John H Knox, ‘The Global Pact for the Environment: At the Crossroads of Human Rights and the Environment’ [2019] 28 *Review of European, Comparative & International Environmental Law* 40; John H Knox, ‘Constructing the Human Right to a Healthy Environment’ [2020] 16 *Annual Review of Law and Social Science* 79.

³²² Resolution adopted by the Human Rights Council on 8 October 2021, A/HRC/RES/48/13, The human right to a clean, healthy and sustainable environment, para 1.

adopt policies for the enjoyment of [this right], including with respect to biodiversity and ecosystems'.³²³ Notably, though, this recognition is only the first of many steps that are needed to make the right to a healthy environment fully functional and enforceable at the international level. For this to happen, the right needs to have its scope defined and, subsequently, to be enshrined into a binding international human rights treaty overseen by an international court or treaty body.

3.2.2.2 Recognition at the regional level

At the same time, the right to a healthy environment has long been explicitly recognised in the regional African³²⁴ and the Inter-American³²⁵ human rights protection systems,³²⁶ with the above-mentioned IACtHR 2017 Advisory Opinion arguably being the most influential interpretation of this right at the regional level so far.³²⁷ Hence, the Court recognised two critical factors: 1) that there is 'an undeniable relationship between the protection of the environment and the realization of other human rights, in that environmental degradation and the adverse effects of climate change affect the real enjoyment of human rights'; and 2) that there is a 'close relationship between the exercise of economic, social and cultural rights – which include the right to a healthy environment – and of civil and political rights, [which] indicates that the different categories of rights constitute an

³²³ *ibid* para 4(c).

³²⁴ African Charter on Human and Peoples' Rights (Nairobi, 19 January 1982) United Nations, *Treaty Series*, vol 1520, p 217, art 24 ('All peoples shall have the right to a general satisfactory environment favorable to their development').

³²⁵ Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (San Salvador, 17 November 1988), art 11: '1) Everyone shall have the right to live in a healthy environment and to have access to basic public services; 2) The States Parties shall promote the protection, preservation, and improvement of the environment.'

³²⁶ Louis J Kotzé and Evadne Grant, 'Environmental Rights in the Global South' in Philippe Cullet and Sujith Koonan (eds), *Research Handbook on Law, Environment and the Global South* (Edward Elgar Publishing 2019) 92-95.

³²⁷ For a discussion on the 2017 Advisory Opinion see: Christopher Campbell-Durufié and Sumudu Atapattu, 'The Inter-American Court's Environment and Human Rights Advisory Opinion: Implications for International Climate Law' [2018] 8 *Climate Law* 321.

indivisible whole based on the recognition of the dignity of the human being'.³²⁸ Furthermore, emphasising the 'interdependence and indivisibility of human rights and environmental protection',³²⁹ the Court stressed that:

As an autonomous right, the right to a healthy environment, unlike other rights, protects the components of the environment, such as forests, rivers and seas, as legal interests in themselves, even in the absence of the certainty or evidence of a risk to individuals. This means that it protects nature and the environment, not only because of the benefits they provide to humanity or the effects that their degradation may have on other human rights, such as health, life or personal integrity, but because of their

³²⁸ *The 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) of the American Convention on Human Rights)*, Advisory Opinion OC-23/18, Inter-Am. Ct. H.R., (ser. A) No. 23 (15 November 2017) [47] (citing its earlier case of *Kawas-Fernández v Honduras* Judgment of 3 April 2009, Series C No. 196 [148], where the Court made a similar observation by referring to both its own and the ECtHR case law, confirming the existence of 'an undeniable link between the protection of the environment and the enjoyment of other human rights', as well as the recognition of the 'ways in which the environmental degradation and the adverse effects of the climate change have impaired the effective enjoyment of human rights in the continent' in the constitutions of many States in Latin America and at the UN level). Furthermore, the Court put particular emphasis on the importance of guaranteeing dignified life to the Indigenous communities:

Specifically, in cases concerning the territorial rights of indigenous and tribal peoples, the Court has referred to the relationship between a healthy environment and the protection of human rights, considering that these peoples' right to collective ownership is linked to the protection of, and access to, the resources to be found in their territories, because those natural resources are necessary for the very survival, development and continuity of their way of life. The Court has also recognized the close links that exist between the right to a dignified life and the protection of ancestral territory and natural resources. In this regard, the Court has determined that, because indigenous and tribal peoples are in a situation of special vulnerability, States must take positive measures to ensure that the members of these peoples have access to a dignified life – which includes the protection of their close relationship with the land – and to their life project, in both its individual and collective dimension. The Court has also emphasized that the lack of access to the corresponding territories and natural resources may expose indigenous communities to precarious and subhuman living conditions and increased vulnerability to disease and epidemics, and subject them to situations of extreme neglect that may result in various violations of their human rights in addition to causing them suffering and undermining the preservation of their way of life, customs and language.

The 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) of the American Convention on Human Rights), Advisory Opinion OC-23/18, Inter-Am. Ct. H.R., (ser. A) No. 23 (15 November 2017) [48].

³²⁹ *ibid* [47], [54] – [57].

importance to the other living organisms with which we share the planet that also merit protection in their own right.³³⁰

In contrast, there is no self-standing right to a healthy environment in the European human rights protection system under the ECHR. In its absence, the right to respect for private and family life under Article 8 of the ECHR³³¹ has been most frequently used in cases concerning environmental harms before the ECtHR.³³² And indeed, in one of the most prominent ‘environmental’ cases arising under Article 8, *Hatton v United Kingdom*, the ECtHR confirmed that while ‘[t]here is no explicit right in the Convention to a clean and quiet environment ..., where an individual is directly and seriously affected by noise or other pollution, an issue may arise under Article 8’.³³³ It must be observed, though, that as mentioned in section 3.2.3 of this thesis, there are various conditions that need to be satisfied in order to trigger the application of Article 8 in cases concerning environmental harms.³³⁴

3.2.2.3 Constitutions

The truly global recognition of the right to a healthy environment has occurred at the national level.³³⁵ The constitutions of more than 100 states – including over

³³⁰ *ibid* [62].

³³¹ European Convention for the Protection of Human Rights and Fundamental Freedoms (Rome, 4 November 1950), United Nations, *Treaty Series*, vol 213, p 221, art 8(1): ‘Everyone has the right to respect for his private and family life, his home and his correspondence.’

³³² Karen Morrow, ‘The ECHR, Environment-Based Human Rights Claims and the Search for Standards’, in Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019) 43.

³³³ *Hatton v United Kingdom* [GC] application no. 36022/97 (8 July 2003) [96]. Similarly, in one its earlier prominent environmental cases, *López Ostra v Spain* application no. 16798/90 (9 December 1994) [51], [54] – [55], the Court held that

Article 8 could include a right to protection from severe environmental pollution, since such a problem might “affect individuals well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely, without, however, seriously endangering their health”.

³³⁴ See also Samvel Varvastian, ‘The Advent of International Human Rights Law in Climate Change Litigation’ [2021] 38 Wisconsin International Law Journal 369, 389-392.

³³⁵ There is a rich body of scholarship on environmental constitutionalism. For example: David R Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (University of British Columbia Press 2012); David R Boyd, ‘Constitutions, Human Rights, and the Environment: National Approaches’ in Anna Grear and Louis J Kotzé (eds), *Research*

thirty-five African states, at least fifteen states in the Asia-Pacific, over thirty states in Latin America and the Caribbean, as well as the majority of European states – recognise the right to a healthy environment.³³⁶ In some of these countries – most notably, countries in Latin America – the concept of environmental protection is so deeply entrenched in the fabric of the constitutional traditions that not only does the right to a healthy environment enjoy a broad interpretation by the respective courts, but nature itself is often declared to be the subject of rights.³³⁷ In other words, in countries that follow such a tradition the right to a healthy environment can blur the distinction between the rights of humans and the rights of nature.³³⁸

Handbook on Human Rights and the Environment (Edward Elgar Publishing 2015); James R May and Erin Daly (eds), *Global Environmental Constitutionalism* (Cambridge University Press 2015); David R Boyd, 'Catalyst for Change: Evaluating Forty Years of Experience in Implementing the Right to a Healthy Environment' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018).

³³⁶ See UN General Assembly, A/HRC/43/53, Right to a healthy environment: good practices. Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (30 December 2019).

³³⁷ See for example: the Constitution of Ecuador of 2008 (with Amendments through 2021), Title II, Chapter 7 (Rights of Nature), the Constitution of Bolivia of 2009, art 33 (Environmental Rights), the Constitution of the Dominican Republic of 2015, art 67 (Protection of the Environment). For a discussion see Juan Auz, 'Human Rights-Based Climate Litigation: A Latin American Cartography' [2022] 13 *Journal of Human Rights and the Environment* 114, 121. While it is beyond the scope of this thesis to discuss the legal rights of nature in detail, it is worth noting that this concept has various dimensions, for example, the recognition of certain natural places such as rivers or mountains as having a legal personality, and thus being 'a material stakeholder in governance decisions that may impact it', the recognition of personality via a specific institution, for example, an Indigenous guardianship, the recognition of nature's rights as a collective public interest, and so forth. Benjamin J Richardson and Nina Hamaski, 'Rights of Nature Versus Conventional Nature Conservation: International Lessons from Australia's Tarkine Wilderness' [2021] 51 *Environmental Policy and Law* 159. That said, as Blanco and Grear have observed, although there are different models for the rights of nature, such models may not be devoid of 'Eurocentric, rationalistic assumptions underwriting law and legal personhood' that are rooted in 'long-standing patterns of marginalization and predation.' Elena Blanco and Anna Grear, 'Personhood, Jurisdiction and Injustice: Law, Colonialities and the Global Order' [2019] 10 *Journal of Human Rights and the Environment* 86, 98. A particular example of judicial recognition of the rights of nature in rights-based climate change litigation in Colombia will be discussed in chapter 6. For a detailed discussion on the nuance of the rights of nature in recent scholarship, see, for example: Ariel Rawson and Becky Mansfield, 'Producing Juridical Knowledge: "Rights of Nature" or the Naturalization of Rights?' [2018] 1 *Nature and Space* 99; Erin L O'Donnell and Julia Talbot-Jones, 'Creating Legal Rights for Rivers' [2018] 23 *Ecology and Society* 7; Mihnea Tănăsescu, 'Rights of Nature, Legal Personality, and Indigenous Philosophies' [2020] 9 *Transnational Environmental Law* 429; Emily Jones, 'Posthuman International Law and the Rights of Nature' [2021] 12 *Journal of Human Rights and the Environment* 76; Jérémie Gilbert, 'The Rights of Nature, Indigenous Peoples and International Human Rights Law: From Dichotomies to Synergies' [2022] 13 *Journal of Human Rights and the Environment* 399.

³³⁸ As discussed in the previous section, this blurring was also observed by the IACtHR in its 2017 Advisory Opinion. See *The Environment and Human Rights (State Obligations in Relation to the*

Furthermore, even the absence of formal constitutional recognition of this right does not preclude national courts in some countries from deriving the right to a healthy environment from recognised constitutional rights. Perhaps the most prominent examples of this trend are the South Asian countries of India and Pakistan, where courts have derived the right to a healthy environment from the right to life when dealing with cases concerning environmental degradation and pollution.³³⁹ For example, since mid-1980s, the Indian courts have been interpreting the right to life under Article 21 of the Constitution as requiring certain environmental standards, and in *Gaur v Haryana*, the Supreme Court of India held that because a healthy environment is a prerequisite for enjoying the right to life, environmental pollution can indeed violate Article 21.³⁴⁰ Deriving the unwritten right to a healthy environment from constitutionally protected rights to life and to dignity under Articles 9 and 14 of the Constitution of Pakistan, the Supreme Court of Pakistan reached a similar conclusion in *Zia v WAPDA*.³⁴¹ The most remarkable aspect of such a judicial interpretation is that it has also been applied in rights-based climate change cases,³⁴² as shall be discussed in detail in chapter 6 of this thesis.

3.2.2.4 Potential difficulties with recognition

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) of the American Convention on Human Rights, Advisory Opinion OC-23/18, Inter-Am. Ct. H.R., (ser. A) No. 23 (15 November 2017) [62].

³³⁹ For a discussion, see: Gitanjali Nain Gill, 'Environmental Standards and the Right to Life in India: Regulatory Frameworks and Judicial Enterprise' in Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019); Waqqas Ahmad Mir, 'From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex than a Celebratory Tale' in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020).

³⁴⁰ *Gaur v Haryana* Appeal (civil) 9151 of 1994 (Supreme Court, 1994).

³⁴¹ *Zia v WAPDA* [1994] PLD 693 SC (Supreme Court, 1994) (holding that a person cannot be said to live with dignity if this life is below bare necessity of proper food, clothing, shelter, education, healthcare, clean atmosphere and unpolluted environment).

³⁴² Namely, in: *Singh v Himachal Pradesh* No. 237 (THC)/2013 (CWPII No.15 of 2010) (National Green Tribunal, 6 February 2014); *Leghari v Pakistan* WP No 25501/2015 judgment (Lahore High Court, 2018); *Leghari v Pakistan* WP No 25501/2015 orders 1 and 2 (Lahore High Court, 2015).

Versatile as it is, the application of the right to a healthy environment in climate change litigation is not free from obstacles. For instance, despite its nearly universal recognition, the right to a healthy environment may not necessarily be recognised in the forum where it is invoked, and the respective courts or treaty bodies may decline to recognise it as an 'unwritten' or 'derived' right. Furthermore, in the absence of formal recognition, the courts may struggle to understand the very content of this right. One particular example of such a scenario is *Friends of the Irish Environment v Ireland*, which concerned the legality of the national GHG emissions reduction plan, and where the Supreme Court of Ireland declined to recognise the unwritten (or derived) right to a healthy environment because, arguably, such a right either does not go beyond the already recognised rights to life and to health, or does not have 'a sufficient general definition ... about the sort of parameters within which it is to operate'.³⁴³ Notably, the Supreme Court's position was directly opposite to the one reached by the High Court of Ireland in both this case³⁴⁴ and in another rights-based climate change case of *Merriman v Fingal County Council*, which concerned the expansion of Dublin Airport, and where the Court recognised the derived right to a healthy environment as a prerequisite for other rights despite the fact that the parameters of this right were not yet defined.³⁴⁵

³⁴³ *Friends of the Irish Environment v Ireland* [2020] No: 205/19 (Supreme Court, 31 July 2020) [8.9] – [8.11].

³⁴⁴ *Friends of the Irish Environment v Ireland* [2019] IEHC 747 (The High Court, 19 September 2019) [133].

³⁴⁵ *Merriman v Fingal County Council* No. 344 JR IEHC 695 (High Court, 2017). The High Court provided an eloquent explanation favouring the recognition of such an unwritten right:

For centuries, humanity has exploited the abundant resources of the natural environment. Until relatively recent decades, this process of exploitation was greatly untrammelled by legal restrictions, prompted perhaps by (a) a notion that nature's bounty is endless and (b) an unawareness of the toll that humanity's industrial and technological progress has taken, and is taking, on the quality of the environment that humanity requires for survival. The historically exploitative approach adopted by our ancestors towards the environment has, in Ireland, been tempered in recent years, not least by a generally beneficial and largely European Union-inspired environmental law regime which is informed in part by the experience of member states that have had to cope with industrialisation and its ill-effects to a greater extent and for a longer time than Ireland. (That environmental law regime is sometimes criticised for its complexity, but complex issues such as environmental protection are rarely, if ever, susceptible to simple solutions). Along with legislative change, and well within the lifetime of this Court, there has also surfaced (i) a rising public concern about increasing environmental degradation and (ii) a greater public awareness that the

Despite the above-mentioned unsuccessful application in Ireland, invoking the right to a healthy environment in climate change litigation has proven to be fully justified and, on many occasions, it has determined, or at least, has contributed to the successful outcome in such cases in the Global South, as shall be discussed in chapter 6 of this thesis.

3.2.3 Right to respect for private and family life

The right to respect for private and family life is present in all climate change cases based on human rights law brought before European national courts where claimants invoke Article 8 of the ECHR. While Article 8 makes no reference to environmental issues, it is very versatile (though not limitless, as is shown below) and in the absence of explicit references to the environment in the ECHR, it is most frequently invoked in the ECtHR environmental degradation

quality of our life as a nation, and as members of the wider human community, is threatened by the processes which have yielded the very quality of life which we presently enjoy. It is in this, not un-pressing, context that the [claimant] contends that there resides within the Constitution an unenumerated and previously not expressly recognised personal right to an environment that is consistent with the human dignity and well-being of citizens at large. [261].

For these reasons, the Court held that it was not necessary to provide answers to all questions about the scope of such a right before recognising it [262], given the fact that this right is a prerequisite for other rights:

A right to an environment that is consistent with the human dignity and well-being of citizens at large is an essential condition for the fulfilment of all human rights. It is an indispensable existential right that is enjoyed universally, yet which is vested personally as a right that presents and can be seen always to have presented, and to enjoy protection, under Art. 40.3.1° of the Constitution. It is not so Utopian a right that it can never be enforced. Once concretised into specific duties and obligations, its enforcement is entirely practicable. Even so, every dimension of the right to an environment that is consistent with the human dignity and well-being of citizens at large does not, for the reasons identified previously above, require to be apprehended and to be described in detail before that right can be recognised to exist. Concrete duties and responsibilities will fall in time to be defined and demarcated. But to start down that path of definition and demarcation, one first has to recognise that there is a personal constitutional right to an environment that is consistent with the human dignity and well-being of citizens at large and upon which those duties and responsibilities will be constructed. [264].

Yet, despite recognising this right, the Court declined to find its violation because there was arguably no evidence of any disproportionate interference with it (ibid).

cases.³⁴⁶ The ECtHR has reiterated on various occasions that Article 8 is not triggered by environmental degradation alone, but by the effect of environmental degradation on a claimant,³⁴⁷ and that such effect must be of a certain severity and be direct and immediate.³⁴⁸ Nevertheless, the ECtHR has also concluded on certain

³⁴⁶ Karen Morrow, 'The ECHR, Environment-Based Human Rights Claims and the Search for Standards', in Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019) 43.

³⁴⁷ See *Fadeyeva v Russia* application no. 55723/00 (9 June 2005) [68]. In *Kyrtatos v Greece* application no. 41666/98 (22 May 2003) [52], the ECtHR made the following observation:

[T]he crucial element which must be present in determining whether, in the circumstances of a case, environmental pollution has adversely affected one of the rights safeguarded by paragraph 1 of Article 8 is the existence of a harmful effect on a person's private or family sphere and not simply the general deterioration of the environment. Neither Article 8 nor any of the other Articles of the Convention are specifically designed to provide general protection of the environment as such; to that effect, other international instruments and domestic legislation are more pertinent in dealing with this particular aspect.

³⁴⁸ See, for example: *Fadeyeva v Russia* application no. 55723/00 (judgment of 9 June 2005) [69]:

The adverse effects of environmental pollution must attain a certain minimum level if they are to fall within the scope of Article 8. [T]he assessment of that minimum is relative and depends on all the circumstances of the case, such as the intensity and duration of the nuisance, and its physical or mental effects. The general context of the environment should also be taken into account.

See also: *Atanasov v Bulgaria* application no. 12853/03 (2 December 2010) [66]:

The State's obligations under Article 8 come into play in that context only if there is a direct and immediate link between the impugned situation and the applicant's home or private or family life ... [t]herefore, the first point for decision is whether the environmental pollution of which the applicant complains can be regarded as affecting adversely, to a sufficient extent, the enjoyment of the amenities of his home and the quality of his private and family life'.

See also *Udovičić v Croatia* application no. 27310/09 (24 April 2014) [139]. Still, just like in case of the right to life under art 2, the ECtHR held that environmental risks might not necessarily materialise to trigger the application of art 8 – see, for example, *Di Sarno v Italy* application no. 30765/08 (10 January 2012) [108]: 'Article 8 may be relied on even in the absence of any evidence of a serious danger to people's health.' Since the ECtHR recognised that this particular case concerned dangerous activities, it held that 'the State was under a positive obligation to take reasonable and adequate steps to protect the right of the people concerned to respect for their homes and their private life and, more generally, to live in a safe and healthy environment' (ibid [110], also referring to *Tătar v Romania* application no. 67021/01 (27 January 2009). Furthermore, in *Jugheli v Georgia* application no. 38342/05 (13 July 2017) [para 63], the ECtHR described the assessment of the effects of environmental pollution on human rights:

[I]t is often impossible to quantify the effects of serious industrial pollution in each individual case and to distinguish them from the influence of other relevant factors such as age, profession or personal lifestyle. The same concerns possible worsening of the quality of life caused by the industrial pollution. "Quality of life" is a subjective characteristic which hardly lends itself to a precise definition ... It follows that, taking into consideration the evidentiary difficulties involved, the Court will have regard primarily, although not exclusively, to the findings of the domestic courts and other competent authorities in establishing the factual circumstances of the case. As a basis for the analysis it may use, among other things, individual decisions taken by the authorities with respect to the applicants' particular situation and the environmental studies commissioned by the

occasions that national authorities have violated Article 8 by failing to address environmental degradation or to stop environmental pollution.³⁴⁹ Notably, the ECtHR has also held that Article 8 may apply in environmental cases, both when the pollution is directly caused by the state and when the state fails to properly regulate the activities of the private sector.³⁵⁰

The fact that the right to respect for private and family life has been exclusive to claims brought under Article 8 of the ECHR does not, of course, mean that this right cannot be applied in the context of environmental degradation in non-European countries, as this right enjoys global recognition and protection. For instance, in the above-mentioned *Portillo Cáceres* case, the UN Human Rights Committee found that the defendants violated the claimants' right to private and family life under Article 17 of the ICCPR.³⁵¹ The Committee found that the claimants 'depend on their crops, fruit trees, livestock, fishing and water resources for their livelihoods' and that these elements constitute components of the claimants' way of life, thus falling within the scope of protection of Article 17.³⁵²

authorities ... However, the Court cannot rely blindly on the decisions of the domestic authorities, especially if they are obviously inconsistent or contradict each other. In such situations it has to assess the evidence in its entirety.

In *Giacomelli v Italy* application no. 59909/00 (2 November 2006) [83], the ECtHR explained how governments should take such an assessment into account when dealing with matters that concern the environment:

A governmental decision-making process concerning complex issues of environmental and economic policy must in the first place involve appropriate investigations and studies so that the effects of activities that might damage the environment and infringe individuals' rights may be predicted and evaluated in advance and a fair balance may accordingly be struck between the various conflicting interests at stake.

³⁴⁹ See, for example: *López Ostra v Spain* application no. 16798/90 (9 December 1994) [51], [58]; *Guerra v Italy* application no. 14967/89 [GC] (19 February 1998) [60]; *Fadeyeva v Russia* application no. 55723/00 (judgment of 9 June 2005) [132] – [134]; *Ledyayeva v Russia* application nos. 53157/99, 53247/99, 56850/00, 53695/00 (26 October 2006) [110]; *Dubetska v Ukraine* application no. 30499/03 (10 February 2011) [151] – [156]; *Di Sarno v Italy* application no. 30765/08 (10 January 2012) [112]; *Jugheli v Georgia* application no. 38342/05 (13 July 2017) [76] – [78]; *Cordella v Italy* application nos. 54414/13 and 54264/15 (24 January 2019) [172] – [174].

³⁵⁰ See also John H Knox, 'Climate Change and Human Rights Law' [2009] 50 *Virginia Journal of International Law* 163, 171-172.

³⁵¹ International Covenant on Civil and Political Rights (New York, 16 December 1966), United Nations, *Treaty Series*, vol 999, p 171, art 17: '1. No one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation. 2. Everyone has the right to the protection of the law against such interference or attacks.'

³⁵² *Portillo Cáceres v Paraguay* CCPR/C/126/D/2751/2016 (25 July 2019) [7.8].

Furthermore, the Committee emphasised that the right to private and family life covers both negative and positive obligations, and given the State party's failure to address large-scale fumigations despite their direct and severe impacts on claimants' livelihood constituted violation of private and family life and the home.³⁵³

3.3 Conclusion

Although climate change affects a broad spectrum of human interests, only three categories of rights have so far been systematically invoked in rights-based climate change litigation. The dominance of these three rights might well be explained by considering the existing jurisprudence on the relevant provisions of constitutions and human rights treaties protecting these rights. Both courts and treaty bodies have on many occasions interpreted the respective rights as being potentially applicable to situations where environmental degradation endangered the claimants. A salient point that emerges from the analysis of these cases is that the above-mentioned rights often focus on the interplay between the environment on the one hand, and human life and health on the other hand. Accordingly, this leads to a certain blurring between the interpretation of these rights, which appears natural given their interdependence and indivisibility. It also explains why these rights are often simultaneously invoked in cases concerning conventional environmental harms and climate change cases. It is therefore unsurprising that invoking these

³⁵³ *ibid.* Notably, in addition to arts 6 and 17, the UN Human Right Committee found violation of the right to an effective remedy under art 2(3) of the ICCPR, 'because an effective, appropriate, impartial and diligent investigation into the environmental pollution that poisoned the authors and led to the death of Mr. Portillo Cáceres was not carried out.' This included: the failure to include the clinical histories of the authors and the results of their blood and urine tests into the case file; the fact that the suspects were not found guilty and the pollution continues, while those who committed the violations have not been subject to any criminal investigation; the lack of enforcement and rectification of the ongoing harm as well as the lack of any substantive progress in the investigation that would have led to the redress of the harm suffered by the authors (*ibid* [7.9]). The Committee reached a similar decision in *Billy v Australia* CCPR/C/135/D/3624/2019 (22 September 2022) [8.9] – [9], finding violation of not only art 17 right, but also of the claimants' right to culture under art 27 of the ICCPR.

rights could be a viable strategy with regard to claims concerning climate change. Of course, the fact that these rights are applicable does not necessarily guarantee successful outcome in such litigation. The claimants normally have to satisfy a range of criteria to demonstrate that the claimed rights were indeed violated. Given the fact that rights-based climate change cases are litigated in different forums, such criteria can often be forum-specific. It is therefore vital to analyse how a litigation forum can determine the viability of such claims.

CHAPTER 4. EUROPE

4.1 Introduction

For many years, Europe has been home to some of the major contributors to global GHG emissions, with countries such as Germany, the UK, France, and Italy being in the top ten GHG emitting countries in the world.³⁵⁴ Although in the last couple of decades this 'leadership' in regional contribution to global GHG emissions has shifted from Europe to Asia and the Middle East, European countries still emit vast amounts of GHGs, and the cumulative emissions of the twenty-seven EU countries and the UK account for about nine per cent of the global GHG emissions.³⁵⁵ While most European countries, especially EU member states and the UK, are highly industrialised with much more advanced climate change adaptation capacity as compared to many other countries in the Global South, the severe impacts of climate change in Europe, especially the death toll during heatwaves, have demonstrated that these countries are still highly vulnerable in the face of the growing threats posed by climate change.³⁵⁶ At the same time, even though the EU and the UK have achieved significant progress in curbing national GHG emissions, the overall contribution of these countries to global emissions is still dangerously high.³⁵⁷

³⁵⁴ See Global Carbon Atlas, CO2 emissions <<http://www.globalcarbonatlas.org/en/CO2-emissions>> accessed 30 June 2022

³⁵⁵ US Environmental Protection Agency, 'Global Greenhouse Gas Emissions Data' <<https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>> accessed 30 June 2022 (referring to Thomas A Boden, Gregg Marland and Robert J Andres, 'National CO2 Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2014' [2017] Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy <https://data.ess-dive.lbl.gov/view/doi:10.3334/CDIAC/00001_V2017> accessed 30 June 2022).

³⁵⁶ Riccardo Valentini and others, '2014: Europe' in Vicente Barros and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014).

³⁵⁷ Climate Action Tracker, EU <<https://climateactiontracker.org/countries/eu/>> accessed 30 June 2022

Since the ground-breaking 2015 decision of the Hague District Court in *Urgenda*, which revolved around national GHG emissions reduction targets and concerned the Dutch government's international human rights obligations,³⁵⁸ Europe has witnessed a boom in rights-based climate change litigation.³⁵⁹ Over the last several years, individuals and NGOs have brought more than a dozen of such cases before European national and supranational courts, making Europe the major arena for rights claims in climate change litigation.³⁶⁰ As shall be demonstrated in this chapter, rights claims in European climate change cases have typically challenged national GHG emissions reduction targets. Furthermore, compared to rights-based climate change litigation outside Europe, rights claims in Europe have made prolific use of regional human rights law, namely, the ECHR. As for constitutional rights claims, the most notable examples are the cases in Norway³⁶¹ and Ireland,³⁶² where claimants invoked, among other things, the right to a healthy environment – enshrined in the former's Constitution and unwritten, or unenumerated, in the latter.

4.2 The first successful challenge to national GHG emissions reduction targets in the world: *Urgenda v The Netherlands*

With regard to its place in climate change litigation, *Urgenda* signalled a new era for climate change litigation in general, and for the use of human rights law in such cases in particular. The claimant – the Dutch NGO Urgenda – brought a claim against the Dutch government, referring to the following facts: a) that global GHG emission levels, particularly CO₂ (carbon dioxide) levels, lead to dangerous climate change with potentially catastrophic consequences; b) that the emissions in

³⁵⁸ *Urgenda v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015).

³⁵⁹ Annalisa Savaresi and Joana Setzer, 'Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers' [2022] 13 *Journal of Human Rights and the Environment* 7, 10-11.

³⁶⁰ *ibid.*

³⁶¹ Namely, *Greenpeace Nordic* – see section 4.5 in this chapter.

³⁶² Namely, *Friends of the Irish Environment* – see section 4.4 in this chapter.

The Netherlands additionally contribute to global climate change, with the state being one of the major per capita emitters in the world; and c) as these emissions occur on the territory of the state, the latter has the capability to manage, control and regulate them by developing adequate policies.³⁶³ However, as the existing policy fell short of requiring the reduction of national annual emissions by forty per cent, or in any case at least twenty-five per cent, compared to 1990 by the end of 2020, it allegedly breached Articles 2 and 8 of the ECHR.³⁶⁴

4.2.1 The initial failure of right claims despite a favourable outcome

In a historic move in 2015, the Hague District Court ruled in favour of the claimants, becoming the first ever court in the world to direct a government to reduce its GHG emissions.³⁶⁵ Importantly, though, the claimants' success stemmed not from the ECHR, but from the duty of care under the Dutch private law standards.³⁶⁶ The District Court's interpretation of human rights law was fairly limited. The court held that as a legal entity, Urgenda itself could not be identified as a direct or indirect victim of a violation of the above-mentioned ECHR articles,³⁶⁷ thus failing to meet the *ratione personae* requirement under Article 34 of the ECHR.³⁶⁸ However, the court recognised that both Articles 2 and 8 and their interpretation by the ECtHR, particularly in cases concerning environmental pollution, can be used when interpreting and implementing the standard of care under the Dutch private law.³⁶⁹ For this reason, the court deemed it proper to discuss the position of the ECtHR on

³⁶³ *Urgenda v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015) [3.1] – [3.2].

³⁶⁴ *ibid.*

³⁶⁵ *ibid* [5.1].

³⁶⁶ Namely, the unwritten standard of care under Book 6, Section 162 of the Dutch Civil Code.

³⁶⁷ *Urgenda v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015) [4.45].

³⁶⁸ For a detailed discussion on the challenges to Urgenda's standing on non-rights grounds see Samvel Varvastian, 'Access to Justice in Climate Change Litigation from a Transnational Perspective: Private Party Standing in Recent Climate Cases' in Jerzy Jendrośka and Magdalena Bar (eds), *Procedural Environmental Rights: Principle X of the Rio Declaration in Theory and Practice* (Intersentia 2017) 500-501.

³⁶⁹ *Urgenda v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015) [4.46].

the relevance of Articles 2 and 8 with regard to human rights' protection from environmental degradation.³⁷⁰

4.2.2 The successful appeal

Following the decision of the District Court, the Dutch government announced its plans to begin its implementation, but also filed an appeal with the Hague Court of Appeal.³⁷¹ This appeal was not successful, as the Court of Appeal went even further in its interpretation concerning the human rights obligations of the state. The Court of Appeal reversed the District Court's unfavourable decision with regard to Urgenda's reliance on Articles 2 and 8 of the ECHR by holding that the *ratione personae* requirement under Article 34 applies only to the ECtHR but not to Dutch courts,³⁷² which rely on national legislation, granting NGOs access to justice in such cases.³⁷³ Assessing the case on the merits, the Court of Appeal reiterated the position of the ECtHR that Articles 2 and 8 of the ECHR are also applicable in the context of environmental degradation and, in the present case, their relevance with regard to climate policy ambition stems from the dangerous nature of climate change.³⁷⁴ Delving into a page-long enumeration of climate change impacts,³⁷⁵ the Court of Appeal concluded that 'it is appropriate to speak of a real threat of

³⁷⁰ *ibid* [4.47] – [4.50].

³⁷¹ See Government of the Netherlands, Climate policy <<https://www.government.nl/topics/climate-change/climate-policy>> accessed 30 June 2022

³⁷² *The Netherlands v Urgenda Foundation* case 200.178.245/01 (The Hague Court of Appeal, 9 October 2018) [35].

³⁷³ *ibid* [36] – [38].

³⁷⁴ *ibid* [43]:

[T]he State has a positive obligation to protect the lives of citizens within its jurisdiction under Article 2 ECHR, while Article 8 ECHR creates the obligation to protect the right to home and private life. This obligation applies to all activities, public and non-public, which could endanger the rights protected in these articles, and certainly in the face of industrial activities which by their very nature are dangerous. If the government knows that there is a real and imminent threat, the State must take precautionary measures to prevent infringement as far as possible.

³⁷⁵ *ibid* [44].

dangerous climate change, resulting in the serious risk that the current generation of citizens will be confronted with loss of life and/or a disruption of family life'.³⁷⁶

4.2.3 The final triumph of rights claims

Ultimately, Urgenda's victory was cemented by the Supreme Court of the Netherlands,³⁷⁷ and this time, the interpretation of human rights law with regard to climate change was very elaborate. Throughout nearly ten pages, the Supreme Court meticulously discussed the rights and duties arising under the ECHR in the context of environmental pollution, providing extensive references to the ECtHR case law³⁷⁸ in order to answer the fundamental question – whether Articles 2 and 8 of the ECHR oblige the government 'to offer protection from the genuine threat of dangerous climate change'.³⁷⁹ In the end, the Court deemed the answer to be 'sufficiently clear', with no need to refer the matter to the ECtHR for an advisory opinion, as is allowed under Protocol No. 16 to the ECHR.³⁸⁰ This answer stemmed primarily from the fact that the obligation to take appropriate steps to address an imminent threat under Articles 2 and 8 of the ECHR may encompass both mitigation measures (measures to prevent the threat from materialising) and adaptation measures (measures to lessen or soften the impact of that materialisation).³⁸¹ Furthermore, the Supreme Court observed that the response to climate change has to be collective, as reflected in the UNFCCC, thus partial responsibility is in place: 'each country is responsible for its part and can therefore be called to account in that respect'.³⁸²

³⁷⁶ *ibid* [45].

³⁷⁷ *The Netherlands v Urgenda Foundation* case ECLI:NL:HR:2019:2007 (Supreme Court of the Netherlands, 20 December 2019).

³⁷⁸ *ibid* [5.1] – [6.6].

³⁷⁹ *ibid* [5.1].

³⁸⁰ *ibid* [5.6.4].

³⁸¹ *ibid* [5.2.3].

³⁸² *ibid* [5.7.5].

Accordingly, the Supreme Court rejected the government's drop-in-the-ocean argument by stating that 'no reduction is negligible':³⁸³

Partly in view of the serious consequences of dangerous climate change ... , the defence that a state does not have to take responsibility because other countries do not comply with their partial responsibility, cannot be accepted. Nor can the assertion that a country's own share in global greenhouse gas emissions is very small and that reducing emissions from one's own territory makes little difference on a global scale, be accepted as a defence. Indeed, acceptance of these defences would mean that a country could easily evade its partial responsibility by pointing out other countries or its own small share. If, on the other hand, this defence is ruled out, each country can be effectively called to account for its share of emissions and the chance of all countries actually making their contribution will be greatest, in accordance with the principles laid down in the preamble to the UNFCCC.³⁸⁴

With this determination, the Supreme Court concluded that in order to ensure adequate protection from the threat to the rights under Articles 2 and 8 of the ECHR resulting from climate change, it should be possible to invoke those rights against individual states, including with regard to partial responsibility.³⁸⁵ In other words, the Supreme Court interpreted Articles 2 and 8 of the ECHR as obliging the contracting states to do their part to counter the threats to human rights posed by climate change,³⁸⁶ thus upholding the Court of Appeal ruling.³⁸⁷ Additionally, the Court rejected arguments that such a decision violated the separation of powers principle, as the decision did not order the government to take any specific steps, leaving that to the government's discretion.³⁸⁸

³⁸³ *ibid* [5.7.8].

³⁸⁴ *ibid* [5.7.7].

³⁸⁵ *ibid* [5.7.9].

³⁸⁶ *ibid* [5.8].

³⁸⁷ *ibid* [5.9.1].

³⁸⁸ See the discussion in part 6.

4.3 Trying to replicate Urgenda's success outside the Netherlands: a failed attempt in Switzerland

The case of *Urgenda* was quickly followed by rights-based climate change litigation in other European countries. Among such cases was the Swiss case of *KlimaSeniorinnen*,³⁸⁹ which in large part mirrored *Urgenda*: the claimants challenged the national GHG emissions reduction targets, namely Article 3(1) of the Federal Act on the Reduction of CO₂ Emissions,³⁹⁰ that stipulated national emissions' reduction by twenty per cent compared to 1990 as early as 2020.³⁹¹ The claimants maintained that as an industrialised country, Switzerland must reduce its GHG emissions by twenty-five to forty per cent by 2020 as well as adopt a more stringent emissions reduction target for 2030 than the one proposed in the context of the legislative proceedings.³⁹² The claimants invoked the rights under Articles 2 and 8 of the ECHR as well as the right to life under Article 10(1) of the Swiss Constitution.³⁹³ However, there were also two significant differences from the *Urgenda* case: first, the claimants in *KlimaSeniorinnen* were much more specific about their claim, requesting not only tightening of the national emissions reduction target, but also suggesting concrete protection measures, such as governmental promotion of electric vehicles and a carbon tax on motor fuels, as well as measures addressing building standards and the agricultural sector – to ensure proper implementation of enhanced reduction targets.³⁹⁴ Second, and even

³⁸⁹ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications* A-2992/2017 (Federal Administrative Court, 27 November 2018).

³⁹⁰ Federal Act on the Reduction of CO₂ Emissions (CO₂ Act, SR 641.71).

³⁹¹ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications* A-2992/2017 (Federal Administrative Court, 27 November 2018) 7.

³⁹² *ibid.*

³⁹³ Switzerland's Constitution of 1999 with Amendments through 2014, Art 10(1): 'Every person has the right to life. The death penalty is prohibited.'

³⁹⁴ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications* A-2992/2017 (Federal Administrative Court, 27 November 2018) 8, [6.1]. Notably, in *Urgenda*, the District Court was also presented with documentation from both the claimants and the government concerning the adoption of similar measures (*Urgenda v The Netherlands* C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015) [4.72]), however, the claimants did not ask the court to order the government to adopt them.

more importantly in the context of human rights claims, the claimants – a group of elderly Swiss women – alleged that they were particularly vulnerable to the impacts of climate change, namely because of ‘the risks of heat-related death as well as impairment of health and well-being due to the more frequent occurrence of heat waves [that] are considerably higher for older women over 75 years of age than for the rest of the population’.³⁹⁵

4.3.1 Justiciability and standing

While acknowledging that prevailing doctrine and case law allow challenge to both positive and negative obligations of the government,³⁹⁶ the Swiss Federal Administrative Court dismissed the claim concerning implementation and toughening of reduction measures for non-justiciability and within the competence of the Federal Council.³⁹⁷ A more fundamental question, however, was whether the claimants could bring a claim based on the fact that their rights were affected with a ‘certain intensity’, which the court answered positively.³⁹⁸ The court’s analysis on this point, however, presented a remarkable level of ambiguity. First, the court agreed that the claimants were affected by climate change impacts more strongly than is the general public due to their age and health conditions.³⁹⁹ Second, to

³⁹⁵ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications A-2992/2017* (Federal Administrative Court, 27 November 2018) 7.

³⁹⁶ *ibid* [6.2].

³⁹⁷ *ibid* [5.3].

³⁹⁸ *ibid* [6.3.3]:

[I]t is sufficient that rights or obligations are affected and that there is therefore a certain intensity of being affected. If potential infringements of fundamental rights are involved, it is essentially a matter of the scope of the fundamental right whether the effect of the infringement is sufficient to assume that rights or obligations have been affected. This does not, however, presuppose an infringement of the protected fundamental right; the question whether such an infringement has occurred is a matter for the material assessment of the case.

³⁹⁹ *ibid* [7.1]:

The appellants derive from Art. 10 Const. as well as Art. 2 and 8 ECHR that they are entitled to positive state protection from an excessive global temperature increase. Appellants 2-5, they claim, are particularly affected by global warming and its consequences. Scientific studies of past summer heat waves had confirmed the statistical finding that in particular older women over 75 years of age were impacted most by summer heat waves in terms of mortality and adverse health effects. In addition, appellant 3 suffered from cardiovascular

determine the case's admissibility and distinction from *actio popularis*, the court deemed it necessary to examine 'whether the extent to which the [claimants] are affected goes beyond that of the general public'.⁴⁰⁰ In order to do that, the court limited itself to a one page-long enumeration of climate-related extremes and the associated impacts on human communities in Switzerland, based on the findings of both the IPCC Fifth Assessment Report and national reports.⁴⁰¹ The result of this analysis was the court's conclusion that although climate change affects different groups in different ways, ranging from economic interests to adverse health effects affecting the general public, 'the group of women older than 75 years of age is not particularly affected by the impacts of climate change'.⁴⁰²

4.3.2 The threshold for triggering violation of the ECHR rights

The case was subsequently appealed to the Federal Supreme Court of Switzerland, which upheld the ruling of the lower court.⁴⁰³ But the Supreme Court's decision was based on a very different kind of argumentation. Specifically, the Supreme Court delved into a rather specious discussion on the future impacts of climate change, namely, the fact that the limits of 'well below 2°C and even 1.5°C global warming are not expected to be exceeded in the near future',⁴⁰⁴ and any consequences of exceeding the limits of such global warming 'shall only occur in the medium to more distant future'.⁴⁰⁵ Based on this, the Supreme Court maintained that the claimants' rights to life and to respect for private life under Articles 2 and 8 of the ECHR '[do] not appear to be threatened by the alleged omissions to such an extent at the present time that one could speak of their own rights being affected ... in a

illness and appellants 4 and 5 from asthma, which exacerbated the health impacts. The appellants were thus more strongly impacted by the consequences of global warming in legal positions protected by (fundamental) rights than the general public, and for this reason had an interest worthy of protection in the issuance of a material ruling

⁴⁰⁰ *ibid* [7.4.1].

⁴⁰¹ *ibid* [7.4.2].

⁴⁰² *ibid* [7.4.3].

⁴⁰³ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications* 1C_37/2019 (Federal Supreme Court, 5 May 2020).

⁴⁰⁴ *ibid* [5.3].

⁴⁰⁵ *ibid* [5.4].

sufficient intensity’,⁴⁰⁶ thus making the case inadmissible as *actio popularis*.⁴⁰⁷ The Supreme Court reached an identical conclusion with regard to the right to life under Article 10(1) of the Swiss Constitution.⁴⁰⁸

4.4 Testing the unwritten constitutional right to a healthy environment to challenge national GHG emissions reduction targets in Ireland

The Irish case of *Friends of the Irish Environment v Ireland*⁴⁰⁹ also concerned a challenge to national GHG emissions reduction targets. The claimant NGO challenged the adequacy of the national mitigation plan, approved under the State’s framework climate legislation – the 2015 Climate Action and Low Carbon Development Act – and concerning emissions reduction up to 2050.⁴¹⁰ The claimant’s key concern was that although the plan aimed to achieve zero net carbon emissions by 2050, it actually allowed an increase in GHG emissions over the initial period of the plan’s implementation.⁴¹¹ Given the cumulative nature of GHG emissions and their persistence in the atmosphere, the claimant argued that allowing further increase in emissions in the near future is unlawful.⁴¹² Similar to other European cases, the claimant alleged violation of Articles 2 and 8 of the ECHR, and of the corresponding constitutional rights as well as of the unwritten right to a healthy environment, arguably derived from other rights under the Irish Constitution.

⁴⁰⁶ *ibid* [5.4].

⁴⁰⁷ *ibid* [5.5].

⁴⁰⁸ *ibid* [6.2] (‘[since] the alleged omissions do not affect them in a legally relevant way in this fundamental right ... , they cannot derive the demands mentioned from this right.’)

⁴⁰⁹ *Friends of the Irish Environment v Ireland* [2019] IEHC 747 (The High Court, 19 September 2019).

⁴¹⁰ *ibid* [12]. The claimants were concerned that the Plan

‘does not specify any or any adequate measures to achieve the management of a reduction of greenhouse gas emissions in order to attain emission levels appropriate for furthering the achievement of the National Transition Objective as provided for and defined in s. 3 of the [Climate Action and Low Carbon Development Act, 2015].’

⁴¹¹ *Friends of the Irish Environment v Ireland* [2020] No: 205/19 (Supreme Court, 31 July 2020) [4.3].

⁴¹² *ibid* [4.3], [4.5].

4.4.1 Justiciability as a key concern

The High Court briefly acknowledged the scientific information on the impacts of climate change on human communities⁴¹³ and the necessity to ‘achieve substantial emission reductions in the short term and that the State is failing to do that’.⁴¹⁴ However, the court’s assessment of the human rights aspect of the claim was very limited. The court conducted a lengthy discussion on the claim’s justiciability, referring to the claim as essentially a request by the applicant to have the court prescribe the way the government’s national mitigation plan would lower emissions,⁴¹⁵ and to the case itself as being ‘complex’ and ‘involving very difficult issues of law and science.’⁴¹⁶

This discussion led the High Court to consider both the ECtHR and national case law.⁴¹⁷ Emphasising the importance of the separation of powers, especially in the context of such complex cases,⁴¹⁸ the court articulated the circumstances where the judiciary has the power to interfere with existing policies – namely, when such intervention is needed to protect against a deliberate breach of constitutional rights and obligations by the government.⁴¹⁹ However, even if a matter or issue is justiciable, it may be that a wide margin of discretion should be afforded to the

⁴¹³ *Friends of the Irish Environment v Ireland* [2019] IEHC 747 (The High Court, 19 September 2019) [6]:

The information and studies opened to this court indicate that there is a relationship between cumulative emissions, temperature rises and global risks to the environment, risk of death, of injury and health particularly in low-lying coastal zones and small island developing states due to storm surges, coastal flooding and sea level rises. There are also reported risks of mortality and morbidity during periods of extreme heat. Food systems may be at risk and there is a risk of loss of rural livelihoods and income. The more one proceeds to global warming of 2°C higher relative to the beginning of the Industrial Revolution the greater are such risks.

⁴¹⁴ *ibid* [9].

⁴¹⁵ *ibid* [61].

⁴¹⁶ *ibid* [76].

⁴¹⁷ *ibid* [71].

⁴¹⁸ *ibid* [92]:

I must accept that a consequence of the separation of powers doctrine is that the court should avoid interfering with the exercise of discretion by the legislature or executive when its aim is the pursuit of policy. Courts are and should be reluctant to review decisions involving utilitarian calculations of social, economic and political preference, the latter being identifiable by the fact that they are not capable of being impugned by objective criteria that a court could apply.

⁴¹⁹ *ibid* [88] – [91].

government.⁴²⁰ The court deemed the latter scenario to be exactly the case on this occasion by holding that the national mitigation plan was consistent with climate legislation under which it was adopted.⁴²¹ Weighing the judicial authority against the discretion enjoyed by the government when discharging its obligations,⁴²² the court deemed that the rights claims were justiciable,⁴²³ which, in turn, led the court to assess the constitutionality of the national mitigation plan. Considering the fundamental disagreement between the parties on what measures are required to be taken in order to maintain a trajectory which will result in the achievement of the objective of a low-carbon country by 2050,⁴²⁴ the court was unpersuaded that the plan failed to achieve the national GHG emissions reduction objective.⁴²⁵ In support of this finding, the court referred to the government's arguments that the national mitigation plan was a flexible mechanism – 'a living document' that would be periodically reviewed, reflecting the 'scientific and technical learning and advancement' to achieve the necessary climate change mitigation.⁴²⁶

⁴²⁰ *ibid* [94].

⁴²¹ *ibid* [112] – [113] and [116] – [117].

⁴²² *ibid* [94]:

I also accept that, even if the court concludes that a matter or issue is justiciable, nevertheless, because of the nature, extent and wording of a statutory obligation, it may be the case that a wide margin of discretion ought to be afforded to the Executive in discharging its obligations. In my view, while the court should be vigilant in ensuring that it does not trespass upon the Executive power of State, nevertheless, consistent with its constitutional functions, the court should also be slow to determine that an issue is not justiciable and therefore excluded from review.

⁴²³ *ibid* [95]:

In contending that the Plan is not justiciable, the respondent emphasises the wording of the Act and the wording of the Plan to illustrate that it is heavily orientated towards policy considerations and the implementation of Government policy. To this end it is instructive to consider the provisions of the Act and in particular, the wording employed in imposing duties and obligations.

⁴²⁴ *ibid* [108].

⁴²⁵ *ibid* [113].

⁴²⁶ *ibid* [117].

4.4.2 Margin of discretion

Although the High Court questioned the claimant's standing to bring constitutional and human rights claims,⁴²⁷ it nevertheless, granted standing.⁴²⁸ However, the court was clearly unprepared to find any violation of these rights:

The constitutional rights which are stated to be infringed are the rights to life [and] the right to an environment consistent with human dignity. Even if I were to accept that these rights are in some way engaged, which I do for the purposes of this case, the difficulty which I perceive in the applicant's claim is that it is seeking to have the court declare that it is the Plan which is impacting upon those constitutional rights. I am not satisfied that it has been established that the making or approval of the Plan by the respondent has the effect of breaching those rights. Accepting for the purposes of this case, that there is an unenumerated right to an environment consistent with human dignity, in my view, it cannot be concluded that it is the plan which places these rights at risk. As I previously stated, I could not reasonably conclude that the Plan resiles from the national transition objective as specified in the legislation nor could I reasonably conclude that the plan runs contrary to the national policy on climate change. The Plan is but one, albeit extremely important, piece of the jigsaw.⁴²⁹

⁴²⁷ *ibid* [130]: 'I do not understand the applicant to argue that as an incorporeal body it enjoys certain of the personal rights contended for.'

⁴²⁸ *ibid* [132]:

There must be a question over the applicant's standing to maintain these proceedings, at least insofar as the fundamental constitutional rights which can only be innate to humans are concerned, nevertheless, bearing in mind the decision ... in *Merriman* and being satisfied that the *bona fides* of the applicant is not called in question, I am satisfied to accept for the purpose of these proceedings, that the applicant has established that it has *locus standi*. [T]he applicant seeks to agitate important issues, including those of a constitutional nature, affecting its members and indeed the public at large, it raises significant issues in relation to environmental concerns which is a factor that ought to be taken into account by this Court in deciding, whether in the interests of justice, that the applicant has such standing.

⁴²⁹ *ibid* [133].

The court, therefore, was convinced that the government adopted the Plan as part of its wide margin of discretion in such policy issues, which is allowed by the ECtHR case-law.⁴³⁰ The court, therefore, refused to grant the reliefs sought.⁴³¹

4.4.3 The prominent role of climate science

The claimant appealed the decision, and after receiving permission to leapfrog the Court of Appeal in February 2020, the appeal was brought before the Supreme Court of Ireland.⁴³² Acknowledging from the outset that ‘climate change is undoubtedly one of the greatest challenges facing all states’,⁴³³ the Supreme Court, first deemed it proper to address the scientific background of the case,⁴³⁴ even though the parties did not dispute the relevant science.⁴³⁵ And this turned out to be a harbinger of the Supreme Court’s science-based approach to deciding the case. One of the factors mentioned by the Supreme Court in its discussion of the scientific aspects of climate change was the impacts of climate change on Ireland, identified in the Irish Environmental Protection Agency’s report, including: a) an increased risk from extreme weather likely to cause death, injury, ill health and disrupted livelihoods; b) the risk that hundreds of square kilometres of coastal land could be inundated due to sea level rises; c) more extreme storm activity which would have the potential to bring the devastation of storm surges to the coast of Ireland; d) a likely increase in heat-related mortalities and morbidity, together with a further risk in food-borne disease and infectious diseases; and e) a probable

⁴³⁰ *ibid* [143] – [144]. In particular, the court referred to the ECtHR cases of *Budayeva v Russia* application nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02 (20 March 2008) and *Fadeyeva v Russia* application no. 55723/00 (judgment of 9 June 2005). For a discussion on margin of discretion, see chapter 3 of this thesis.

⁴³¹ *Friends of the Irish Environment v Ireland* [2019] IEHC 747 (The High Court, 19 September 2019) [145] – [146]. Curiously, despite this finding, the High Court dedicated nearly two pages of its decision to describe the decision of the Hague Court of Appeal in *Urgenda*, including the latter’s interpretation of the state’s obligations with regard to emissions reduction under arts 2 and 8 of the ECHR. *ibid* [135] – [138].

⁴³² The Supreme Court determination in *Friends of the Irish Environment v Ireland* [2020] IESCDT 13 (Supreme Court, 13 February 2020).

⁴³³ *Friends of the Irish Environment v Ireland* [2020] No: 205/19 (Supreme Court, 31 July 2020) [1].

⁴³⁴ *ibid* [3.1] – [3.8].

⁴³⁵ *ibid* [2.2].

increase in cases of skin cancer and potential mental health effects.⁴³⁶ Another important factor, in the Supreme Court's view, was the potential triggering of the tipping points – irreversible adverse events.⁴³⁷ The Supreme Court considered the latter to be particularly important when deciding the urgency of climate change mitigation measures.⁴³⁸

4.4.4 Can NGOs bring rights claims?

The Supreme Court's analysis of rights claims focused on two aspects: first, the claimant NGO's standing to bring rights claims, and second, the interpretation of an unenumerated right to a healthy environment. On the claimant's standing, the Supreme Court was of opinion that as a corporate body the claimant 'does not enjoy the personal constitutional rights', hence the question was whether it could have standing to bring a claim based on the rights of others.⁴³⁹ This led the Supreme Court to consider the national case law,⁴⁴⁰ according to which, claimants must demonstrate 'that they have been affected in reality or as a matter of fact by virtue of the measure which they seek to challenge on the basis that it breaches rights'.⁴⁴¹ The circumstances in which it could be permissible to grant standing outside the above-mentioned principle must necessarily be limited and involve situations where there would be a real risk that rights would not be vindicated unless a more relaxed attitude to standing were adopted.⁴⁴² Consequently, the Supreme Court was reluctant to grant the claimant NGO standing to bring such

⁴³⁶ *ibid* [3.6].

⁴³⁷ *ibid* [3.7].

⁴³⁸ *ibid*: 'It would certainly seem to me on the evidence that the practical irreversibility and significant consequences of reaching some of the tipping points in question adds a further imperative to the early tackling of global warming.'

⁴³⁹ *ibid* [7.5], [7.7]. As for standing to bring the claims under the ECHR, in the Supreme Court's view, the main question was whether the claimant can bring such claims before the Irish national courts, despite being unable to bring them before the ECtHR [7.6]; as discussed above, the same question was addressed by the Dutch courts in *Urgenda* – see section 4.2 in this chapter.

⁴⁴⁰ *ibid* [7.8] – [7.22]. See also [5.27], [7.19] – [7.21], in particular, the Supreme Court's case of *Mohan v Ireland* [2019] IESC 18.

⁴⁴¹ *Friends of the Irish Environment v Ireland* [2020] No: 205/19 (Supreme Court, 31 July 2020) [7.21]

⁴⁴² *ibid*.

rights claims as leading to potentially unwanted 'situation where standing was greatly expanded and the absence of standing would largely be confined to cases involving persons who simply maintain proceedings on a meddlesome basis'.⁴⁴³ For the same reason, the Supreme Court declined to recognise standing to bring the ECHR claims.⁴⁴⁴

4.4.5 Criticism of the unwritten constitutional right to a healthy environment

The Supreme Court was also reluctant to accept the High Court's treatment of an unenumerated right to a healthy environment by expressing concerns about the very accuracy of the term 'unenumerated right' and a potentially more suitable term 'derived rights' as part of the analysis on the existence of this right and its applicability in the present case.⁴⁴⁵ The Supreme Court viewed the use of the term 'unenumerated' as potentially dangerous and as conveying an impression that judges can identify rights of which they approve and deem to be part of the Constitution,⁴⁴⁶ which could lead to a potential 'blurring of the separation of powers'.⁴⁴⁷

Furthermore, the Supreme Court suggested a series of critical interrelated questions to determine the meaning of the right to a healthy environment,⁴⁴⁸ which the High Court arguably failed to provide:

If [the right to a healthy environment] does not extend existing recognised rights, then there is no need for it. If it does extend existing recognised rights, then there needs to be at least some general clarity about the nature of the right so that there can be a proper analysis of whether the

⁴⁴³ *ibid* [7.22]. These claims were therefore qualified as *actio popularis*.

⁴⁴⁴ *ibid* [7.23] – [7.24].

⁴⁴⁵ *ibid* [8.4].

⁴⁴⁶ *ibid* [8.5]. See also [8.6].

⁴⁴⁷ *ibid* [8.9].

⁴⁴⁸ *ibid* [8.10]:

What exactly does it mean? How does it fit into the constitutional order? Does it really advance rights beyond the right to life? If not, then what is the point of recognising such a right? If so, then in what way and within what parameters?

recognition of the asserted right can truly be derived from the Constitution itself. In my view, the right to an environment consistent with human dignity, or alternatively the right to a healthy environment ... as accepted by the trial judge for the purposes of argument in this case, is impermissibly vague. It either does not bring matters beyond the right to life ... , in which case there is no need for it. If it does go beyond those rights, then there is not a sufficient general definition (even one which might, in principle, be filled in by later cases) about the sort of parameters within which it is to operate.⁴⁴⁹

The Supreme Court also rejected the idea of relying on examples of other countries with the recognised constitutional right to a healthy environment, observing, among other things, that the constitutional recognition of environmental rights followed ‘different models’, but has been largely absent ‘in countries within the broad common law family’.⁴⁵⁰ The Court, therefore, declined to recognise that such a right can be derived from the Irish Constitution.⁴⁵¹ That said though, the Supreme Court emphasised that this decision did not affect the relevance of considering already recognised rights in the context of climate change. First, the Supreme Court indicated that had claimants satisfied the standing requirement, the courts would need to consider the circumstances in which climate change measures (or the lack of them) might interfere with the right to life.⁴⁵² Second, the Court clearly did not view such judicial assessment of rights as non-justiciable:

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 ...), then the 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

⁴⁴⁹ *ibid* [8.11].

⁴⁵⁰ *ibid* [8.12] – [8.13].

⁴⁵¹ *ibid* [8.17].

⁴⁵² *ibid* [8.14].

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.⁴⁵³

Finally, the Supreme Court did not rule out the possibility that existing constitutional rights could give rise to specific obligations on the part of the State with regard to climate change.⁴⁵⁴

4.5 Challenging permits: the Norwegian experience

Combining elements of other rights-based climate change cases before European courts, the Norwegian case of *Greenpeace Nordic*⁴⁵⁵ offered a completely new perspective. In *Greenpeace Nordic*, the claimants challenged the 2016 governmental decree⁴⁵⁶ that awarded ten licences for the production of petroleum on the Norwegian continental shelf.⁴⁵⁷ While on the face of it, the claimants challenged a permit, the essence of the claim was much more complex because it concerned potential emissions abroad caused by the burning of fossil fuels that would be produced as a result of the contested decree and then exported.⁴⁵⁸ The claimants alleged violation of Articles 2 and 8 of the ECHR and of the corresponding

⁴⁵³ *ibid* [8.16].

⁴⁵⁴ *ibid* [8.17]. Notably though, despite the unfavourable outcome on rights, the claimants' statutory argument was successful. After a careful analysis of the contested national mitigation plan, the Supreme Court was convinced that the plan 'falls a long way short' of the statutorily required specificity, as significant parts of its policies are 'excessively vague or aspirational.' In the light of this, the Supreme Court held that the national mitigation plan should be quashed (see [6.46] – [6.49]).

⁴⁵⁵ *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 16-166674TVI-OTIR/06 (Oslo District Court, 4 January 2018).

⁴⁵⁶ Royal Decree of 10 June 2016 on awarding production licences on the Norwegian continental shelf 'the 23rd licensing round'.

⁴⁵⁷ *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 16-166674TVI-OTIR/06 (Oslo District Court, 4 January 2018) [1.1].

⁴⁵⁸ *ibid* [1.2] – [1.4], [3.1].

rights under Articles 93⁴⁵⁹ and 102⁴⁶⁰ of the Norwegian Constitution as well as of the constitutional right to a healthy environment under Article 112,⁴⁶¹ because the government arguably did not consider these rights when issuing the contested decree.

4.5.1 Interpreting the constitutionally recognised right to a healthy environment under Article 112

The decision of the Oslo District Court revolved around the applicability and interpretation of Article 112, which was among the main points of disagreement between the parties.⁴⁶² The court's assessment focused on two questions – whether Article 112 is a rights provision⁴⁶³ and, if so, what are its parameters and its relevance in the present case.⁴⁶⁴ With regard to the first question, the court deemed it obvious from the preparatory works that Article 112 is a rights provision.⁴⁶⁵ With regard to the second question, the court agreed with both parties that the right to a healthy environment under Article 112 covers both

⁴⁵⁹ Norway's Constitution of 1814 with Amendments through 2016, art 93:

Every human has the right to life. No one can be sentenced to death. No one must be subjected to torture or other inhuman or degrading treatment or punishment. No one shall be held in slavery or forced labour. The authorities of the State shall protect the right to life and oppose torture, slavery, forced labour and other forms of inhuman or degrading treatment.

⁴⁶⁰ *ibid* art 102:

Everyone has the right to respect for his private and family life, his home and his correspondence. Search of private homes shall not be made except in criminal cases. The authorities of the State shall secure the protection of personal integrity.

⁴⁶¹ *ibid* art 112:

Every person has a right to an environment that is conducive to health and to natural surroundings whose productivity and diversity are preserved. Natural resources should be made use of on the basis of comprehensive long-term considerations whereby this right will be safeguarded for future generations as well.

In order to safeguard their right in accordance with the foregoing paragraph, citizens are entitled to be informed of the state of the natural environment and of the effects of any encroachments on nature that are planned or commenced.

The State authorities shall issue further provisions for the implementation of these principles.

⁴⁶² *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 16-166674TVI-OTIR/06 (Oslo District Court, 4 January 2018) [5.1].

⁴⁶³ *ibid* [5.2.1].

⁴⁶⁴ *ibid* [5.2.2].

⁴⁶⁵ *ibid* [5.2.1].

traditional environmental harms and climate change.⁴⁶⁶ A more complex question, however, was when Article 112 could be triggered, because as a rights provision, it cannot be invoked in case of every encroachment that has a negative impact on the environment, unless such a negative impact exceeds a certain threshold.⁴⁶⁷

4.5.2 Causation

Acknowledging the international obligations to reduce GHG emissions within their territories, the court considered that the right to a healthy environment under Article 112 is not applicable in the context of emissions abroad from Norway's exported oil and gas.⁴⁶⁸ The key factors that determined the court's conclusion on this were the alleged uncertainty about how much emissions would be produced as a result of the contested decree and the fact that in any case they would cause 'only an extremely marginal increase of total Norwegian emissions'.⁴⁶⁹ The court was satisfied that the Norwegian government had been sufficiently involved in a range of measures that mitigate both climate change (for example, the adoption of the national emissions trading system) and in addressing local environmental harms resulting from petroleum production activities on the continental shelf.⁴⁷⁰ Therefore, the court concluded that the contested decree did not violate the right to a healthy environment because 'the risk of both (traditional) environmental harm and climate deterioration as a result of [it] is limited, and remedial measures are sufficient'.⁴⁷¹

⁴⁶⁶ *ibid.*

⁴⁶⁷ *ibid.*

⁴⁶⁸ *ibid* [5.2.2].

⁴⁶⁹ *ibid* [5.2.3].

⁴⁷⁰ *ibid* [5.2.4].

⁴⁷¹ *ibid* [5.2.7].

4.5.3 Justiciability of Article 112

As the claimants appealed, the case was subsequently addressed by the Borgarting Court of Appeal. The appellate court agreed with the District Court that Article 112 of the Norwegian Constitution is a rights provision,⁴⁷² but stated that its interpretation requires strict adherence to the separation of powers, as ‘decisions in cases involving fundamental environmental issues often entail political balancing and prioritisation’.⁴⁷³ The court considered striking the proper balance to be paramount, as the case concerned ‘Norway’s most important industry from a socio-economic perspective – the petroleum activities – and what many will believe is the most important environmental challenge the world is facing – climate change’.⁴⁷⁴ The court, therefore, concluded that the right to a healthy environment under Article 112 of the Constitution is justiciable:

[T]he courts must be able to set a limit as well for a political majority when the matter involves protecting constitutionally established values. The environment is fundamental in the broadest sense for humans' living conditions, and when compared with other rights the courts have been assigned to protect, it does not seem unnatural to understand Article 112 to mean that in this area as well, the courts must be able to set a limit on the Government's actions.⁴⁷⁵

4.5.4 Traditional arguments against climate action

Like the District Court, the Court of Appeal faced difficulties in terms of assessing the parameters of this constitutional right. The Court of Appeal agreed with the District Court that the right can only be violated when the environmental harm passes a certain threshold, with the severity of the harm being ‘the key criterion,

⁴⁷² *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 18-060499ASD-BORG/03 (Borgarting Court of Appeal, 23 January 2020) [2.2].

⁴⁷³ *ibid.*

⁴⁷⁴ *ibid.*

⁴⁷⁵ *ibid.*

based on the significance for human health and the productive capacity and diversity of the natural environment'.⁴⁷⁶ However, such environmental harm does not necessarily need to materialise and as long as there is a sufficient risk, the right to a healthy environment can be violated.⁴⁷⁷ Still, the threshold for harm should be relatively high.⁴⁷⁸ In other words, the relevance of Article 112 to challenged GHG emissions should be interpreted not 'in isolation' but rather in the context of their 'total effect on the climate and how [these] emissions are included in other emissions'.⁴⁷⁹ Consequently, the court agreed with the claimants on two key issues: that GHG emissions from combustion after export are relevant in the assessment and that the constitutional right to a healthy environment could be relevant when considering decisions in Norway that cause harm abroad, as long as these decisions also cause harms in Norway.⁴⁸⁰ The reason behind this was that unlike the principle of intergenerational solidarity, the international law 'no harm' principle obliging states 'to prevent environmental harm in neighbouring countries ... has not been expressed in the wording of Article 112, nor have any clear references been made to [it] in the preparatory works'.⁴⁸¹

Accordingly, the Court of Appeal considered the impacts of climate change in Norway, as well as the projected GHG emissions resulting from the challenged decree, including from the combustion abroad.⁴⁸² The court's position on this, however, resulted in ambiguity. On the one hand, the court acknowledged that fulfilment of GHG emissions reduction targets accepted by Norway through its participation in the Paris Agreement 'requires drastic cuts in emissions ... which is directly in opposition to searching for new discoveries'.⁴⁸³ On the other hand, the court gave considerable weight to the fact that GHG emissions in Norway can

⁴⁷⁶ *ibid* [2.3].

⁴⁷⁷ *ibid*.

⁴⁷⁸ *ibid*.

⁴⁷⁹ *ibid* [2.4].

⁴⁸⁰ *ibid*.

⁴⁸¹ *ibid*.

⁴⁸² *ibid* [3.1] – [3.4].

⁴⁸³ *ibid* [3.2].

decrease in other sectors, following ‘prioritisations in climate policy’.⁴⁸⁴ The court emphasised that such prioritisations ‘involve socio-economic and political balancing’ that courts should arguably be ‘constrained in reviewing’.⁴⁸⁵

Ultimately, it was the latter considerations that determined the court’s position. First, the court believed that the issue of ‘the actual significance of Norwegian exports of oil and gas for global emissions is ... complicated and controversial’, because arguably, ‘cuts in Norwegian production might quickly be replaced by oil supplied from other countries’.⁴⁸⁶ Also, the court seemed satisfied that even drastic global impacts of climate change would not be an issue for Article 112 assessment as long as these impacts are not ‘serious enough’ in Norway itself.⁴⁸⁷ Curiously, on this occasion the court also referred to climate change adaptation measures in Norway that ameliorate any such impacts.⁴⁸⁸ In other words, the court gave greater weight to measures that were supposed to deal with climate change harms than to measures that would have helped prevent such harms in the first place. Finally, the court considered the government’s persistent rejection of phasing out of Norwegian oil activities to be a clear demonstration of the importance of these activities for the Norwegian economy.⁴⁸⁹ The court, therefore, held that the threshold for triggering Article 112 was not exceeded.⁴⁹⁰

4.5.5 Setting the threshold for the ECHR rights very high

Apart from the above-mentioned discussion on the constitutional right to a healthy environment, the Court of Appeal also addressed the potential violation of the rights to life and to respect for private and family life under Articles 2 and 8 of the ECHR respectively, including by providing reference to the ECtHR case law.⁴⁹¹

⁴⁸⁴ *ibid.*

⁴⁸⁵ *ibid.*

⁴⁸⁶ *ibid* [3.3].

⁴⁸⁷ *ibid.*

⁴⁸⁸ *ibid.*

⁴⁸⁹ *ibid.*

⁴⁹⁰ *ibid* [3.5].

⁴⁹¹ *ibid* [4.2].

However, the court's interpretation of these rights was equally narrow. The court merely acknowledged that:

With respect to the consequences of climate changes in Norway, it cannot be ruled out that these will result in loss of human life, for example through floods or slides in areas that are particularly exposed to this, [h]owever, the relationship between the production licences ... and loss of human life does not clearly fulfil the requirement for a 'real and immediate' risk.⁴⁹²

In particular, the court favoured the drop-in-the-ocean argument, by stating 'that it is uncertain whether emissions will occur based on the [licensing] decision, and that these will in any event be marginal when compared with total global emissions'.⁴⁹³ The court also observed that if the contested decree was deemed to be a potential threat to Articles 2 and 8 of the ECHR, the court would assess whether the government has met its positive obligations to protect these rights; however, such an assessment would be no different from the one carried out by the court in the context of the constitutional right to a healthy environment.⁴⁹⁴

Furthermore, the court held that since the case was brought by NGOs, 'serious consequences are required for private life, family life and home for the inhabitants of Norway at a general level' to trigger Article 8 of the ECHR in contrast to the case if the lawsuit had been individualised, for example, in the case of 'inhabitants in specific areas who are particularly exposed'.⁴⁹⁵ The court, though, reiterated that it did not see any 'direct and immediate link' between the emissions that might result from the decree and any such 'serious consequences for the rights under Article 8 for the inhabitants of Norway at a general level'.⁴⁹⁶ And when confronted with the relevance of the decision in *Urgenda*,⁴⁹⁷ the Court of Appeal held that the allegedly

⁴⁹² *ibid.*

⁴⁹³ *ibid.*

⁴⁹⁴ *ibid* [4.2].

⁴⁹⁵ *ibid* [4.2].

⁴⁹⁶ *ibid.*

⁴⁹⁷ Which, of course, is not binding on the non-Dutch courts but could be used as a benchmark when assessing such cases.

different nature of the cases in the Netherlands and Norway rendered the *Urgenda* ruling of little practical value:

The [claimants] have cited in particular the *Urgenda* case from the Netherlands, which is based on ECHR Articles 2 and 8. There is no doubt that the decision breaks new ground for the application of the ECHR. However, in the opinion of the Court of Appeal, the decision has little transfer value as it involved issues regarding general emissions targets and not, as in this case, specific future emissions from individual fields that might eventually be put into production in the future. There is no conflict between the result the Court of Appeal has arrived at in this case and the result in the *Urgenda* case.⁴⁹⁸

Finally, the court held that the constitutional rights to life and respect for private and family life do not extend beyond the above-mentioned respective rights under the ECHR, especially since the ‘Norwegian constitution, unlike the ECHR, has its own environmental provision’, namely, the right to a healthy environment under Article 112.⁴⁹⁹ The court also referred to the UN Human Rights Committee’s 2019 General Comment on the right to life under Article 6 of the ICCPR, which mentions climate change as one of the most serious threats to the right to life of present and future generations, but concluded that ‘the comment is formulated on this point as encouragement instead of obligations, and the text is too general in any event to have any significance in this case’.⁵⁰⁰

4.5.6 Limited application of Article 112

⁴⁹⁸ *Greenpeace Nordic Association v Ministry of Petroleum and Energy* 18-060499ASD-BORG/03 (Borgarting Court of Appeal, 23 January 2020) [4.2].

⁴⁹⁹ *ibid.*

⁵⁰⁰ *ibid.*

The claimants subsequently appealed the decision to the Supreme Court of Norway, but they were not successful.⁵⁰¹ The Supreme Court agreed with the interpretation of the right to a healthy environment provided by the Court of Appeal and added that Article 112 covers both positive and negative obligations,⁵⁰² thus imposing a duty to refrain from actions that violate the right to a healthy environment. Such an interpretation could have made Article 112 a powerful tool for challenging permits to carry out polluting projects. However, the Supreme Court substantially limited the power of Article 112 by holding that in order for a court to set aside a legislative decision by the government, the latter ‘must have grossly disregarded its duties’ under the above-mentioned Article, thus rendering the threshold ‘very high’.⁵⁰³ Similarly, the Supreme Court considered that Article 112 covers climate change, and could potentially be violated when ‘activities abroad that Norwegian authorities have directly influenced or could take measures against cause harm in Norway’, including ‘situations when combustion abroad of oil or gas produced in Norway leads to harm in Norway as well’.⁵⁰⁴ However, the Supreme Court found no violation of the constitutional right to a healthy environment because the government’s decision to open the maritime areas in question did not grossly disregard the duty under Article 112.⁵⁰⁵ In support of this conclusion, the Supreme Court referred to a number of factors, including the adoption of carbon pricing, investment in renewable energy and carbon capture and storage technology, the adoption of local environmental harm mitigation measures, GHG emissions reduction targets, and so forth.⁵⁰⁶ The Supreme Court therefore found no violation of Article 112.

4.5.7 Declining to follow the *Urgenda* model

⁵⁰¹ *Greenpeace Nordic Association v Ministry of Petroleum and Energy* HR-2020-2472-P, (case no. 20-051052SIV-HRET) (Supreme Court, 22 December 2020).

⁵⁰² *ibid* [143].

⁵⁰³ *ibid* [142].

⁵⁰⁴ *ibid* [149].

⁵⁰⁵ *ibid* [157].

⁵⁰⁶ *ibid* [159] – [163].

For its part, the Supreme Court's engagement with Articles 2 and 8 of the ECHR was considerably more extensive than that of the Court of Appeal.⁵⁰⁷ Like its Dutch counterpart, the Supreme Court acknowledged that the standing requirements under the Norwegian legislation allowed the environmental NGO-claimants to invoke the ECHR in the Norwegian courts.⁵⁰⁸ However, the Supreme Court's interpretation of the applicability of Articles 2 and 8 was fundamentally different and followed the Court of Appeal's line of reasoning. For instance, considering the Article 2 requirement for the risk to be real and immediate, the Supreme Court recognised that '[t]here is no doubt that the effects of climate change in Norway could lead to the loss of human life, for example in the event of a flood or landslide'.⁵⁰⁹ However, the Supreme Court held that the link between the production licenses and possible loss of human life is insufficient, because: a) it is 'uncertain whether or to what extent the decision will actually lead to emissions of [GHGs]', and b) while the threat of climate change is serious, 'the potential impact [of these GHGs] on the climate will be a long way off'.⁵¹⁰ Similarly, the Supreme Court held that unlike local environmental damage, the effects of the possible future GHG emissions resulting from the licenses are not 'direct and immediate', thus failing to qualify as a violation of Article 8 of the ECHR.⁵¹¹ Finally, while making a reference to *Urgenda*, the Supreme Court agreed with the Court of Appeal that the different circumstances in that case rendered it of 'little transfer value'.⁵¹² The Supreme Court therefore upheld the decision of the Court of Appeal, declining to find violation of Articles 2 and 8 of the ECHR.

4.6 Divergent approaches

⁵⁰⁷ *ibid* [164] – [176].

⁵⁰⁸ *ibid* [165]. See also sections 4.2.3-4.3.4 in this chapter.

⁵⁰⁹ *Greenpeace Nordic Association v Ministry of Petroleum and Energy* HR-2020-2472-P, (case no. 20-051052SIV-HRET) (Supreme Court, 22 December 2020) [167].

⁵¹⁰ *ibid* [167] – [168].

⁵¹¹ *ibid* [170] – [171].

⁵¹² *ibid* [172] – [173].

Rights-based climate change litigation before European national courts presents a curious paradox. Unlike any other region discussed in this thesis, European national courts have produced strikingly contrasting decisions when addressing similar, or even identical questions related to the application of rights protected under the ECHR in the context of climate change. The outcomes in the four cases discussed in sections 4.2 to 4.5 reflect three different approaches to rights claims in Europe.

First, the ground-breaking success in *Urgenda* made clear that challenging existing GHG emissions reduction targets by claiming rights explicitly recognised and protected under the ECHR is a viable pathway in climate change litigation. The Dutch courts' – particularly, the Supreme Court's – treatment of the claimed rights followed the ECtHR practice,⁵¹³ even despite the fact that at that time this practice did not cover any climate change cases. The combination of three crucial factors – a) the clearly defined scope of the claim challenging the existing GHG emissions reduction targets, b) the use of the ECHR rights to life and to respect for private and family life, commonly claimed in 'environmental' cases before the ECtHR,⁵¹⁴ and c) the Dutch courts' willingness to expand the interpretation of these rights as covering climate change and imposing positive obligations on the state to adopt more ambitious reduction targets, ultimately determined the success of rights claims in this case. It is therefore unsurprising that *Urgenda* has been widely referred to in subsequent rights-based climate change litigation – not only in the above-mentioned cases before European national courts, but also in cases before courts outside Europe.⁵¹⁵

Second, a cautious, yet potentially viable approach can be observed in *Friends of the Irish Environment*. Unlike *Urgenda*, despite the overall success in *Friends of the*

⁵¹³ See sections 3.2.1.2 and 3.2.3 of this thesis.

⁵¹⁴ *ibid.*

⁵¹⁵ The most notable example is *Juliana v United States* 217 F.Supp.3d 1224, 1269 (D. Or. 2016), where the District Court made the following observation:

[A]lthough this court has no authority outside of its jurisdiction, it is worth noting that a Dutch court, on June 24, 2015, did order a reduction of greenhouse gas emissions nationwide by at least 25% by 2020. ... Thus, regulation by this country, in combination with regulation already being undertaken by other countries, may very well have sufficient impact to redress the alleged harms.

Irish Environment, the rights claims were dismissed and the potential recognition of the unwritten constitutional right to a healthy environment rejected by the Supreme Court of Ireland. That said, the dismissal of the recognised rights' claims entirely stemmed from a restrictive interpretation of NGO standing to bring such claims in Ireland, which is directly opposite to the situation in the Netherlands, where the Supreme Court allowed the claimant NGO standing to bring rights claims. Hence, the Supreme Court of Ireland clearly indicated that were the case initiated by a physical person, the respective rights claims would be considered. Although such a consideration would not guarantee success, it is at least possible that the Irish courts would deem such claims to be justified. And given the overall outcome in the case, it might well be that these rights claims would be successful. As for the right to a healthy environment, because of its absence from the Irish constitution, the viability of such a claim depended on this right's recognition as a 'derived right' by the courts. That, however, did not happen, as the Supreme Court chose to follow a restrictive line of reasoning when interpreting the existence of an unwritten right to a healthy environment.

Third, a restrictive approach was taken in both *KlimaSeniorinnen* and *Greenpeace Nordic*. In both cases, the courts were dismissive of the respective countries' contribution to global GHG emissions and to the potential loss of human life due to climate change. Accordingly, such an approach fails to answer the fundamental question: how severe should the harm (or the risk of the harm) be to exceed the exceptionally high threshold to amount to a violation of the claimed rights? Unfortunately, neither the Swiss nor the Norwegian courts provided an answer. For example, by dismissing the case as *actio popularis*, the Swiss Federal Court followed a line of reasoning that was frequently adopted by the US courts in the past, where the respective courts would deny claimants standing because climate change arguably affects everyone.⁵¹⁶ Even more remarkably, the Swiss Federal

⁵¹⁶ For a discussion, see Samvel Varvastian, 'Access to Justice in Climate Change Litigation from a Transnational Perspective: Private Party Standing in Recent Climate Cases' in Jerzy Jendrośka and Magdalena Bar (eds), *Procedural Environmental Rights: Principle X of the Rio Declaration in Theory and Practice* (Intersentia 2017).

Administrative Court tried to justify this approach by stating that the requested relief cannot ‘make a direct contribution toward reducing greenhouse gas emissions in Switzerland [as] this depends on the decisions of the legislators and regulators as well as of each individual’.⁵¹⁷ However, as has already been discussed in chapter 2 of this thesis and in relation to the case of *Urgenda* in this chapter,⁵¹⁸ such an argument has been refuted by other courts.⁵¹⁹ For its part, the different position adopted by the Swiss Supreme Court reveals yet another problem, namely, the lack of perception of the full magnitude of present climate change impacts on humans: the Court’s conclusion on the non-violation of the claimed rights was based on the assumption that the impacts of climate change are a matter of ‘medium’ or ‘more distant future’.⁵²⁰

As for *Greenpeace Nordic*, the difference between it and *Urgenda* was of course more substantial because the Norwegian case concerned a permit that would lead to harmful activities. But ultimately, the courts’ recognition of the fact that there might be loss of human life resulting from climate change – while holding the government’s decision to contribute to global GHG emissions by issuing the contested permit legal because the risks were arguably assessed – raises equally serious questions to the integrity of such reasoning. *Greenpeace Nordic* can also be distinguished from *Friends of the Irish Environment*, because unlike in Ireland, the claimed right to a healthy environment is explicitly recognised in and protected by the Norwegian constitution.⁵²¹ But again, this difference suggests an extreme rigidity in the Norwegian courts’ approach. For instance, while it may seem that the

⁵¹⁷ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications A-2992/2017* (Federal Administrative Court, 27 November 2018) [8.3].

⁵¹⁸ See the position of the Supreme Court of the Netherlands in *Urgenda. The Netherlands v Urgenda Foundation* case ECLI:NL:HR:2019:2007 (Supreme Court of the Netherlands, 20 December 2019) [5.7.8] (ruling that ‘[t]he defence that a duty to reduce greenhouse gas emissions on the part of the individual states does not help because other countries will continue their emissions cannot be accepted ... : no reduction is negligible’).

⁵¹⁹ Most notably, by the US Supreme Court in *Massachusetts v EPA* 549 US 497, 525-526 (2007) (ruling that the existence of other major GHG emitters such as China and India, should not preclude the US agency from its regulatory duty, because ‘[a] reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere’).

⁵²⁰ *Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications 1C_37/2019* (Federal Supreme Court, 5 May 2020) [5.4].

⁵²¹ Namely, art 112 – see section 4.5.1 in this chapter.

Norwegian courts' interpretation of the right to a healthy environment follows the general approach established in international human rights law (namely that encroachment should exceed certain threshold),⁵²² the fact that the Norwegian courts set this threshold *very high* – namely, only when the government grossly disregards its duties⁵²³ – resulted in an exceptionally restrictive application of this right in cases against individual polluting projects permitted by the Norwegian government.

Two specific points thus emerge from the outcome in *Greenpeace Nordic*. First, despite successful ECHR-based litigation against localised environmental pollution,⁵²⁴ rights claims challenging permits on *climate change* grounds can face considerable difficulties in terms of meeting the threshold requirement. And second, the explicit recognition of the right to a healthy environment in constitutions does not automatically extend protection from environmental harms offered by the more 'established' rights such as the right to life.

The four above-mentioned cases draw a rather polarised and complicated picture of the viability of rights claims in climate change litigation before European national courts. But just how much is this picture indicative of the future of the judicial approach to rights claims in climate change litigation in Europe? After all, it needs to be kept in mind that even the unsuccessful cases in Switzerland and Norway did not shut the door for future rights-based climate change litigation in these countries. Despite adopting a restrictive approach, the respective courts clearly indicated that the claimed rights *could potentially* be violated in the context of climate change.⁵²⁵ In other words, despite some setbacks, rights claims in climate change litigation before European national courts have proved viable. And although such viability has so far been restricted to claims challenging GHG emissions reduction targets, it is foreseeable that developments in case law and in the

⁵²² See chapter 3 of this thesis.

⁵²³ Once again, the fundamental question is what counts as a 'gross' disregard?

⁵²⁴ See sections 3.2.1.2 and 3.2.3 of this thesis.

⁵²⁵ See sections 4.4 and 4.5 in this chapter.

evolving judicial approach could pave the way for the success of other types of challenges before European national courts.

4.7 Supranational courts

Apart from litigation at the national level, rights-based climate change cases have also made their way to the supranational European courts – namely, the EU courts and the ECtHR. As shall be demonstrated below, similar to national courts, the respective supranational courts' approaches have also produced divergent results. The EU courts have followed a restrictive approach on standing and have been dismissive of the EU contribution to global GHG emissions. For its part, the ECtHR has signalled its potential willingness to consider unambitious GHG emissions reduction targets as a violation of the ECHR.

4.7.1 Sweeping challenge to European Union climate policy

The climate change case against the EU, *Carvalho v The European Parliament*,⁵²⁶ also known as 'the People's climate case', was the first rights-based climate change case to be addressed by a supranational court in Europe. As a subject of international law, with its own legal system (that can be described as a supranational sub-system of international law),⁵²⁷ the EU is a member of the UN climate regime, having ratified both the Kyoto Protocol and the Paris Agreement. As a result of these international commitments, the EU has adopted a comprehensive set of measures, including the world's largest GHG emissions trading scheme; effort sharing between member states; petrol and diesel fuels efficiency standards; targets for reducing GHG emissions from motor vehicles; accounting rules on GHG

⁵²⁶ *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019).

⁵²⁷ On the nature of the EU law and its place in international law, see, for example, Bruno de Witte, 'EU law: is it international law?' in Catherine Barnard and Steve Peers (eds), *European Union Law*, 2nd edition (Oxford University Press 2017).

emissions; and rules relating to land use, and forestry.⁵²⁸ Overall, through this policy package, the EU is expected to meet the binding GHG emissions reduction target of at least forty per cent by 2030 compared to 1990 levels.⁵²⁹

This policy package has been challenged by a group of families operating in the agricultural or tourism sectors and residing in various EU countries (including Germany, France, Italy, Portugal and Romania) and in non-EU countries (Kenya and Fiji), as well as by a Swedish NGO representing young indigenous Sami people.⁵³⁰ The claimants alleged that the level of the EU climate policy ambition is not sufficiently high with regard to reducing GHG emissions as the technical and economic capacity of the EU extends to reducing those emissions by fifty to sixty per cent, which is why the legislative package must be annulled in so far as it will allow for emissions in 2030 at a level that is higher than forty to fifty per cent of 1990 levels.⁵³¹ Such dangerous emission levels allow various harms from climate change that will only exacerbate in the future.⁵³² The claimants particularly emphasised the impacts of heatwaves that are already causing damage to human health, in particular to children, and to persons whose professions are dependent on moderate temperatures, such as in the agriculture and tourism sectors.⁵³³ According to the claimants, the legislative package directly affected their legal situation, given that, by requiring an insufficient reduction in GHG emissions and thereby allocating and authorising an excessive volume of such emissions, it infringes their fundamental rights as enshrined in the Charter of Fundamental Rights of the European Union, including the right to life.⁵³⁴

⁵²⁸ *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019) [2].

⁵²⁹ *ibid* [5]. For a discussion on the international law aspects of the EU GHG emissions reduction commitments see Gerd Winter, 'Armando Carvalho and Others v EU: Invoking Human Rights and the Paris Agreement for Better Climate Protection Legislation' [2020] 9 *Transnational Environmental Law* 137, 144-145.

⁵³⁰ *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019) [1].

⁵³¹ *ibid* [18].

⁵³² *ibid* [24].

⁵³³ *ibid*.

⁵³⁴ Charter of Fundamental Rights of the European Union (26 October 2012), OJ C 326, 26.10.2012, p 391, art 2: 'Everyone has the right to life. No one shall be condemned to the death penalty, or executed.'

Both the Council and the Parliament challenged the admissibility of this action, because they claimed that the acts do not directly affect the applicants' legal situation and that the contested provisions setting the target levels of GHG emissions are not, in themselves, capable of affecting the fundamental rights invoked by the applicants.⁵³⁵ They stated that the legislative package does not 'authorise' any person to emit GHGs: it just lays down the minimum requirements with which member states must comply in order to reduce emissions and, accordingly, combat climate change.⁵³⁶ Furthermore, they claimed that the contested provisions are of a general nature and that they can be applied to any natural or legal person and apply to an indeterminate number of natural and legal persons; as a matter of fact, every person around the world is individually concerned by the legislative package.⁵³⁷ However, suggesting that all persons are individually concerned by the contested acts would contradict the relevant standing requirements, which require the existence of genuine distinguishing features.⁵³⁸

The General Court of the EU was persuaded by the defendants' arguments and did not even address the potential violation of the rights claimed by the claimants. Instead, it followed a line of reasoning almost identical to the one adopted by the Swiss court in *KlimaSeniorinnen*, that while 'every individual is likely to be affected one way or another by climate change ...', the fact that the effects of climate change may be different for one person than they are for another does not mean that, for that reason, there exists standing to bring an action against a measure of general application'.⁵³⁹ The court also accepted the defendants' drop-in-the-ocean argument, namely, the global nature of emissions and, therefore, the alleged inability of the EU to reduce the harms posed by climate change by reducing its emissions.⁵⁴⁰ The claimants appealed the case to the European Court of Justice, but

⁵³⁵ *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019) [27].

⁵³⁶ *ibid.*

⁵³⁷ *ibid* [28].

⁵³⁸ *ibid.* See *Plaumann v Commission of the European Economic Community* case 25-62 (European Court of Justice, 15 July 1963).

⁵³⁹ *Carvalho v The European Parliament* T-330/18 (General Court, 8 May 2019) [50].

⁵⁴⁰ *ibid* [60]:

the Court dismissed the appeal on all grounds.⁵⁴¹ Most notably, the Court held that the fact that the claimants were affected by climate change in unique and different ways was not sufficient to demonstrate that the claimants were individually distinguished for the purpose of establishing standing under EU law, hence, their claims were dismissed as *actio popularis*.⁵⁴²

4.7.2 The European Court of Human Rights

Starting from late 2020, several rights-based climate change cases were filed with the ECtHR. These included two petitions of the claimants in *KlimaSeniorinnen*⁵⁴³ and *Greenpeace Nordic*⁵⁴⁴ cases respectively, and the unprecedented *Agostinho v Portugal* petition brought by a group of Portuguese children against thirty-three European states, alleging that unambitious GHG emissions reduction targets currently adopted by these countries violated their rights to life and to respect for private life under Articles 2 and 8 of the ECHR.⁵⁴⁵ The latter case became the very first climate change case filed with the ECtHR. Notably, the claimants filed it directly

[T]he Parliament argues that, without there being a need to rule on the legality of the legislative package and the question whether the alleged unlawfulness of that legislative package constitutes a sufficiently serious breach of a rule of law the purpose of which is to confer rights on individuals, there is no direct and specific link between the conduct of the Union legislature and the damage that the applicants claim to have suffered. In that connection, the Parliament remarks that climate change is global and that the Union, even by reducing all its emissions to zero, is not in a position to overcome climate change by itself. In addition, while it does not deny the reality of climate change, the extent to which the alleged damage is a result of that change (and not of other natural phenomena or other human activities not linked to climate change) has not been definitively established. Lastly, according to the Parliament, it is also not established that the alleged damage is a result of the alleged lack of efforts to mitigate greenhouse gas emissions, rather than the lack of efforts to adapt (which falls within the Member States' competences).

⁵⁴¹ *Carvalho v The European Parliament* C-565/19 P ECLI:EU:C:2021:252 (25 March 2021).

⁵⁴² *ibid* [49]:

Since [the appellants] merely invoked, before the General Court, an infringement of their fundamental rights, inferring individual concern from that infringement, on the ground that the effects of climate change and, accordingly, the infringement of fundamental rights are unique to and different for each individual, it cannot be held that the acts at issue affect the appellants by reason of certain attributes which are peculiar to them or by reason of circumstances in which they are differentiated from all other persons, and by virtue of these factors distinguish them individually just as in the case of the person addressed.

⁵⁴³ *Verein Klimaseniorinnen Schweiz v Switzerland* application no. 53600/20 (pending).

⁵⁴⁴ *Greenpeace Nordic v Norway* application no. 34068/21 (pending).

⁵⁴⁵ *Agostinho v Portugal* application no. 39371/20 (pending) para 13.

with the regional court, arguing that the exhaustion of domestic remedies admissibility requirement should be waived given the specific nature of this case.⁵⁴⁶ Two months after receiving the complaint, the ECtHR communicated it to defendant countries, asking them to respond to the complaint.⁵⁴⁷

This development is particularly interesting. The ECtHR normally considers only those complaints previously brought before national courts, as part of the exhaustion of domestic remedies admissibility criterion under Article 35(1) of the ECHR.⁵⁴⁸ In this case, however, the claimants filed their complaint directly to the ECtHR, without going through the typical route, that is, through Portuguese national courts first, similar to the case of *Carvalho* against the EU. The ECtHR's apparent unwillingness to immediately dismiss the complaint as inadmissible suggests that the claim is potentially viable. This is significant in itself as only a small percentage of complaints to the ECtHR get to this stage.⁵⁴⁹ Furthermore, the ECtHR also announced that it will deal with the case as a matter of priority according to Article 41 of the Rules of the Court.⁵⁵⁰ Finally, it is noteworthy that in its communication, the ECtHR went beyond the complaint by requesting the defendant countries also to provide information on potential violations of the right not to be subjected to torture or to inhuman or degrading treatment under Article 3, and of the right to property under Article 1 of Protocol No. 1 of the ECHR.⁵⁵¹

⁵⁴⁶ *ibid* paras 35-40.

⁵⁴⁷ European Court of Human Rights, Statement of 13 November 2020 [https://hudoc.echr.coe.int/eng#{%22languageisocode%22:\[%22FRE%22\],%22appno%22:\[%2239371/20%22\],%22itemid%22:\[%22001-206535%22\]}](https://hudoc.echr.coe.int/eng#{%22languageisocode%22:[%22FRE%22],%22appno%22:[%2239371/20%22],%22itemid%22:[%22001-206535%22]}) accessed 30 June 2022

⁵⁴⁸ Art 35(1): 'The Court may only deal with the matter after all domestic remedies have been exhausted, according to the generally recognised rules of international law, and within a period of four months from the date on which the final decision was taken.'

⁵⁴⁹ See, for example, European Court of Human Rights Statistics 2019 <https://www.echr.coe.int/Documents/Stats_annual_2019_ENG.pdf> accessed 30 June 2022

⁵⁵⁰ European Court of Human Rights, Rules of Court <https://www.echr.coe.int/documents/rules_court_eng.pdf> accessed 30 June 2022:

In determining the order in which cases are to be dealt with, the Court shall have regard to the importance and urgency of the issues raised on the basis of criteria fixed by it. The Chamber, or its President, may, however, derogate from these criteria so as to give priority to a particular application.

⁵⁵¹ European Court of Human Rights, Communication of 13 November 2020 [https://hudoc.echr.coe.int/eng#{%22languageisocode%22:\[%22FRE%22\],%22appno%22:\[%2239371/20%22\],%22itemid%22:\[%22001-206535%22\]}](https://hudoc.echr.coe.int/eng#{%22languageisocode%22:[%22FRE%22],%22appno%22:[%2239371/20%22],%22itemid%22:[%22001-206535%22]}) accessed 30 June 2022, question 3.

Similarly, in March 2021, the ECtHR agreed to hear the *KlimaSeniorinnen* case against Switzerland and also gave it priority status.⁵⁵² In 2022, the respective Chambers of the Court to which *Agostinho* and *KlimaSeniorinnen* had been allocated relinquished jurisdiction in favour of the Grand Chamber.⁵⁵³ While at the time of writing it is impossible to predict the outcome of these cases, the above-mentioned developments suggest that rights claims in climate change litigation before the ECtHR could potentially be viable.

4.8 Conclusion

In Europe, the rights to life and to respect for private and family life under the regional human rights protection treaties have been widely used in rights-based climate change litigation before national and supranational courts. The majority of such cases have challenged GHG emissions reduction targets. Except for the case of *Urgenda*, the national courts' treatment of such claims has been unfavourable to the claimants. The reasons for this were different in each individual case, but overall, the courts were unpersuaded that GHG emissions reduction targets, or a permit as in *Greenpeace Nordic*, could amount to a violation of the invoked rights. Notably though, these courts did not rule out the possibility that a violation of the rights to life and to respect for private and family life, resulting from GHG emission reduction targets, or even from permits, could occur in future cases. However, some courts have also demonstrated a notable lack of consideration of

⁵⁵² European Court of Human Rights, Communication of 17 March 2021 <[⁵⁵³ See: European Court of Human Rights, 'Grand Chamber to examine case concerning complaint by association that climate change is having an impact on their living conditions and health' \(29 April 2022\) <<https://hudoc.echr.coe.int/app/conversion/pdf/?library=ECHR&id=003-7322460-9989782&filename=Relinquishment%20in%20favor%20of%20the%20Grand%20Chamber%20of%20the%20case%20Verein%20KlimaSeniorinnen%20Schweiz%20and%20Others%20v.%20Switzerland.pdf>> accessed 30 June 2022; European Court of Human Rights, 'Grand Chamber to examine case concerning global warming' \(30 June 2022\) <<https://hudoc.echr.coe.int/app/conversion/pdf/?library=ECHR&id=003-7322460-9989782&filename=Relinquishment%20in%20favor%20of%20the%20Grand%20Chamber%20of%20the%20case%20Verein%20KlimaSeniorinnen%20Schweiz%20and%20Others%20v.%20Switzerland.pdf>> accessed 30 June 2022](https://hudoc.echr.coe.int/eng#{%22appno%22:[%2253600/20%22],%22itemid%22:[%22001-209313%22]}> accessed 30 June 2022</p>
</div>
<div data-bbox=)

the current risks posed by climate change. Furthermore, these courts have generally set the threshold for triggering the respective rights exceptionally high. A related difficulty is the restrictive interpretation of the right to a healthy environment. Consequently, while the European courts have left the door open for future rights claims in climate change cases, the viability of the latter is uncertain. It is true that several unsuccessful cases were subsequently filed with the ECtHR, which has so far demonstrated considerable attention to the claims. However, these cases are still pending.

CHAPTER 5. NORTH AMERICA

5.1 Introduction

When it comes to action on climate change, the US and Canada share much in common, including the most obvious fact that despite their exceptional economic and infrastructural development, both have been severely affected by various impacts of climate change.⁵⁵⁴ Historically, the US is the largest contributor to global GHG emissions, and is currently the second largest emitter in the world, surpassed only by China.⁵⁵⁵ The US is a party to the UNFCCC, but has not committed to any internationally binding emissions reduction targets and has not ratified the Kyoto Protocol. The US also withdrew from the Paris Agreement under the administration of Donald Trump,⁵⁵⁶ though it subsequently re-joined the Agreement under the administration of Joe Biden.⁵⁵⁷ At the federal level in the US, attempts to adopt comprehensive climate legislation have traditionally failed.⁵⁵⁸ At the same time,

⁵⁵⁴ Patricia Romero-Lankao and others, '2014: North America' in Vicente Barros and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1439.

⁵⁵⁵ US Environmental Protection Agency, 'Global Greenhouse Gas Emissions Data' <<https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>> accessed 30 June 2022 (referring to Thomas A Boden, Gregg Marland and Robert J Andres, 'National CO₂ Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2014' [2017] Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy <https://data.ess-dive.lbl.gov/view/doi:10.3334/CDIAC/00001_V2017> accessed 30 June 2022).

⁵⁵⁶ Matt McGrath, 'Climate change: US formally withdraws from Paris agreement' *BBC* (4 November 2020) <<https://www.bbc.co.uk/news/science-environment-54797743>> accessed 30 June 2022

⁵⁵⁷ US Department of State, 'The United States Officially Rejoins the Paris Agreement' (19 February 2021) <<https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/>> accessed 30 June 2022

⁵⁵⁸ One of the most notable examples of this is the Clean Power Plan – a set of rules aimed at reducing GHG emissions from existing fossil fuel-fired power plants – introduced by the administration of Barack Obama in 2015. See: Final Rule: Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (23 October 2015); Final Rule: Standards for Performance for Greenhouse Gas Emissions for New Power Stationary Sources: Electric Generating Units, 80 Fed. Reg. 64,510 (23 October 2015). The Clean Power Plan never went into effect due to anti-regulatory litigation launched by the industry and some states, arguably becoming 'the most heavily litigated environmental regulation ever'. See Felix Mormann, 'Constitutional Challenges and Regulatory Opportunities for State Climate

some US states, most notably California and New York, enacted laws and policies on GHG emission reduction targets and carbon pricing more than a decade ago.⁵⁵⁹

The situation in Canada is strikingly similar to the one in the US, albeit on a smaller scale with regard to national GHG emissions. Canada has been in, or very close to being in, the top ten GHG emitters globally for many years.⁵⁶⁰ Canada's participation in global efforts to reduce GHG emissions has also been thwarted by its withdrawal from the Kyoto Protocol⁵⁶¹ and by discord between federal and provincial governments with regard to climate action, including legal challenges by the provinces of Alberta and Ontario to the federal government's legislation on carbon pricing.⁵⁶²

Finally, there is yet another crucial factor that makes the US and Canada highly distinguishable, namely, the early development of high-profile climate change litigation. The initial emergence and subsequent prevalence of climate change litigation in the US – more than anywhere else in the world – is often attributed to a regulatory void on climate change at the federal level.⁵⁶³ The seminal case of *Massachusetts*⁵⁶⁴ is probably the most referred to, but not the only example of litigation where the government's response to climate change was challenged in a court. The US has also been the main forum for novel types of action in climate

Policy Innovation' [2017] 41 Harvard Environmental Law Review 189, 192, fn 12. This litigation includes the case of *West Virginia v EPA* 597 U.S. ____ (2022), in which the US Supreme Court limited the Environmental Protection Agency's authority to set standards on GHG emissions for existing power plants.

⁵⁵⁹ See Center for Climate and Energy Solutions, State Climate Policy Maps <<https://www.c2es.org/content/state-climate-policy/>> accessed 30 June 2022

⁵⁶⁰ See Global Carbon Atlas, CO2 emissions <<http://www.globalcarbonatlas.org/en/CO2-emissions>> accessed 30 June 2022

⁵⁶¹ See *Turp v Canada* 2012 FC 893 [2014] 1 F.C.R. 439 (Federal Court of Canada, 2014).

⁵⁶² See *Ontario v Canada re Greenhouse Gas Pollution Pricing Act* 2019 ONCA 544 (Court of Appeal for Ontario, 2019); *In the Matter of the Greenhouse Gas Pollution Pricing Act SC 2018, c. 12* 2020 ABCA 74 (Court of Appeal of Alberta, 2020).

⁵⁶³ See, for example: Jacqueline Peel, 'Issues in Climate Change Litigation' [2011] 5 Carbon & Climate Law Review 15; Hari M Osofsky and Jaqueline Peel, 'Litigation's Regulatory Pathways and the Administrative State: Lessons from US and Australian Climate Change Governance' [2012] 25 Georgetown International Environmental Law Review 207, 254. E. Fisher considers the US legal culture, with its strong tendency to resorting to litigation, as yet another reason for this phenomenon. Elizabeth Fisher, 'Climate Change Litigation, Obsession and Expertise: Reflecting on the Scholarly Response to *Massachusetts v EPA*' [2013] 35 Law & Policy 236.

⁵⁶⁴ *Massachusetts v EPA* 549 US 497 (2007).

change litigation, including cases brought by cities and states all across the US against major fossil fuel companies, seeking damages for climate change adaptation costs.⁵⁶⁵ Meanwhile, although emerging much later than in the US and not garnering nearly as much momentum, by the late 2000s and early 2010s, climate change litigation in Canada also produced some high-profile cases against the federal government, most notably, challenges concerning Canada's participation in the Kyoto Protocol.⁵⁶⁶

Given the above-mentioned similarities between the two countries, particularly with regard to the early emergence of high-profile climate change cases, it is not very surprising that rights claims in climate change litigation in the US and Canada have also followed a similar pathway and, ultimately, shared a similar outcome, which from a global perspective is unique to this region.

5.2 Sweeping challenges to climate policy in the US

Sweeping challenges to climate policy have a long history in the US. The first attempt to challenge the US national climate policy⁵⁶⁷ with rights claims was the Inuit petition submitted to the Inter-American Commission on Human Rights in 2005.⁵⁶⁸ By identifying the US as the then world's largest GHG emitter, the claimant – the Chair of the Inuit Circumpolar Conference, on behalf of herself, a group of other named individuals, and all Inuit of the Arctic regions of the US and Canada – alleged violations of the right to life and numerous other rights under

⁵⁶⁵ This wave of cases followed the first few such unsuccessful attempts in the 2000s – see Geetanjali Ganguly, Joana Setzer and Veerle Heyvaert, 'If at First You Don't Succeed: Suing Corporations for Climate Change' [2018] 38 Oxford Journal of Legal Studies 841.

⁵⁶⁶ *Friends of the Earth v Canada (Governor in Council)* 2008 FC 1183 [2009] 3 F.C.R. 201, aff'd 2009 FCA 297, leave to appeal refused, [2010] S.C.C.A. No. 33469 (Supreme Court of Canada, 2010); *Turp v Canada* 2012 FC 893 [2014] 1 F.C.R. 439 (Federal Court of Canada, 2014).

⁵⁶⁷ Or rather, the absence of a comprehensive climate policy.

⁵⁶⁸ *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* No P-1413-05 (7 December 2005).

the American Declaration of the Rights and Duties of Man,⁵⁶⁹ resulting from the impacts of climate change on virtually every aspect of Inuit life and culture.⁵⁷⁰ The claim revolved around the high vulnerability of communities within the Arctic region to a range of climate-related extremes, as shown by extensive evidence provided in the petition.⁵⁷¹ The claimant challenged the lack of federal GHG emission reduction targets and regulatory gaps with regard to major emissions sources such as power plants and vehicles, the alleged failure to cooperate with international efforts to reduce GHG emissions, and so forth.⁵⁷² Hence, the petition was of clearly transnational nature, as it was brought on behalf of communities not only in the US, but also in Canada, and revolved around the transboundary impacts of climate change, thus effectively becoming the first case of transnational climate change litigation.

It was probably the complexity and the political context of the petition that ultimately proved to be too much for a regional human rights treaty body to handle at this early stage of climate change litigation.⁵⁷³ The petition was rejected on procedural grounds for not providing the necessary information for the Commission ‘to determine whether the alleged facts would characterize a violation of rights protected by the American Declaration’.⁵⁷⁴ However, despite the fact that the petition was summarily dismissed,⁵⁷⁵ it attracted considerable

⁵⁶⁹ American Declaration of the Rights and Duties of Man, O.A.S. Res. adopted by the Ninth International Conference of American States (2 May 1948), reprinted in *Basic Documents Pertaining to Human Rights in the Inter-American System*, OEA/Ser.L.V/II.82 doc.6 rev.1 17 (1992).

⁵⁷⁰ *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* No P-1413-05 (7 December 2005) 74-95.

⁵⁷¹ *ibid* 35-67.

⁵⁷² *ibid* 103-111.

⁵⁷³ See Sumudu Anopama Atapattu, ‘Climate Change under Regional Human Rights Systems’ in Sébastien Duyck, Sébastien Jodoin and Alyssa Johl (eds), *The Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018) 134-136.

⁵⁷⁴ Response of the Inter-American Commission on Human Rights regarding *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* No P-1413-05 (16 November 2006).

⁵⁷⁵ Notably, though, the claimants expected such an outcome, and ‘acknowledged how unlikely formal success was.’ Jacqueline Peel and Hari M Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press 2015) 50. See also Hari M Osofsky, ‘Inuit Petition as a Bridge? Beyond Dialectics of Climate Change and Indigenous Peoples’ Rights’ [2007] 31 *American Indian Law Review* 675.

international attention to the problems faced by people living in polar regions and catalysed further action⁵⁷⁶ — including a special hearing on the links between climate change and human rights organised by the Commission — as well as triggering subsequent legal developments in the region.⁵⁷⁷ In other words, the Inuit petition's regulatory influence was indirect, namely, by 'changing norms and values through increasing the public profile of Arctic climate change impacts'⁵⁷⁸ and 'giving climate change a human face'.⁵⁷⁹

Regardless of the true extent of the Inuit petition's actual or alleged contribution to the development of subsequent rights-based climate change litigation against the US, the petition was the first of many sweeping challenges in the following years, but this time, before the US national courts.⁵⁸⁰ There is no provision in the US Constitution that explicitly grants environmental rights, despite calls to amend the Constitution and to introduce such a provision.⁵⁸¹ Nevertheless, the US Constitution does contain provisions that are relevant to rights-based climate change litigation, namely the Fifth and the Fourteenth Amendments (stipulating that no person/citizen shall be deprived of life, liberty, or property without due process of law) and the Ninth Amendment (recognising the existence of unenumerated

⁵⁷⁶ John H Knox, 'The Past, Present, and Future of Human Rights and the Environment' [2018] 53 Wake Forest Law Review 649, 657-658.

⁵⁷⁷ Namely, the *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* submitted 23 April 2013 (pending). See Jacqueline Peel and Hari M Osofsky, 'Climate Change Litigation's Regulatory Pathways: A Comparative Analysis of the United States and Australia' [2013] 35 Law and Policy 150, 160; Christopher Campbell-Durufflé and Sumudu Anopama Atapattu, 'The Inter-American Court's Environment and Human Rights Advisory Opinion: Implications for International Climate Law' [2018] 8 Climate Law 321.

⁵⁷⁸ Jacqueline Peel and Hari M Osofsky, 'Climate Change Litigation's Regulatory Pathways: A Comparative Analysis of the United States and Australia' [2013] 35 Law and Policy 150, 160.

⁵⁷⁹ Sumudu Atapattu and Andrea Schapper, *Human Rights and the Environment: Key Issues* (Routledge 2019) 66.

⁵⁸⁰ See Samvel Varvastian, 'A Natural Resource Beyond the Sky: Invoking the Public Trust Doctrine to Protect the Atmosphere from Greenhouse Gas Emissions' in Helle Tegner Anker and Birgitte Egelund Olsen (eds), *Sustainable Management of Natural Resources: Legal Instruments and Approaches* (Intersentia 2018).

⁵⁸¹ See Lynton K Caldwell, 'The Case for an Amendment to the Constitution of the United States for Protection of the Environment' [1991] 1 Duke Environmental Law & Policy Forum 1.

rights).⁵⁸² At the same time, several state constitutions explicitly recognise environmental rights.⁵⁸³ However, despite the fact that the US became the first country in the world with high-profile climate change litigation against the government (both federal and state) that has since become systematic, constitutional rights claims, in particular, have been raised only in a very small number of sweeping challenges. This is because the typical avenue for these high-profile climate change cases in the US has been the common law public trust doctrine,⁵⁸⁴ a pattern that has led to such cases being referred to as ‘atmospheric trust litigation’.⁵⁸⁵ Developing since 2011, the trend towards atmospheric trust litigation is the result of a nationwide campaign seeking judicial recognition of the fact that the planet’s atmosphere is a natural resource covered by the public trust doctrine, meaning that its protection from dangerous GHG emissions is an essential obligation of the government.⁵⁸⁶

Despite the common law origins of the public trust doctrine and its difference from constitutional rights,⁵⁸⁷ the history of atmospheric trust litigation and that of rights-

⁵⁸² These fall into the category of Amendments commonly known as the Bill of Rights.

⁵⁸³ James May and William Romanowicz, ‘Environmental Rights in State Constitutions’ in James May (ed), *Principles of Constitutional Environmental Law* (American Bar Association 2011) 305.

⁵⁸⁴ For a discussion on the interplay between the public trust doctrine and environmental rights see Bernard S Cohen, ‘The Constitution, the Public Trust Doctrine, and the Environment’ [1970] *Utah Law Review* 388; Richard M Frank, ‘The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future’ [2011] 45 *University of California Davis Law Review* 665.

⁵⁸⁵ See, for example: Mary Christina Wood and Dan Galpern, ‘Atmospheric Recovery Litigation: Making the Fossil Fuel Industry Pay to Restore a Viable Climate System’ [2015] 45 *Environmental Law* 259; Mary Christina Wood and Charles W Woodward IV, ‘Atmospheric Trust Litigation and the Constitutional Right to a Healthy Climate System: Judicial Recognition at Last’ [2016] 6 *Washington Journal of Environmental Law and Policy* 647; Randall S Abate, ‘Atmospheric Trust Litigation in the United States: Pipe Dream or Pipeline to Justice for Future Generations?’ in Randall S Abate (ed), *Climate Justice: Case Studies in Global and Regional Governance Challenges* (Environmental Law Institute 2016) 548.

⁵⁸⁶ *ibid.* All atmospheric trust cases have been brought by children claimants supported by various non-profits, most notably Our Children’s Trust, <<https://www.ourchildrenstrust.org/>> accessed 30 June 2022

⁵⁸⁷ The public trust doctrine derives from ancient Roman law, finding its way into English common law in the Middle Ages and eventually settling in American common law. The doctrine, being based on the antimonopoly notion, requires the government to hold vital natural resources in trust for the public beneficiaries, thus protecting those resources from monopolisation or destruction by private interests. In its traditional application throughout the 19th century, the doctrine was limited to navigable and tidal waters and the land submerged beneath them for the purposes of navigation, commerce and fishing. Such application of the doctrine was dictated by the paramount importance of waterways to economic activities at that time. However, the public trust doctrine has not

based climate change cases in the US are exceptionally closely intertwined. In fact, it was atmospheric trust litigation that paved the way for rights claims in subsequent climate change cases against the US federal and state governments, as is illustrated by the following example.

In 2012, the federal case of *Alec*⁵⁸⁸ became one of the first atmospheric trust cases to be addressed by the courts. *Alec* was a sweeping challenge to the US climate policy: the youth claimants alleged that several federal agencies violated ‘their fiduciary duties to preserve and protect the atmosphere as a commonly shared

remained static. In the 20th century in the US, many courts started expanding it to protect wildlife, ecosystems, non-navigable waters, parks and beaches for the purposes of recreation as well as ecological preservation. The doctrine traditionally developed at the state level and the developments in relevant jurisprudence in some states did not necessarily extend to other states, while the existence of the federal public trust doctrine is still unsettled. The expansion of the public trust doctrine to the atmosphere – as the key natural resource polluted by GHG emissions, which in turn is the main cause of anthropogenically-driven climate change – has been pioneered by Mary Christina Wood, whose works have been instrumental in shaping the atmospheric trust litigation. This expansion of the public trust doctrine has also been supported by other legal scholars in the US. Ultimately, atmospheric trust litigation envisions taking multi-pronged political action on climate change, including, for instance, removing subsidies to the fossil fuel industry and active phase-out of such fuels and equipment dependent on them, actively promoting renewable energy, preparing and implementing plans to remove GHGs from the atmosphere, and so forth. In more recent years, rights-based climate change cases revolving around the public trust doctrine have started emerging outside the US as well, including in Canada, India, Pakistan and Uganda. However, the public trust doctrine claims have played virtually no role in these countries’ climate change cases, perhaps with the exception of *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020), where the court explicitly engaged with the question of public trust doctrine and declined to recognise the existence of this doctrine in Canada. Despite its apparent relevance, the application of the public trust doctrine in climate change litigation has proven to be extremely difficult. When claimants invoke the public trust doctrine in climate change litigation, they typically seek two objectives: 1) to have the courts declare the atmosphere a natural resource that should be protected under the public trust doctrine; and 2) to have the courts declare that states have obligations under the public trust doctrine to protect natural resources from the impacts of climate change. However, the majority of the US courts dealing with such cases have found both these elements problematic. This largely stemmed from the courts’ hesitation as to whether the public trust doctrine should be expanded to cover the atmosphere and whether the government has any concrete climate change obligations under it. It is notable, though, that despite this hesitance, the majority of the US courts did not foreclose such a possibility in the future. For a detailed overview of the doctrine’s use in environmental litigation in the US, see, for example: Robin Kundis Craig, ‘A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries’ [2007] 16 Penn State Environmental Law Review 1; Robin Kundis Craig, ‘Comparative Guide to the Western Public Trust Laws: A Case Study’ [2010] 45 Environmental Law 431; Alexandra B Klass, ‘The Public Trust Doctrine in the Shadow of State Environmental Rights Doctrines: Public Values, Private Rights, the Evolution toward an Ecological Public Trust’ [2015] 37 Ecology Law Quarterly 5; Hope M Babcock, ‘Using the Federal Public Trust Doctrine to Fill Gaps in the Legal Systems Protecting Migrating Wildlife from the Effects of Climate Change’ [2016] 95 Nebraska Law Review 649.

⁵⁸⁸ *Alec v Jackson* 863 F.Supp.2d 11 (D.D.C. 2012).

public trust resource under the public trust doctrine'.⁵⁸⁹ For that purpose, the claimants asked the court to issue the following declarations: 1) that the atmosphere is a public trust resource and that the federal government, as a trustee, has a fiduciary duty to refrain from taking actions that waste or damage it; 2) that the defendants have violated their fiduciary duties by contributing to and allowing unsafe amounts of GHG emissions into the atmosphere.⁵⁹⁰ With regard to the latter point, the claimants asked the court to define such duties by declaring that the defendants have to 'reduce global atmospheric carbon dioxide levels to less than 350 parts per million during this century'.⁵⁹¹ To ensure implementation, the claimants asked the court to issue an injunction directing the above-mentioned federal agencies to take all necessary actions to enable carbon dioxide emissions to peak by December 2012 and to decline by at least six per cent yearly beginning in 2013 and to order the agencies to submit various documents (including annual US GHG reports, a climate recovery plan, etc.) for the court's approval.⁵⁹² Instead of alleging violation of any federal legislation or constitutional provisions, the claimants invoked the federal public trust doctrine.⁵⁹³ The defendants moved to dismiss the claim, arguing that the complaint was grounded in state common law but did not raise a federal question, thus being outside of the federal court's jurisdiction.⁵⁹⁴

The District Court granted the defendants' motions referring to the Supreme Court's decision in the non-climate change case of *PPL Montana v Montana*⁵⁹⁵ that 'the public trust doctrine remains a matter of state law' and that 'the States retain residual power to determine the scope of the public trust'.⁵⁹⁶ Furthermore, the court in *Alec* referred to yet another non-climate change case, where the Court of Appeals for the District of Columbia Circuit observed that '[i]n this country the

⁵⁸⁹ *ibid* 12.

⁵⁹⁰ *ibid* 13-14.

⁵⁹¹ *ibid* 14.

⁵⁹² *ibid*

⁵⁹³ *ibid* 12.

⁵⁹⁴ *ibid* 12-13.

⁵⁹⁵ *PPL Montana, LLC v Montana* 565 U.S. 576 (D. Mont. 2012).

⁵⁹⁶ *ibid* 603.

public trust doctrine has developed almost exclusively as a matter of state law',⁵⁹⁷ while a federal common-law public trust doctrine would be displaced by federal statutes.⁵⁹⁸ Upon appeal in *Alec*, the appellate court affirmed the position of the lower court by holding that the Supreme Court in *PPL Montana* 'directly and categorically rejected any federal constitutional foundation for [the public trust] doctrine, without qualification or reservation'.⁵⁹⁹ In other words, in this case, the question whether the atmosphere is a natural resource protected by this doctrine at the federal level remained unanswered because the courts rejected the very idea of the federal public trust doctrine.

5.2.1 The Fifth and the Ninth Amendments to the US Constitution in *Juliana v United States*

Despite this unsuccessful outcome, *Alec* did not shut the door to subsequent atmospheric trust climate change cases at the federal level. In August 2015, a group of minors from across the US filed a new federal atmospheric trust lawsuit in the District Court for the District of Oregon against the US President and a number of federal agencies: the case was the famous *Juliana*.⁶⁰⁰ Like *Alec*, *Juliana* was a sweeping challenge to the US federal climate policy, but this time, the claimants raised not only the question of the public trust doctrine, but also constitutional rights claims. The claimants challenged numerous decisions taken by the defendants, such as

whether and to what extent to regulate [carbon dioxide] emissions from power plants and vehicles, whether to permit fossil fuel extraction and development to take place on federal lands, how much to charge for use of those lands, whether to give tax breaks to the fossil fuel industry, whether to subsidize or directly fund that industry, whether to fund the construction

⁵⁹⁷ *District of Columbia v Air Florida, Inc* 750 F.2d 1077, p. 1082 (D.C. Cir. 1984).

⁵⁹⁸ *ibid* 1085, n. 43.

⁵⁹⁹ *Alec ex rel. Looz v McCarthy* 561 Fed.Appx. 7, 8 (D.C. Cir. 2014).

⁶⁰⁰ *Juliana v United States* 217 F.Supp.3d 1224 (D. Or. 2016).

of fossil fuel infrastructure such as natural gas pipelines at home and abroad, whether to permit the export and import of fossil fuels from and to the US, and whether to authorize new marine coal terminal projects.⁶⁰¹

According to the claimants, the defendants have known for more than fifty years that carbon dioxide produced by burning fossil fuels was destabilising the climate system, significantly endangering the claimants. Yet despite that knowledge, the defendants have exercised the sovereign authority over the country's atmosphere and fossil fuel resources in such a way that permitted, encouraged, and enabled continued exploitation, production and combustion of fossil fuels, thus deliberately allowing atmospheric concentrations of carbon dioxide to escalate to unprecedented levels.⁶⁰² The claimants asserted that the defendants' decisions have substantially caused the planet to warm and the oceans to rise, thus drawing a direct causal link between defendants' policy choices and floods, food shortages, destruction of property, species extinction, and various other harms.⁶⁰³ The claimants invoked the Due Process Clause of the Fifth Amendment to the US Constitution, which bars the federal government from depriving a person of 'life, liberty, or property, without due process of law'.⁶⁰⁴ Furthermore, the claimants referred to the Ninth Amendment, which allows the existence of unenumerated constitutional rights, including — according to the claimants — the right to a climate system capable of sustaining human life (right to a stable climate system).⁶⁰⁵ The defendants moved to dismiss the claims on multiple grounds,

⁶⁰¹ *ibid* 1234.

⁶⁰² *ibid* 1233.

⁶⁰³ *ibid* 1234.

⁶⁰⁴ United States of America's Constitution of 1789 with Amendments through 1992, the Fifth Amendment:

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

⁶⁰⁵ *ibid* the Ninth Amendment: 'The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.'

including justiciability and claimants' standing, as well as the application of the constitutional rights invoked.⁶⁰⁶

5.2.1.1 The political question

The District Court for the District of Oregon allowed the claims to proceed. Relying on the US Supreme Court's *Baker* test in its analysis of the alleged political question,⁶⁰⁷ the District Court was clearly unprepared to politicise climate change:

Climate change, energy policy, and environmental regulation are certainly 'political' in the sense that they have 'motivated partisan and sectional debate during important portions of our history'. ... But a case does not present a political question merely because it 'raises an issue of great importance to the political branches'. ... Instead, dismissal on political question grounds is appropriate only if one of the *Baker* considerations is 'inextricable' from the case.⁶⁰⁸

The District Court for the District of Oregon found that none of the *Baker* test factors apply to *Juliana*. First, because 'climate change policy is not a fundamental power on which any other power allocated exclusively to other branches of government rest'.⁶⁰⁹ Second, because the court would only determine what level of GHG emissions reduction would redress the claimants' injuries,⁶¹⁰ but without making policy determinations about competing economic and environmental

⁶⁰⁶ *Juliana v United States* 217 F.Supp.3d 1224, 1235 (D. Or. 2016).

⁶⁰⁷ In *Baker v Carr* 369 U.S. 186, 217 (1962), the Supreme Court identified six criteria, each of which could individually signal the presence of a political question: 1) A textually demonstrable constitutional commitment of the issue to a coordinate political department; 2) a lack of judicially discoverable and manageable standards for resolving it; 3) the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; 4) the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; 5) an unusual need for unquestioning adherence to a political decision already made; or 6) the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

⁶⁰⁸ *Juliana v United States* 217 F.Supp.3d 1224, 1236 (D. Or. 2016).

⁶⁰⁹ *ibid* 1237-1238 (D. Or. 2016) (first Baker factor)

⁶¹⁰ *ibid*. The Court observed that the scientific complexity of this is irrelevant to the political question analysis.

concerns or directing any individual agency to take any particular action.⁶¹¹ Related to this was the court's dismissal of the defendants' argument that the claims failed to identify any specific legislation.⁶¹² Finally, the case would not affect US international commitments.⁶¹³ In other words, the case concerned the constitutional rights question, which 'is squarely within the purview of the judiciary'.⁶¹⁴

5.2.1.2 Standing under Article III of the US Constitution

The District Court for the District of Oregon was also satisfied that claimants met the three-element standing requirement under Article III of the US Constitution.⁶¹⁵ This included the court's acceptance of the provided evidence of injury, including the impacts of wildfires, drought and flooding.⁶¹⁶ Notably, the court rejected the government's arguments that claimants did not have standing because the injuries they alleged are widely shared.⁶¹⁷ The court reiterated the US Supreme Court's position on this question in *Massachusetts*, that 'the fact that a harm is widely shared does not necessarily render it a generalized grievance'.⁶¹⁸

⁶¹¹ *ibid* 1238-1239.

⁶¹² *ibid* 1239-1240:

This is not a typical environmental case. Plaintiffs are not arguing defendants issued any particular permit in violation of a statutory provision in the Clean Air Act or the Clean Water Act. They are not arguing any specific tax break, royalty rate, or contract runs afoul of an agency's governing regulations. Rather, the theory of plaintiffs' case is much broader: it is that defendants' *aggregate actions* violate their substantive due process rights That theory ... requires no citation to particular statutory or regulatory provisions.

⁶¹³ *ibid* 1240-1241:

Although the United States has made international commitments regarding climate change, granting the relief requested here would be fully consistent with those commitments. There is no contradiction between promising other nations the United States will reduce CO2 emissions and a judicial order directing the United States to go beyond its international commitments to *more aggressively* reduce CO2 emissions.

⁶¹⁴ *ibid* 1241. That said, the District Court for the District of Oregon observed that 'great care' should be exercised to avoid problems related to the principle of the separation of powers when issuing a remedy, should claimants succeed on the merits.

⁶¹⁵ For a discussion on standing under Article III (the *Lujan* test) see section 2.4.2.1 of this thesis.

⁶¹⁶ *Juliana v United States* 217 F.Supp.3d 1224, 1242-1244 (D. Or. 2016).

⁶¹⁷ *ibid* 1243-1244.

⁶¹⁸ *ibid* 1243, referring to *Massachusetts v EPA* 549 U.S. 497, 517 (2007).

Similarly, the District Court for the District of Oregon was convinced that given the fact that the alleged harm ‘is ongoing and likely to continue in the future’, the imminence requirement of the standing test was also satisfied.⁶¹⁹ As for causation, the court rejected the government’s argument that it should follow the line of reasoning adopted by the Court of Appeals for the Ninth Circuit in *Bellon*, where the appellate court held that no causal link could be established between the GHG emissions from five oil refineries in Washington and the claimants’ alleged climate change-related injuries.⁶²⁰ The District Court for the District of Oregon distinguished *Juliana* from *Bellon*:

[T]he emissions at issue in this case, unlike the emissions at issue in *Bellon*, make up a significant share of global emissions. In *Bellon*, as noted, the five oil refineries were responsible for just under six percent of the greenhouse gas emissions generated in the state of Washington. The Ninth Circuit recently explained that in *Bellon*, ‘causation was lacking because the defendant oil refineries were such minor contributors to greenhouse gas emissions, and the independent third party causes of climate change were so numerous, that the contribution of the defendant oil refineries was “scientifically undiscernable”’. Here, by contrast, plaintiffs’ chain of causation rests on the core allegation that defendants are responsible for a substantial share of worldwide greenhouse gas emissions. Plaintiffs allege that over the 263 years between 1751 and 2014, the United States produced more than twenty-five percent of global CO2 emissions. Greenhouse gas emissions produced in the United States continue to increase. In 2012, the United States was the second largest producer and consumer of energy in the world. *Bellon*’s reasoning, which rested on a determination the oil refineries were ‘minor contributors’ to climate change, does not apply.⁶²¹

⁶¹⁹ *Juliana v United States* 217 F.Supp.3d 1224, 1244 (D. Or. 2016).

⁶²⁰ *ibid* 1244-1245.

⁶²¹ *ibid* 1245-1246.

In other words, unlike in *Bellon*, causation in *Juliana* was much more ‘palpable’, including the affirmative acts by the government — for example, lease of public lands for exploration and production of fossil fuels — thus promoting higher levels of GHG emissions, and failure to curb existing GHG emissions by not setting emissions reduction targets for major sources such as powerplants and transportation.⁶²²

Finally, the District Court for the District of Oregon held that the redressability requirement was also met because redressability ‘does not require certainty, it requires only a substantial likelihood’ that the court could provide meaningful relief and the possibility that some other individual or entity might later cause the same injury does not defeat standing – the question is whether the injury caused by the defendant can be redressed.⁶²³ That said, the court acknowledged that *Juliana* raised complex scientific questions that are inextricably linked to causation, but these questions could not be answered at the motion to dismiss stage.⁶²⁴

5.2.1.3 The ‘danger creation’ exception under the Due Process Clause

As a general rule, the Due Process Clause of the Fifth Amendment does not create positive obligations on the government to protect human life.⁶²⁵ However, the claims in *Juliana* fell into one of the two exceptions to this rule, namely, the so-called ‘danger creation’ exception – a situation ‘when government conduct “places a person in peril in deliberate indifference to their safety”’.⁶²⁶ In the present case, this exception applied, given the claimants’ allegations of the ‘significant role’ of the US government ‘in creating the current climate crisis’ while fully aware ‘of the

⁶²² *ibid* 1246.

⁶²³ *ibid* 1247.

⁶²⁴ *ibid*.

⁶²⁵ *ibid* 1250-1251.

⁶²⁶ *ibid* 1251.

consequences of their actions’ and by failing ‘to correct or mitigate the harms they helped create in deliberate indifference to the injuries caused by climate change’.⁶²⁷

5.2.1.4 An unenumerated right to a stable climate system

With regard to the unenumerated right to a stable climate system arguably protected by the Ninth Amendment,⁶²⁸ the District Court for the District of Oregon considered the practice of the US Supreme Court, and drew parallels between the right to a stable climate system and the right to marriage addressed by the US Supreme Court in the case of *Obergefell v Hodges*.⁶²⁹ In *Obergefell*, the US Supreme Court held that the US Constitution is not frozen in time, and that it allows the existence of new rights to protect future generations in the face of social progress.⁶³⁰ Furthermore, the District Court for the District of Oregon considered yet another historic US Supreme Court case – *Roe v Wade*⁶³¹ – which concerned the right to respect for private and family life, and which demonstrated that ‘certain rights may be necessary to enable the exercise of other rights, whether enumerated or unenumerated’.⁶³² The District Court for the District of Oregon concluded that the latter considerations made clear that the right to a stable climate could exist:

Exercising my ‘reasoned judgment’, I have no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society. Just as marriage is the ‘foundation of the family’, a stable climate system is quite literally the foundation ‘of society, without which

⁶²⁷ *ibid* 1251-1253.

⁶²⁸ The existence of various unenumerated rights under the Due Process Clause has been questioned in a wide range of high-profile cases, for example, regarding a right to abortion as in *Planned Parenthood v Casey* 505 U.S. 833 (1992), a right to assisted suicide as in *Washington v Glucksberg* 521 U.S. 702 (1997), and so forth. In one its most recent cases, *Dobbs v Jackson Women's Health Organization* No. 19-1392 597 U.S. ____ (2022) 36, which concerned a right to abortion, the US Supreme Court stated that ‘the “established method of substantive-due-process analysis” requires that an unenumerated right be “deeply rooted in this Nation’s history and tradition” before it can be recognized as a component of the “liberty” protected in the Due Process Clause.’

⁶²⁹ *Juliana v United States* 217 F.Supp.3d 1224, 1249 (D. Or. 2016), referring to *Obergefell v Hodges* 576 U.S. 644 (2015).

⁶³⁰ *ibid*.

⁶³¹ *Roe v Wade* 410 U.S. 113 (1973).

⁶³² *Juliana v United States* 217 F.Supp.3d 1224, 1249 (D. Or. 2016).

there would be neither civilization nor progress'[;] without 'a balanced and healthful ecology', future generations 'stand to inherit nothing but parched earth incapable of sustaining life'.⁶³³

Ultimately, therefore, the court allowed the claim asserting the right to a stable climate system to proceed on the grounds that it is an adequate precondition to exercising other rights.⁶³⁴ However, the court clarified that such an interpretation does not render all claims concerning environmental degradation or climate change constitutional,⁶³⁵ and that neither should the phrase 'capable of sustaining human life' be read as requiring claimants to allege that 'governmental action will result in the extinction of humans as a species'.⁶³⁶

5.2.1.5 The Ninth Circuit's position on redressability

Following the numerous motions by the government, the case was addressed by the Court of Appeals for the Ninth Circuit, which in a split decision reversed the district court's order.⁶³⁷ The Ninth Circuit accepted the evidence presented on climate science as well as of the federal government's knowledge of the risks of fossil fuel use as early as 1965 and subsequent promotion of fossil fuels despite this knowledge.⁶³⁸ The Ninth Circuit also agreed with the district court's findings on the injury and causation requirements for standing.⁶³⁹ However, it was the appellate court's assessment of redressability that diverged from the district court's line of reasoning and proved to be fatal to the claimants. Although the Ninth Circuit

⁶³³ *ibid* 1250.

⁶³⁴ *ibid*.

⁶³⁵ *ibid*: '[A]cknowledgment of this fundamental right does not transform any minor or even moderate act that contributes to the warming of the planet into a constitutional violation.'

⁶³⁶ *ibid*. Considering the potential normative content of the right to a stable climate system, it is noteworthy that the claimants emphasised the need to return the atmospheric concentration of carbon dioxide to 350 parts per million by the end of this century and to stabilise the global heating to 1°C over pre-industrial temperatures, which is a significantly more stringent goal than the one set by international climate change law, namely, the Paris Agreement's goal of 2°C, and its aspirational goal of 1.5°C. Mary Christina Wood, "'On the Eve of Destruction': Courts Confronting the Climate Emergency' [2022] 97 Indiana Law Journal 239, 283-284.

⁶³⁷ *Juliana v United States* 947 F.3d 1159 (9th Cir. 2020).

⁶³⁸ *ibid* 1166-1167.

⁶³⁹ *ibid* 1168-1169.

‘assumed the existence’ of the constitutional right to a climate system capable of sustaining human life,⁶⁴⁰ it was unpersuaded that the relief sought met the requirements for demonstrating the redressability prong of the standing test.⁶⁴¹ Regarding declaratory relief, the Ninth Circuit held that such ‘a declaration, although undoubtedly likely to benefit the plaintiffs psychologically, is unlikely by itself to remediate their alleged injuries absent further court action’.⁶⁴² Therefore, it is the injunctive relief that is the ‘the crux’ of the claimants’ requested remedy – namely, an order ‘requiring the government not only to cease permitting, authorizing, and subsidizing fossil fuel use, but also to prepare a plan subject to judicial approval to draw down harmful emissions’.⁶⁴³

Such an order, in the appellate court’s view, was impossible for two reasons. First, the Ninth Circuit was convinced that even stopping all fossil fuel activities in the US would not prevent injuries to claimants given the global contribution to climate change.⁶⁴⁴ When confronted with the radically different approach in *Massachusetts* where the Supreme Court held that claimants satisfied redressability requirements by demonstrating that the requested relief would likely slow or reduce GHG emissions,⁶⁴⁵ the Ninth Circuit merely brushed any application of that line of reasoning away by asserting that the latter case concerned a procedural right, unlike *Juliana*, which concerns a substantive due process claim.⁶⁴⁶

However, a much more fundamental problem was the courts’ ability ‘to order, design, supervise, or implement the plaintiffs’ requested remedial plan’.⁶⁴⁷ The appellate court referred to various policy decisions that such a plan would potentially entail, including determining ‘how much to invest in public transit’, or

⁶⁴⁰ *ibid* 1169-1170.

⁶⁴¹ *ibid* 1170: ‘To establish Article III redressability, the plaintiffs must show that the relief they seek is both (1) substantially likely to redress their injuries; and (2) within the district court’s power to award.’

⁶⁴² *ibid*.

⁶⁴³ *ibid*.

⁶⁴⁴ *ibid* 1170-1171.

⁶⁴⁵ See *Massachusetts v EPA* 549 US 497, 525-526 (2007).

⁶⁴⁶ *Juliana v United States* 947 F.3d 1159 (9th Cir. 2020) 1171

⁶⁴⁷ *ibid*.

‘how quickly to transition to renewable energy’.⁶⁴⁸ The Ninth Circuit was clearly uncomfortable with the idea of the judiciary being involved in this process, particularly, ‘given the complexity and long-lasting nature of global climate change’ that would require courts ‘to supervise the government’s compliance with any suggested plan for many decades’.⁶⁴⁹ The appellate court, therefore, was convinced that in this particular case, the relief sought should be considered through the lens of the separation of powers principle, which stipulates that ‘some questions – even those existential in nature – are the province of political branches’.⁶⁵⁰ Interestingly, the Ninth Circuit acknowledged that these political branches ‘have to date been largely deaf to the pleas of the plaintiffs and other similarly situated individuals’, yet held that this problem cannot be solved by the judiciary.⁶⁵¹ For this reason, the appellate court ‘reluctantly’ concluded that ‘the plaintiffs’ case must be made to the political branches or to the electorate at large, the latter of which can change the composition of the political branches through the ballot box’.⁶⁵²

5.2.1.6 Critique of the Nine Circuit’s line of reasoning

The analysis on the Ninth Circuit’s treatment of *Juliana* would be incomplete without mentioning the dissent by Judge Josephine L. Staton. The dissenting judge heavily criticised the majority’s opinion on numerous grounds, including the fact that courts have a duty to protect constitutional rights that are in danger because of the political branch’s approach to climate change, and the fact that despite that duty, the majority nonetheless directed the claimants to vindicate their rights through the political process, which in this particular case is not helpful.⁶⁵³ Similarly, the dissenting judge rejected the majority’s opinion that the requested relief would not mitigate the claimants’ injuries, because it was not required to have full redress

⁶⁴⁸ *ibid* 1172.

⁶⁴⁹ *ibid*.

⁶⁵⁰ *ibid* 1173.

⁶⁵¹ *ibid* 1174-1175.

⁶⁵² *ibid* 1175.

⁶⁵³ *ibid* 1181.

to satisfy the standing requirement, as long as ‘the court could do something to help the plaintiffs’.⁶⁵⁴ As for the political side of redressability, the dissenting judge equally did not share the majority’s fears about the potential difficulties in supervising the potential overhaul of climate policy should the claimants succeed, given similar examples in the past, namely, the historic *Brown v Board of Education* case where the Supreme Court ruled on the question of racial desegregation in schools, and which also catalysed a continuous overhaul of policies.⁶⁵⁵

5.2.2 The Environmental Rights Amendment to the Constitution of Pennsylvania

Rights-based climate change litigation in the state of Pennsylvania presents a particularly interesting case given the existence of the constitutional right to a healthy environment enshrined in Article I, Section 27 of the Constitution of Pennsylvania – the so-called Environmental Rights Amendment.⁶⁵⁶ Similar to *Juliana* and to its non-rights-based atmospheric trust litigation counterparts in other states, *Funk* was a sweeping challenge to climate policy. In September 2015, a group of minors, including Ashley Funk, brought a lawsuit under the Environmental Rights Amendment against the Governor of Pennsylvania, the state’s Department of Environmental Protection, and various other state officials and agencies before the

⁶⁵⁴ *ibid* 1182. On this question, the dissenting judge thoroughly followed the approach adopted by the Supreme Court in *Massachusetts*, and was quite eloquent when explaining the need for urgent action:

The majority portrays any relief we can offer as just a drop in the bucket. 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*. Properly framed, a court order—even one that merely postpones the day when remedial measures become insufficiently effective—would likely have a real impact on preventing the impending cataclysm. Accordingly, I conclude that the court could do something to help the plaintiffs before us. And “something” is all that standing requires.

⁶⁵⁵ *ibid* 1188-1189, referring to *Brown v Board of Education of Topeka* 347 U.S. 483 (1954).

⁶⁵⁶ Constitution of the Commonwealth of Pennsylvania of 1776, art 1, para 27. The Environmental Rights Amendment was adopted on 18 May 1971 and its text reads as follows:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Commonwealth Court of Pennsylvania.⁶⁵⁷ The claimants argued that the respondents had failed to fulfil their constitutional obligation by not developing and implementing a comprehensive plan to regulate carbon dioxide and other GHGs in light of the present and future impacts of climate change.⁶⁵⁸ The impacts – including temperature increases leading to heat-related deaths, increase of ground-level ozone (which is linked to adverse health impacts), disruption of the hydrological cycle, sea-level rise, and degradation of water and forest resources – were already being felt in Pennsylvania and would only get worse.⁶⁵⁹ The court was presented with examples of such effects on the claimants; thus, one of them claimed that she had experienced extreme-weather anomalies attributed to climate change, including tornadoes; her house was inundated during Hurricane Sandy in October 2012; and her enjoyment of outdoor summer activities was significantly impeded by rising temperatures which also exacerbated her asthma and pollen allergy.⁶⁶⁰

The claimants submitted that the consumption of fossil fuels was occurring at a considerable rate in Pennsylvania, based on US Energy Information Agency data.⁶⁶¹ They argued that current science confirms that, in order to tackle climate change, the concentrations of carbon dioxide in the atmosphere must be reduced to, at most, 350 parts per million by 2100.⁶⁶² They further argued that current climate change legislation and policy were not in line with achieving that goal, and therefore that the Environmental Rights Amendment compels the respondents to set state emission limits and draw up a plan to meet them.⁶⁶³ The claimants sought a court order to compel the respondents to carry out studies, investigations and other analyses to determine the impact of climate change on the rights established by the Environmental Rights Amendment, and to implement a comprehensive regulatory scheme to reduce GHG emissions, thus satisfying their constitutional

⁶⁵⁷ *Funk v Wolf* 144 A.3d 228 (Pa. Cmwlth. 2016).

⁶⁵⁸ *ibid* [232] - [233].

⁶⁵⁹ *ibid* [235] - [236].

⁶⁶⁰ *ibid* [246].

⁶⁶¹ *ibid* [236].

⁶⁶² *ibid* [236] - [237].

⁶⁶³ *ibid* [237] - [238].

obligations.⁶⁶⁴ The claimants stressed that they did not demand the imposition of any particular regulatory regime.⁶⁶⁵

For their part, the defendants filed objections on standing, alleging that the claims were based on the harm that was ‘remote, speculative, and generalized’, and that the asserted interest did not go beyond the common interest of all citizens.⁶⁶⁶ Additionally, they alleged that the claimants did not have a right to require them to exercise their discretion in any particular way, while the declarations sought would have no practical effect on the parties.⁶⁶⁷ The defendants further alleged that the claimants’ requests were already being implemented through a variety of programs and strategies, and moreover that the petition raised a non-justiciable political question.⁶⁶⁸

5.2.2.1 Standing

The court dedicated most of its attention to the question of standing. According to the case law, in order to have standing under Pennsylvania’s prudential standing requirement,⁶⁶⁹ a person should be able to demonstrate a substantial, direct, and immediate interest in the outcome of the litigation.⁶⁷⁰ A substantial interest means that the interest in question surpasses the interest of all citizens.⁶⁷¹ It need not be pecuniary in nature; thus ‘aesthetic and environmental well-being, like economic well-being, are important ingredients of the quality of life in our society, and the fact that particular environmental interests are shared by the many rather than the few does not make them less deserving of legal protection through the judicial

⁶⁶⁴ *ibid.*

⁶⁶⁵ *ibid* [239].

⁶⁶⁶ *ibid* [239].

⁶⁶⁷ *ibid* [239] - [241].

⁶⁶⁸ *ibid* [241].

⁶⁶⁹ See *City of Philadelphia v Com.* 838 A.2d 566, 577 (Pa. 2003): ‘The requirement of standing under Pennsylvania law is prudential in nature, and stems from the principle that judicial intervention is appropriate only where the underlying controversy is real and concrete, rather than abstract.’

⁶⁷⁰ *Funk v Wolf* 144 A.3d 228, 243-244 (Pa. Cmwlth. 2016), referring to *Fumo v City of Philadelphia* 972 A.2d 487, 496 (Pa. 2009)).

⁶⁷¹ *ibid.*

process’.⁶⁷² An interest is direct when there is a causal link between the matter complained of and the alleged harm; and it is immediate when the causal link is not remote or speculative.⁶⁷³

Although Pennsylvania’s prudential standing requirement differs from standing under Article III of the US Constitution, which is applied in federal courts, Pennsylvania courts often look to the decisions of federal courts for guidance.⁶⁷⁴ It is relevant, for example, that the US Supreme Court has held that ‘environmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons for whom the aesthetic and recreational values of the area will be lessened by the challenged activity’.⁶⁷⁵ In the present case, the Commonwealth Court of Pennsylvania therefore drew parallels between the allegations of harm presented by the claimants and those in the case law – both federal and state – which had been found to go beyond the abstract interest of the general public.⁶⁷⁶ The court recognised that although the weather conditions linked to climate change affect many people, the claimants had suffered concrete harm, and this sufficiently distinguished them.⁶⁷⁷ The court did not agree with the defendants that the different nature of other cases, involving harm resulting from actions such as permit decisions or legislative enactments, rendered them essentially different from the case under consideration, where the harm was said to emanate from a failure to act.⁶⁷⁸ Therefore, the claimants were entitled to rely on the fact that the Environmental Rights Amendment places an affirmative duty on the Commonwealth to prevent and to remedy the degradation, diminution, or depletion of the public natural resources.⁶⁷⁹

With regard to causation, the claimants’ allegation that the defendants’ failure to carry out their obligations under the Environmental Rights Amendment results in

⁶⁷² *Wm. Penn Parking Garage, Inc. v City of Pittsburgh* 346 A.2d 269, 281 n.20 (Pa. 1975).

⁶⁷³ *Fumo v City of Philadelphia* 972 A.2d 487, 496 (Pa. 2009).

⁶⁷⁴ *ibid* 500, n.5.

⁶⁷⁵ *Friends of the Earth Inc v Laidlaw Environmental Services* 528 U.S. 167, 183 (2000).

⁶⁷⁶ *Funk v Wolf* 144 A.3d 228, 247 (Pa. Cmwlth. 2016).

⁶⁷⁷ *ibid*.

⁶⁷⁸ *ibid* 247-248.

⁶⁷⁹ *ibid*.

dangerous levels of carbon dioxide and other GHGs contributing to the degradation of natural resources, was also sufficient to establish a causal link.⁶⁸⁰ As to whether the claimants' interests were immediate, since the Environmental Rights Amendment protects the rights of all people, including future generations, the claimants' allegations about present as well as future harms⁶⁸¹ was not a reason to deny them standing.⁶⁸²

5.2.2.2 Restrictive interpretation of the Environmental Rights Amendment

The key question regarding the application of the Environmental Rights Amendment, was whether it provided the claimants with a clear right to the performance of their requested specific acts, and whether the performance of such acts by the defendants was mandatory in nature.

The infringement of Environmental Rights Amendment's rights can occur when the government has actually infringed upon citizens' rights or has failed in its trustee obligations.⁶⁸³ However, although 'expansive in its language'⁶⁸⁴ and 'giving greater weight to the environmental concerns in the decision-making process' when such concerns are 'juxtaposed with economic benefits',⁶⁸⁵ the Environmental Rights Amendment does not provide absolute priority to environmental rights.⁶⁸⁶ Instead, it requires policymakers to weigh conflicting environmental and social concerns in making their decisions, the legality of which are determined by the court in a three-fold test.⁶⁸⁷ By declaring the Commonwealth the trustee of public natural resources

⁶⁸⁰ *ibid.*

⁶⁸¹ With regard to the connection between the likely future harms and the immediate nature of the interest, the Supreme Court of Pennsylvania held that '[w]e need not wait until an ecological emergency arises in order to find that the interest of the municipality and county faced with such disaster is immediate.' See *Robinson Twp., Washington Cnty. v Commonwealth* 83 A.3d 901, 920 (Pa. 2013).

⁶⁸² *Funk v Wolf* 144 A.3d 228, 248 (Pa. Cmwlth. 2016).

⁶⁸³ *ibid* 233.

⁶⁸⁴ *ibid.*

⁶⁸⁵ *ibid* 234.

⁶⁸⁶ *ibid* 233, referring to *Payne v Kassab* 361 A.2d 263, 273 (Pa. 1976).

⁶⁸⁷ *ibid* 233-234:

for the benefit of present and future generations, the Environmental Rights Amendment does not stipulate that the Commonwealth's other duties, such as the maintenance of an adequate public highway system (which is also for the public's benefit), should be neglected.⁶⁸⁸ The balance between environmental and social concerns is struck, for the most part, by the legislative bodies, through legislative action,⁶⁸⁹ which sometimes delegates this power to the executive branch's agencies and departments.⁶⁹⁰ The exercise of such a discretion does not in itself 'expand the powers of a statutory agency'.⁶⁹¹ Therefore, in assessing the Environmental Rights Amendment's imposed duties on the executive, courts must remain cognisant of the balance that the legislature has struck between the above-mentioned concerns.⁶⁹²

On this basis, the Commonwealth Court of Pennsylvania concluded that the case law interprets the scope of the Environmental Rights Amendment in a rather restrictive manner, that is, that the court 'cannot legally operate to expand the powers of a statutory agency', and 'could operate only to limit such powers as had been expressly delegated by proper enabling legislation'.⁶⁹³ In other words, the balance between environmental and social concerns stems from the legislature, and any expansion of the Environmental Rights Amendment's scope thereof would amount to the disturbance of the 'legislative scheme'.⁶⁹⁴

Regarding the case at hand, the legislative scheme included a number of Acts addressing climate change, primarily Pennsylvania's Climate Change Act⁶⁹⁵ and its

(1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources? (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum? (3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?

⁶⁸⁸ *ibid* 234-235.

⁶⁸⁹ *ibid* 235.

⁶⁹⁰ *ibid*.

⁶⁹¹ *ibid* 235.

⁶⁹² *ibid*.

⁶⁹³ *ibid* 249.

⁶⁹⁴ *ibid* 249-250.

⁶⁹⁵ Climate Change Act of July 9, 2008, P.L. 935, 71 P.S. §§ 1361.1–1361.8.

Air Pollution Control Act,⁶⁹⁶ which oblige the defendants to examine the potential impacts of climate change, prepare a report and action plan, and promulgate and implement rules and regulations to reduce carbon dioxide and other GHG emissions.⁶⁹⁷ The Commonwealth Court of Pennsylvania agreed with the defendants' submission that those statutes did not require them to take the steps outlined by the claimants,⁶⁹⁸ and noted that those steps were within the discretion of government officials or were a task for the legislature.⁶⁹⁹ Therefore, the claimants did not have a clear right to have the defendants perform the requested actions.⁷⁰⁰ As for the requested declaration, the court held that it would amount to a purely advisory opinion, and thus have no practical effect.⁷⁰¹ Therefore, the case was dismissed.⁷⁰²

The claimants appealed to the Supreme Court of Pennsylvania, challenging the lower court's order to sustain the preliminary objections on the requested mandamus and declaratory relief.⁷⁰³ They claimed that the lower court had failed to consider the constitutional rights and duties created by the Environmental Rights Amendment itself, and that, by focusing solely on how the Environmental Rights Amendment was implemented through specific statutory enactments, had ignored the constitutional nature of the Environmental Rights Amendment.⁷⁰⁴ The state Supreme Court, however, affirmed the order of the lower court in a single-sentence decision.⁷⁰⁵

⁶⁹⁶ Air Pollution Control Act of January 8, 1960, P.L. 2119, *as amended*, 35 P.S. §§ 4001–4015.

⁶⁹⁷ *Funk v Wolf* 144 A.3d 228, 250 (Pa. Cmwlth. 2016).

⁶⁹⁸ *ibid.*

⁶⁹⁹ *ibid* 250-251.

⁷⁰⁰ *ibid.*

⁷⁰¹ *ibid* 251.

⁷⁰² *ibid* 252.

⁷⁰³ *Funk v Wolf* 88 MAP 2016 Appeal from Final Order of Commonwealth Court, 467 MD 2015, 11-42.

⁷⁰⁴ *ibid* 11-12. For a discussion see Kenneth T Kristl, 'The Devil Is in the Details: Articulating Practical Principles for Implementing the Duties in Pennsylvania's Environmental Rights Amendment' [2016] 28 Georgetown Environmental Law Review 589.

⁷⁰⁵ *Funk v Wolf* A.3d 2017 WL 1151148 (Mem) (Pa. 2017).

5.3 Section 7 of the Canadian Charter

The difficulties faced by the young US claimants in their sweeping challenges to federal and state climate policies did not dissuade their Canadian counterparts from initiating a similar nationwide rights-based climate change litigation campaign at the end of the last decade. Within just two years, several such cases emerged in Canada against the federal and state governments. All these cases have chiefly revolved around the constitutional right to life, safety and liberty under Section 7 of the Canadian Charter.⁷⁰⁶

5.3.1 Sweeping challenges to Canada's national climate policy

Like the US cases discussed earlier in this chapter, the two rights-based climate change cases against the federal government of Canada, *La Rose*⁷⁰⁷ and *Dini Ze' Lho'Imggin v Canada*,⁷⁰⁸ were both sweeping challenges to Canada's climate policy. Both cases were very similar. In *La Rose*, the claimants alleged violation of the above-mentioned Section 7 stemming from various actions and inaction by the federal government, including failure to adopt adequate GHG emissions reduction targets and failure to meet existing targets, and for continuous support for the development of new fossil fuel projects and so forth.⁷⁰⁹ Similar to their US counterparts, the claimants sought an order declaring the violation of their rights and an order requiring the government to prepare a national GHG inventory and to develop a climate recovery plan.⁷¹⁰ For their part, the claimants in *Dini Ze'* sought declaratory and injunctive relief 'to keep mean global warming to between 1.5°C and 2°C above pre-industrial level by reducing Canada's GHG emissions' in accordance with Canada's commitments under the Paris Agreement.⁷¹¹ The

⁷⁰⁶ Canada's Constitution of 1867 with Amendments through 2011, s 7: 'Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.'

⁷⁰⁷ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020).

⁷⁰⁸ *Dini Ze' v Canada* 2020 FC 1059 (Federal Court, 16 November 2020).

⁷⁰⁹ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [8].

⁷¹⁰ *ibid* [12].

⁷¹¹ *Dini Ze' v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [6].

claimants alleged that the federal government ‘has repeatedly failed, and continues to fail’ to take various measures to ensure compliance with the Paris Agreement,⁷¹² thus violating their constitutional right under Section 7 of the Canadian Charter.⁷¹³ The government moved to dismiss the claims in both these cases, arguing that their sweeping nature rendered the claims non-justiciable and non-redressable and disclosed no reasonable cause of action.⁷¹⁴

5.3.1.1 Justiciability

The Federal Court of Canada dedicated considerable attention to the justiciability of claims under Section 7 of the Charter. The court acknowledged that ‘the complexity of the matter or the novelty of the claim’ does not preclude justiciability.⁷¹⁵ Similarly, the existence of policy considerations does not preclude judicial review⁷¹⁶ as long as these questions at stake are not ‘so political’ to render courts incapable or unsuited to deal with them.⁷¹⁷ The court therefore emphasised that ‘i[t] is within the Court’s role to consider the constitutionality of government action and the accountability of the executive in light of the supremacy of the Constitution, including the Charter’.⁷¹⁸ The court referred to cases concerning illegal drug use⁷¹⁹ and the health care system,⁷²⁰ where the Supreme Court of Canada held that complex questions of a scientific and social nature do not automatically render such

⁷¹² *ibid* [10].

⁷¹³ *ibid* [11] – [14].

⁷¹⁴ See *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [22]; *Dini Ze’ v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [7].

⁷¹⁵ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [32], [39]:

‘The Plaintiffs argue that their claim is systemic and complex in nature. However, this should not render their claim non-justiciable. ... There is no issue as to institutional capacity because the Courts are well equipped to handle complexity, which in this case is based on scientific data and assessment of that data’.

⁷¹⁶ *ibid* [39]: ‘[A]n underlying social or policy context is not an impediment to a Court’s legitimacy’.

⁷¹⁷ *ibid* [33].

⁷¹⁸ *ibid* [35].

⁷¹⁹ *Canada (Attorney General) v PHS Community Services Society* 2011 SCC 44 (Supreme Court, 2011).

⁷²⁰ *Chaoulli v Quebec (Attorney General)* 2005 SCC 35 (Supreme Court, 2005).

cases non-justiciable for review under the Charter.⁷²¹ However, there is an important condition to justiciability of questions involving policy considerations, namely, that such ‘policy questions must be translated into law or state action to be amenable to Charter review and otherwise justiciable’.⁷²²

It was the latter consideration that led the Federal Court of Canada to determine that the Charter claim was non-justiciable⁷²³ because of the ‘undue breadth and diffuse nature’ of the challenged government’s response to climate change and because of ‘inappropriate remedies’ sought by the claimants.⁷²⁴ With regard to the former, the court observed that the ‘diffuse nature’ of the claim ‘has effectively put the entirety of Canada’s policy response to climate change at issue’, which undermines the function of judicial review, because the alleged violation of the Charter ‘cannot be connected to specific laws or state action’.⁷²⁵ This, in the court’s view, would inevitably require ‘judicial involvement in Canada’s overall policy response to climate change’.⁷²⁶ In the present case, the court was convinced that the claimants did not plead definable law or state action, or even a network in

⁷²¹ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [36] – [37]. Similarly, in *Dini Ze’ v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [20] the Court acknowledged that dealing with justiciability requires a more nuanced approach and clarified that there are exceptions to the above-mentioned general rule:

[J]ust because it is a political issue does not mean that there cannot be sufficient legal elements to render something justiciable. Justiciability of a policy/political issue is not always a black and white determination. Blurring of these lines happens sometimes, and a court will intervene especially when the allegations are of the constitutionality of policy or law, or a breach of someone’s constitutional rights. Canadian courts have ruled on matters of abortion ..., physician assisted death ..., and even international border agreements

⁷²² *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [38]. See also *Dini Ze’ v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [21].

⁷²³ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [40]:

The Plaintiffs’ position fails on the basis that there are some questions that are so political that the Courts are incapable or unsuited to deal with them. These include questions of public policy approaches – or approaches to issues of significant societal concern. ... To be reviewable under the *Charter*, policy responses must be translated into law or state action. While this is not to say a government policy or network of government programs cannot be subject to *Charter* review, in my view, the Plaintiffs’ approach of alleging an overly broad and unquantifiable number of actions and inactions on the part of the Defendants does not meet this threshold requirement and effectively attempts to subject a holistic policy response to climate change to *Charter* review.

⁷²⁴ *ibid* [41].

⁷²⁵ *ibid* [43].

⁷²⁶ *ibid* [44].

issue.⁷²⁷ Therefore, the court's greatest concern was the sweeping nature of the claimants' challenge.⁷²⁸

5.3.1.2 Redressability

Apart from concerns over justiciability, the Federal Court of Canada also considered the relief sought and found it to be inappropriate.⁷²⁹ With regard to declaratory relief, the court considered that such a declaration would 'not address the underlying harms created by law or state action'.⁷³⁰ As for the requested development and implementation of an enforceable climate recovery plan, the court referred to the early case of *Friends of the Earth v Canada* concerning Canada's participation in the Kyoto Protocol, where the respective court found the evaluation of the content of a climate change plan to be non-justiciable.⁷³¹ The Federal Court of Canada was convinced that this finding was applicable in *La Rose* as well, regardless of the case's difference from *Friends of the Earth*, which concerned the interpretation of the national law implementing the Kyoto Protocol.⁷³² Finally, the court considered that an order to develop and implement the above-mentioned plan would arguably be meaningless:

⁷²⁷ *ibid* [46]. See also *Dini Ze' v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [72].

⁷²⁸ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [46]: 'My concern is not that the Plaintiffs are asking this Court to consider a network of Canada's actions and inactions related to climate change, but with the undue breadth and diffuse nature of that network, which puts Canada's overall policy choices at issue.'

⁷²⁹ *ibid* [50] ('[w]hile the *Charter* remedies have the air of *prima facie* legal remedies, the Plaintiffs fail to consider that the overall context of the relief sought, in relation to the undue breadth of the claim, pushes this Court into a role outside the confines imposed by justiciability') and [51] ('the breadth of the [government's conduct] effectively means that the Plaintiffs are seeking a legal opinion on the interpretation of the *Charter*, in the absence of clearly defined law or state action that brings the *Charter* into play').

⁷³⁰ *ibid* [52].

⁷³¹ *Friends of the Earth v Canada (Governor in Council)* 2008 FC 1183 [2009] 3 F.C.R. 201, *aff'd* 2009 FCA 297, leave to appeal refused, [2010] S.C.C.A. No. 33469 (Supreme Court of Canada, 2010) [34] - [36].

⁷³² *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [54]. The Court believed so because the decision in *Friends of the Earth* arguably 'suggests that the remedies in the context of climate change must be carefully circumscribed to the appropriate separation of powers.'

The Plaintiffs are seeking an order requiring the Defendants to develop and implement an enforceable climate recovery plan, without specifying the specific content of that plan. Instead, they specify the method for devising such a plan, which involves a comprehensive accounting of Canada's GHG emissions and the alignment of the 'enforceable' climate recovery plan with Canada's fair share of the global carbon budget plan. This remedy is devoid of content and meaning in addressing the Plaintiffs' alleged rights, if violated. Further, it poses an incursion into the policy-making functions of the executive and legislative branches by requiring specific standards that the climate recovery plan must meet, including that it be compatible with maintaining a Stable Climate System and the protection of Public Trust Resources.⁷³³

The court reached a similar conclusion in *Dini Ze'*, but on this occasion, the court's position significantly departed from that in *La Rose* and presented a high degree of ambiguity. The court considered that 'the remedies sought to attempt to simplify a complex situation in a way that would be ineffective at actually addressing climate change given the polycentric and international nature of the problem'.⁷³⁴ According to the court, one of the reasons for this is that there are 'causation issues'⁷³⁵ with the claims:

In Canada, any real effect on Canada's GHG emissions will be dependent on the co-operation of the provincial governments. This Court does not have the statutory jurisdiction to mandate any such co-operation between the different levels of government meaning that any remedies would quite possibly be ineffective.⁷³⁶

Hence, despite acknowledging that the complexity of the claim does not preclude justiciability, the court stressed that the complexity of climate change was one of

⁷³³ *ibid* [55].

⁷³⁴ *ibid* [57].

⁷³⁵ *ibid* [62].

⁷³⁶ *ibid* [63].

the crucial matters that precluded meaningful judicial supervision of the remedies sought.⁷³⁷ The court therefore concluded that the claims were non-redressable.⁷³⁸

5.3.1.3 Applicability of Section 7

For the same reason, the Federal Court of Canada concluded that Section 7 rights claim did not disclose a reasonable cause of action⁷³⁹ because ‘the undue breadth and diffuse nature’ of the government’s conduct cannot sustain a proper analysis of this right – in contrast to ‘a challenge to a *particular* law or application thereof [which] is an archetypal feature of Section 7 *Charter* challenges’.⁷⁴⁰ However, on this occasion, there is a stark contrast between the court’s approaches in *La Rose* and *Dini Ze’*.

In *La Rose*, despite the overall unfavourable treatment of rights claims, the court did not foreclose a possibility of further legal action under Section 7, as can be observed in the following several points of the court’s analysis. First, the court agreed with the claimants ‘that novel and creative remedies may be warranted in order to be responsive to the needs of a given case’, although, strangely, it considered that ‘this is not such a case’.⁷⁴¹ Second, the court clearly signalled on multiple occasions that dealing with the question of climate change under Section 7 of the Charter was not a problem in itself – rather, the problem was that this particular claim raised a sweeping challenge.⁷⁴² Furthermore, the court dismissed

⁷³⁷ *ibid* [65]: ‘[c]limate change is a complex and multifaceted problem, with a host of provincial, municipal and international actors making supervision impossible or meaningless in this case.’

⁷³⁸ *ibid* [73] – [76].

⁷³⁹ *ibid* [59]. See also *Dini Ze’ v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [104].

⁷⁴⁰ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [62]. The Court followed the same approach in *Dini Ze’ v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [90], [94] and added that it was not the complexity of the claim, but rather the fact that it concerns a matter that ‘spans across various governments’ and ‘involves issues of economics and foreign policy, trade, and a host of other issues,’ meaning that ‘the courts must leave these decisions in the hands of others.’ *ibid* [56].

⁷⁴¹ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [56].

⁷⁴² *ibid* [63]:

[W]hile I would be prepared to find that a network of laws or state action could be reviewable under Section 7 of the *Charter*, it is the diffuse and unconstrained nature of the

one of the government's arguments against the applicability of the right to life, liberty and security, namely that Section 7 arguably 'does not confer positive rights, requiring Canada to enact, fund and enforce climate change policies consistent with the Plaintiffs' standards'.⁷⁴³ In fact, the court deemed the claimants' evidence sufficient 'to suggest that Section 7 may be interpreted as engaging positive rights in appropriate cases'.⁷⁴⁴ Specifically, the court referred to cases where other Canadian courts have held that the interpretation of the right to life, liberty and security should not be frozen in time, particularly in the context of novel cases.⁷⁴⁵

But perhaps most importantly, the court dismissed the government's argument that the right to life, liberty and security claim is speculative because it is arguably 'incapable of proof, owed to the cumulative and global nature of climate change [which] is driven from historical and global human activities and requires a comprehensive, international approach to address'.⁷⁴⁶ The government invoked this argument by referring to a non-climate change case concerning cruise missile testing, where the Supreme Court of Canada held that there is no 'sufficient causal link' between the government's decision to approve cruise missile and the increased threat of nuclear war.⁷⁴⁷ The Federal Court of Canada in *La Rose* firmly rejected applying the same approach with regard to climate change:

I cannot find that there is no reasonable prospect of success on the basis of the speculation arguments alone. Unlike the speculation inherent in the assumption ... that the reaction of foreign powers to cruise missile testing will increase the risk of nuclear war, the Plaintiffs in this case are alleging that Canada's role in climate change has led to the alleged harms. Canada

proposed Impugned Conduct that fails to provide an anchor for the analysis in this case. As such, the claim has no reasonable prospect of success under Section 7 of the *Charter*.

⁷⁴³ *ibid* [61] and [65] – [66].

⁷⁴⁴ *ibid* [69].

⁷⁴⁵ *ibid* [69] – [72], referring to *Gosselin v Quebec (Attorney General)* 2002 SCC 84 (Supreme Court, 2002) and *Kreishan v Canada (Citizenship and Immigration)* 2019 FCA 223, 438 D.L.R. (4th) 148.

⁷⁴⁶ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [74].

⁷⁴⁷ *ibid*, referring to *Operation Dismantle v The Queen* [1985] 1 SCR 441 (Supreme Court of Canada, 1985) [18].

has a role in GHG emissions that is more than speculative in this current case.⁷⁴⁸

In contrast, in *Dini Ze'* the court held that the constitutional rights claims under Section 7 of the Canadian Charter disclosed no reasonable cause of action because, among other things, they were speculative given the cumulative nature of GHG emissions:

[T]here is, however, little doubt that the effects of climate change are real, and both sides readily admit this fact. While there is a causal link between the emissions of GHG to climate change, because of the myriad of provincial and international actors, proving a causal link between specific Canadian laws and the effects felt because of climate change would be near impossible given the specific laws are not pled.⁷⁴⁹

In other words, this position is exactly the opposite to the one reached in *La Rose*, where the court draw a line between a hypothetical nuclear conflict scenario and Canada's real contribution to climate change. The court in *Dini Ze'* was apparently aware of this, as it distinguished the present case from the cruise missile testing case.⁷⁵⁰ The court, therefore, attempted to clarify its position by emphasising that it was the alleged lack of 'specific law or government action' – or even a network of laws – that the Charter claims would target, which resulted in such claims disclosing no reasonable cause of action.⁷⁵¹ But even with this explanation, the court found itself in muddy waters. This is because, as the court itself acknowledged, the claimants did identify 'some legislation which they see as having a goal to

⁷⁴⁸ *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [75]. Despite this finding, the Federal Court of Canada held that s 7 claim had no reasonable cause of action because of the allegedly undue breadth and diffuse nature of the government's conduct, as discussed earlier in this chapter. *ibid* [73].

⁷⁴⁹ *Dini Ze' v Canada* 2020 FC 1059 (Federal Court, 16 November 2020) [89].

⁷⁵⁰ *ibid* [90]:

That is not to say that *Operation Dismantle* is a perfect fit for this case—there is a major difference between concluding that the dangers of nuclear war are heightened because of the testing of a cruise missile, and the proposition that Section 7 *Charter* breaches can come from a government's environmental policy. Connecting the dots from that policy to the alleged harm is decidedly more difficult.

⁷⁵¹ *ibid* [91] – [93].

“encourage or permit emissions” and those with the goal to “reduce emissions””.⁷⁵²

The court side-stepped this important fact by arguing that the claimants failed to reference ‘specific sections and their role in causing specific breaches of the Charter’.⁷⁵³

Overall, the court in *Dini Ze’* seemed uneasy about its interpretation of Section 7. Hence, it tried to clarify further by referring to the traditional obstacle in climate change litigation, namely, causation: ‘while it hypothetically might be true that there is legislation which is causing *Charter*-breaching harm to the Dini Ze’, on the facts of this case the relationship to any breach is “manifestly incapable of being proven””.⁷⁵⁴ The court admitted that claimants were asking it ‘to consider a novel use of the negligence standards of material contribution’,⁷⁵⁵ which has been recognised in exceptional circumstances in tort, but never in Charter claims.⁷⁵⁶ And indeed, the court considered that ‘there must be some basis in fact to argue that there could be a material contribution claim for *Charter* breaches’.⁷⁵⁷ But ultimately, the court held that there was no such basis in this case.⁷⁵⁸

⁷⁵² *ibid* [94].

⁷⁵³ *ibid* [94].

⁷⁵⁴ *ibid* [95].

⁷⁵⁵ *ibid* [97].

⁷⁵⁶ *ibid* [98].

⁷⁵⁷ *ibid* [99].

⁷⁵⁸ *ibid* [100] – [102]:

While there could be a “but-for” argument resulting from two or more actors because of GHG emissions, the Dini Ze’ are not arguing that. They argue that not legislating in line with the *Paris Agreement* is the cause of the breach of Section 7 of the *Charter*. This argument does not succeed. Firstly, no other states’ laws are subject to the *Charter*, so no other states’ lack of legislating in line with the *Paris Agreement* could be a *Charter* breach. Secondly, the Dini Ze’ have provided no evidence that other states are breaching *Paris Agreement* duties, and because of that, there is contribution to the harm allegedly suffered. Therefore, while the Dini Ze’ could potentially have a *Charter* claim for government laws allowing for breaches of the *Charter*, this is not possible on the facts and pleadings of this case.

5.3.2 Challenge to Ontario's GHG emissions reduction targets

Chronologically, the court order in *Mathur v Ontario*,⁷⁵⁹ came out between the orders in *La Rose* and *Dini Ze'*; however, there are two fundamental differences between *Mathur* and the two latter cases.

Unlike *La Rose* and *Dini Ze'*, *Mathur* was filed in a provincial court, namely, the Ontario Court of Justice. But much more importantly, unlike the two above-mentioned cases, *Mathur* was not a sweeping challenge to Canada's, or even Ontario's climate policy, but rather a challenge to the province's GHG emission reduction target set by the provincial government's 2018 environmental plan.⁷⁶⁰ This plan, including the contested GHG emission reduction target, was adopted as a result of the government's 2018 Cap and Trade Cancellation Act⁷⁶¹ that among other things repealed the then existing province's framework climate change legislation⁷⁶² along with the GHG emission targets set out in it.⁷⁶³ The newly adopted plan set a new target to reduce Ontario's GHG emissions by thirty per cent below 2005 level by 2030.⁷⁶⁴ While this new target corresponds to the one adopted in the Paris Agreement, it actually represents a fifteen per cent decrease compared to the previous target which was set out in the repealed framework climate change legislation.⁷⁶⁵ The claimants therefore challenged this new target as well as the repeal of the old legislation.⁷⁶⁶ Like their counterparts in *La Rose* and *Dini Ze'*, they alleged violation of Section 7 of the Canadian Charter.⁷⁶⁷ The government moved to dismiss the case on the ground that it disclosed no reasonable cause of action.⁷⁶⁸

⁷⁵⁹ *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020).

⁷⁶⁰ *ibid* [2], [28] – [29]. See Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan 013-4208 (29 November 2018).

⁷⁶¹ Cap and Trade Cancellation Act, 2018, S.O. 2018, c 13.

⁷⁶² Namely, Climate Change Mitigation and Low-carbon Economy Act, 2016, S.O. 2016, c 7.

⁷⁶³ *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020) [24] - [25].

⁷⁶⁴ Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan 013-4208 (29 November 2018). See *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020) [29].

⁷⁶⁵ *ibid*.

⁷⁶⁶ *ibid* [30].

⁷⁶⁷ *ibid* [31].

⁷⁶⁸ *ibid* [32].

The Ontario Court of Justice reiterated the position of its federal counterpart in *La Rose* that ‘novelty alone is not a reason to strike a claim’.⁷⁶⁹ Furthermore, the court was satisfied that there is sufficient scientific proof that both of the harms caused by GHG emissions in general and of the anticipated contribution of the GHG emissions that would result under the new target to global emissions.⁷⁷⁰ In so doing, the Ontario Court of Justice repeated the conclusion reached by the Federal Court of Canada in *La Rose* that cumulative and global nature of climate change does not render the rights claims speculative.⁷⁷¹

5.3.2.1 Justiciability

With regard to justiciability, the outcome in *Mathur* was fundamentally different from the other two Canadian cases. First, the Ontario Court of Justice had to address the important question of whether the new target is actually law, as argued by the claimants, or a mere aspiration, as argued by the government.⁷⁷² The court held that the target as well as the plan itself is law and is judicially reviewable⁷⁷³ because it is legislatively mandated by the province’s legislature,⁷⁷⁴ it reflects the government’s policy,⁷⁷⁵ and it has the force of law.⁷⁷⁶ Second, the court took note of the federal court’s treatment of justiciability in *La Rose*, but pointed to the key difference between the two cases, namely, the fact that the challenge in *Mathur* was much more specific:

[T]his Application is very different from [*La Rose*]. In *La Rose*, the court noted that the plaintiffs were essentially challenging ‘Canada’s overall approach to climate policy’. Here, the Applicants are challenging very

⁷⁶⁹ *ibid* [38], [40].

⁷⁷⁰ *ibid* [95] – [102].

⁷⁷¹ *ibid* [100], referring to *La Rose v Canada* 2020 FC 1008 (Federal Court, 27 October 2020) [74] – [75].

⁷⁷² *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020) [48] – [58].

⁷⁷³ *ibid* [71].

⁷⁷⁴ *ibid* [63].

⁷⁷⁵ *ibid* [64] – [67].

⁷⁷⁶ *ibid* [68] – [70].

specific governmental actions and legislation. They are challenging policy decisions that were translated into law – in the form of the *Cancellation Act* – and by state action – in that the Ministry of Environment set the Target, pursuant to the *Cancellation Act*.⁷⁷⁷

5.3.2.2 Applicability of Section 7

The Ontario Court of Justice was equally unprepared to dismiss the rights claims as having no reasonable prospect of success. The court examined the claimants' arguments regarding the alleged violation of the right to life, liberty and security under Section 7 of the Charter⁷⁷⁸ and concluded that the case correctly engages with the invoked right.⁷⁷⁹

Regarding life interest, the court observed that the expansion of the concept of the right to life from its traditional application in the context of criminal justice in the early 1980s to a broader interpretation by courts, including in the context of medical insurance, environmental pollution and, most importantly, assisted suicide.⁷⁸⁰ Of particular note is the Supreme Court's case law concerning the right to life in assisted suicide, where the Supreme Court concluded that 'the right to life is engaged where the law or state action imposes death or an increased risk of death on a person, either directly or indirectly'.⁷⁸¹ The Ontario Court of Justice draw a direct parallel between such an interpretation and the situation in *Mathur*, where 'the Applicants argue that Ontario's actions in repealing the *Climate Change Act* and setting an inadequate Target increase the risk of death of Ontario's youth and future generations'.⁷⁸² Similarly, the court held that liberty interest goes beyond mere physical freedom and includes situations 'where state compulsions or

⁷⁷⁷ *ibid* [132].

⁷⁷⁸ *ibid* [142] - [144].

⁷⁷⁹ *ibid* [147].

⁷⁸⁰ *ibid* [148] – [152].

⁷⁸¹ *ibid* [151], referring to *Carter v Canada (Attorney General)* 2015 SCC 5 [2015] 1 S.C.R. 331 (Supreme Court of Canada, 2015) [62].

⁷⁸² *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020) [153].

prohibitions affect important and fundamental life choices’,⁷⁸³ as well as ‘the right to choose where to establish one’s home’.⁷⁸⁴ Finally, with regard to security interest, the Ontario Court of Justice once again relied on the case law of the Supreme Court of Canada, which has established that this interest concerns ‘an individual’s physical or psychological integrity’⁷⁸⁵ and ‘the right to be free from prospective harm’.⁷⁸⁶ The Ontario Court of Justice was therefore convinced that liberty and security interests are both relevant in the present case given the impacts of climate change on the claimants.

Yet another interesting point in the court’s analysis of the relevance of Section 7 is its recognition of the flexible nature of this particular section, which was referred to in the context of climate change in a non-climate change case addressed by the Federal Court of Appeal. On that occasion, the appellate court stated that ‘Section 7 is not frozen in time, nor is its content exhaustively defined, and that it may, some day, evolve to encompass positive obligations – possibly in the domain of social, economic, health or climate rights’.⁷⁸⁷ The idea that Section 7 of the Charter may potentially be interpreted as ‘climate rights’ seemed to resonate within the Ontario Court of Justice’s analysis, as the court reiterated it when discussing Ontario’s constitutional obligations with regard to climate change.⁷⁸⁸ However, this was not the only reason that guided the court. The other crucial factor, as already mentioned above, was that unlike *La Rose*, *Mathur* concerned a specific law:

The Applicants submit that if Ontario chose to put in a scheme to protect against climate change, it must do so in a way that complies with the *Charter*. It is of note that in *La Rose*, on this point, the court noted: ‘... when policy choices are translated into law or state action, that resulting law or

⁷⁸³ *ibid* [154], citing the Supreme Courts’ case *Blencoe v British Columbia (Human Rights Commission)*, 2000 SCC 44, [2000] 2 S.C.R. 307 (Supreme Court of Canada, 2000) [49].

⁷⁸⁴ *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020) 155, referring to *Godbout v Longueuil (City)* [1997] 3 S.C.R. 844 (Supreme Court of Canada, 1997) [66].

⁷⁸⁵ *ibid* [157].

⁷⁸⁶ *ibid* [158], referring to *Singh v Minister of Employment and Immigration* [1985] 1 S.C.R. 177 (Supreme Court of Canada, 1985) [207].

⁷⁸⁷ *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020) [165], referring to *Kreishan v Canada (Citizenship and Immigration)* 2019 FCA 223, 438 D.L.R. (4th) 148 [139].

⁷⁸⁸ *Mathur v Ontario* 2020 ONSC 6918 (Superior Court of Justice, 12 November 2020) [233].

state action must not infringe the constitutional rights of the Plaintiffs'. In other words, once Ontario chose to translate policy choices into law and state action, which I have found to be the case here, Ontario has a responsibility to ensure that the same law and state action do not infringe the constitutional rights of Ontario residents.⁷⁸⁹

In light of these circumstances, the Ontario Court of Justice was convinced that these positive obligations must be assessed at a merits hearing since it could not be determined that the claims have no reasonable prospect of success.⁷⁹⁰

5.3.2.3 Standing on behalf of future generations

Apart from refusing to dismiss the rights claims, the Ontario Court of Justice also granted claimants standing to represent both their own generation as well as future generations.⁷⁹¹ Regarding claimants themselves, the court found various compelling reasons for granting standing, including the fact that the standing test does not require the harm to materialise as long as claimants can show that a potential injury affected them.⁷⁹² As for standing on behalf of the future generations, the court deemed that the question of climate change impacts on future generations must be reviewed at a merits hearing.⁷⁹³ For the purpose of initial assessment, the court concluded that claimants have standing on behalf of future generations because the latter would be unable to bring the same claim against the current government for setting the contested GHG emissions reduction target.⁷⁹⁴

⁷⁸⁹ *ibid* [226].

⁷⁹⁰ *ibid* [228], [236] – [237].

⁷⁹¹ *ibid* [253].

⁷⁹² *ibid* [250] – [251].

⁷⁹³ *ibid* [249].

⁷⁹⁴ *ibid* [253]. As mentioned above, scholars have correctly observed the problems related to states' obligations to people who do not yet exist (see, for example, Bridget Lewis, 'The Rights of Future Generations within the Post-Paris Climate Regime' [2018] 7 *Transnational Environmental Law* 69), therefore, it is particularly interesting to see whether other courts would adopt such an approach with regard to standing on behalf of future generations. Although references to future generations have been made in many other analysed cases, in most such cases the question of standing on behalf of *unborn future generations* was either not raised at all or not addressed by the respective

5.4 Two trends in courts' approaches

The overall theme that emerges from the analysis of rights-based climate change cases in the US and Canada is that of ambiguity and uncertainty. This ambiguity and uncertainty is clearly observed in two key trends: the extent of 'politicisation' of governmental response to climate change by the courts on the one hand, and the courts' interpretation of written or unwritten constitutional rights in the context of climate change on the other hand. This section will now discuss these two trends and the potential drivers behind them.

5.4.1 Politicisation of governmental approach to climate change

With regard to the politicisation of governmental approaches to climate change, the approach taken by the US and the Canadian courts is typically 'pro-government'. The Canadian *Dini Ze'* case is perhaps a particularly stark example. Hence, the Federal Court of Canada was of the opinion that '[i]t is hard to imagine a more political issue than climate change'.⁷⁹⁵ It is therefore unsurprising that in its concluding paragraphs on justiciability, the court blatantly stated that '[t]he issue of climate change, while undoubtedly important, is inherently political, not legal, and is of the realm of the executive and legislative branches of government'.⁷⁹⁶ The same approach can be observed in *La Rose*, where the court was comfortable with drawing parallels between climate change and some other problems that raised the question of justiciability:

There is little difference between the choices the Defendants make in relation to addressing climate change and other policy choices the Courts

courts. One notable exception is the case of *Urgenda*, where the Hague District Court allowed Urgenda to represent future generations in the Netherlands because of Urgenda's goal of promoting a sustainable society. See *Urgenda Foundation v The Netherlands* C/09/456689 / ha za13-1396 (Hague District Court, 24 June 2015) [4.89] and [4.92].

⁷⁹⁵ *ibid* [19].

⁷⁹⁶ *ibid* [77].

have consistently recognized as falling more appropriately within the sphere of the other branches of government. These include choices in relation to the type of healthcare system ... , approaches to illegal drug use and addiction ... , limits on how and where prostitution may be conducted ... , addressing physician-assisted death ... and the prioritization of homeless and inadequate housing These are all important societal issues, the decisions in relation to which fall more appropriately on the legislative and executive branches of government. They attract a variety of social, political, scientific and moral reactions. There is room for disagreement between reasonable people about how these issues should be addressed.⁷⁹⁷

The treatment of policy concerning nationwide existential risks posed by climate change as being so closely analogous to policies on much narrower problems outlined above raises certain questions with respect to the court's apprehension of climate change risks and their real magnitude. The Federal Court of Canada justified such an approach by stressing that 'justiciability is an important underpinning of Canada's constitutional framework and this Court cannot circumvent its constitutional boundaries of the subject matter pleaded on the sole basis that the issue in question is one of societal importance, no matter how critical climate change is and will be to Canadians' health and well-being'.⁷⁹⁸ Such an approach is identical to the Ninth Circuit's majority opinion in *Juliana*, and it is also consistent with the approach adopted by some other US courts in other atmospheric trust litigation cases where the claimants did not invoke constitutional rights. The most notable example is *Kanuk v Alaska*, in which the Supreme Court of Alaska declined to determine the state government's obligations to protect the atmosphere from GHG emissions on political question grounds.⁷⁹⁹

⁷⁹⁷ *ibid* [44].

⁷⁹⁸ *ibid* [48].

⁷⁹⁹ *Kanuk ex rel Kanuk v State Dep't of Nat Res* 335 P.3d 1088, 1097-1101 (Alaska 2014). Despite this conclusion, the Supreme Court emphasised that if the claimants are able to bring forward justiciable claims in the future, they have a basis to proceed 'even absent a declaration that the atmosphere is subject to the public trust doctrine', since their complaint alleged 'that the atmosphere is inextricably linked to the entire ecosystem, and that climate change is having a detrimental impact

While it may be tempting to ascribe this politicisation of governmental approach to climate change solely to the ‘political climate’ in the US and Canada, the fact that all dismissed cases in both countries raise sweeping challenges to climate policy seems particularly compelling. Indeed, it is worth recalling that of all the cases discussed in this chapter, the Canadian *Mathur* case was the only one that survived the motions to dismiss stage after a lengthy judicial scrutiny of the political question.⁸⁰⁰ Was it simply because the Ontario Court of Justice was more sympathetic to the claimants, or was it because the court was more convinced that climate change presents an extremely grave threat to the claimants than its federal counterpart, or, indeed, than its US counterparts? Hardly so. In fact, the Ontario Court of Justice itself highlighted the fact that its position in *Mathur* was largely dictated by the different nature of this case, namely, by the fact that it is not a sweeping challenge, but rather a challenge to the existing GHG emissions reduction target. And while it is impossible to say without at least some degree of speculation whether the Court would dismiss the claims in *Mathur* if they raised sweeping challenges to Ontario’s climate policy, it is certainly much more likely that an unsuccessful outcome could have happened.

Is it safe to assume then that rights claims raising sweeping challenges in North America are prone to potential politicisation by the judiciary, which in turn makes them highly vulnerable to judicial scrutiny at the very early stages of litigation? The answer is most likely yes. But if so, can it also be assumed that such rights claims are not viable? The answer to this question is probably ‘not necessarily.’ For instance, as may be recalled, *Funk* was dismissed not because it was a sweeping challenge, but rather because of the court’s narrow interpretation of the right to a healthy environment. For its part, in *Juliana*, the ‘politicisation’ of climate change by the Ninth Circuit’s majority was vehemently opposed by the dissenting judge. Furthermore, looking at the examples of non-rights based atmospheric trust cases that raised sweeping challenges to state climate policies, it can be observed that a

on already recognized public trust resources such as water, shorelines, wildlife, and fish’ (ibid 1102-1103).

⁸⁰⁰ As seen in section 5.2.1.2 in this chapter, the court in *Funk* did not address the political question.

number of state courts did not foreclose the possibility of expanding the public trust doctrine in the future to include climate change obligations on the states. The most notable example of this trend is *Chernaik v Brown*, where the majority of the Supreme Court of Oregon dismissed the public trust doctrine claim but left the door open for potential future developments.⁸⁰¹ Curiously, the dissenting judge Walters raised very similar concerns to the ones raised by the dissenting Ninth Circuit judge in *Juliana*, particularly, that the courts should not abdicate their obligation to determine what the law requires to protect the rights of persons, regardless of the complexities of the issue.⁸⁰² At the same time, it remains to be seen whether similar developments could take place in Canada in the future, but for now, the federal court's treatment of sweeping challenges offers little hope for the viability of such claims.

5.4.2 Interpretation of the written or unwritten constitutional rights in the context of governmental climate obligations

Even assuming that sweeping challenges to climate policy are not viable in North America, the question still remains whether rights claims could be made to mount other types of challenges. And it is here where the second trend has to be considered – the US and the Canadian courts' interpretation of written or unwritten

⁸⁰¹ *Chernaik v Brown* 367 Or 143, 169-270 (2020):

We ... do not foreclose the possibility that the doctrine might be expanded in the future to include additional duties imposed on the state. However, even though the state acknowledges in briefing to the court that it recognizes the threats posed by climate change and that the state needs to do more to address those threats, plaintiffs have not developed a legal theory that leads us to alter current law concerning the state's duty under the public trust doctrine. In this case, therefore, we do not impose broad fiduciary duties on the state, akin to the duties of private trustees, that would require the state to protect public trust resources from effects of greenhouse gas emissions and consequent climate change.

⁸⁰² *ibid* 186-187:

Courts also must not shrink from their obligation to enforce the rights of all persons to use and enjoy our invaluable public trust resources. How best to address climate change is a daunting question with which the legislative and executive branches of our state government must grapple. But that does not relieve our branch of its obligation to determine what the law requires We should not hesitate to declare that our state has an affirmative fiduciary duty to act reasonably to prevent substantial impairment of our public trust resources.

constitutional rights in the context of governmental climate obligations. However, this trend also is equally ambiguous, though perhaps less so than the politicisation of governmental approach to climate change. For example, it is evident that there is no consistency between the federal court's approaches in the Canadian cases *La Rose* and *Dini Ze'* despite the fact that both cases arose in practically identical circumstances. In *La Rose*, the court found that the right to life, liberty and security under Section 7 of the Canadian Charter was applicable when challenging the government on climate change grounds, yet reached a completely different conclusion in *Dini Ze'* due to alleged complexity of causation.⁸⁰³

Similarly, the US courts' different approaches to the right to a healthy environment leaves the viability of climate claims invoking this right open to debate. This right was invoked in both *Juliana* and *Funk*, albeit in somewhat different contexts. In *Juliana*, the right took the shape of an unenumerated 'right to a climate system capable of protecting human life', or in other words, the 'right to a stable climate system'.⁸⁰⁴ Since this right is not explicitly mentioned in the US constitution, the District Court for the District of Oregon tried to clarify its meaning,⁸⁰⁵ although the resulting interpretation can still be viewed as rather broad, and thus destined to differ significantly from case to case if other courts were to adopt judge Aiken's interpretation.⁸⁰⁶ And yet, despite this potential breadth, the Ninth Circuit was willing to accept the existence of this right and its relevance in the context of climate change, although it did not clarify the scope of this right or the duties that such a right imposes on the federal government.⁸⁰⁷ In contrast, the Pennsylvanian state courts' interpretation of the constitutionally recognised right to a healthy environment in *Funk* notably limited the right's application⁸⁰⁸ in a very similar way

⁸⁰³ See section 5.3.1.3 in this chapter.

⁸⁰⁴ See section 5.2.1.4 in this chapter.

⁸⁰⁵ *ibid.*

⁸⁰⁶ This potentially broad interpretation is a notable feature of the right to a healthy environment that was observed by the Irish Supreme Court in *Friends of the Irish Environment. Friends of the Irish Environment v Ireland* [2020] No: 205/19 (Supreme Court, 31 July 2020) [8.10] – [8.11].

⁸⁰⁷ See section 5.2.1.5 in this chapter.

⁸⁰⁸ See section 5.2.2.2 in this chapter.

to their Norwegian counterparts in *Greenpeace Nordic*, discussed in the previous chapter.⁸⁰⁹

5.5 Conclusion

The North American courts have thus far proved to be an unfavourable forum for sweeping challenges to climate policy that have dominated rights-based climate change litigation in this region. The reason for this is that courts have viewed climate policy as falling within the scope of the legislative and executive branches. At the same time, courts have demonstrated a fairly flexible approach to the right to life, which indicates, at least to some degree, the viability of this particular right in the context of climate change. The relevance of the right to a healthy environment, on the other hand, is much more contentious, given both its limited use and lacklustre interpretation by the respective courts. Overall, the judicial approach to rights claims in North America has been rather inconsistent, which on the one hand explains the general lack of viability of such claims, but on the other hand, does not necessarily preclude a more successful outcome in other types of rights claims in the future.

⁸⁰⁹ See section 4.5.6 of this thesis.

CHAPTER 6. THE GLOBAL SOUTH

6.1 Introduction

In the context of climate change, the term ‘Global South’ evokes no single trend.⁸¹⁰ For instance, Asia is home to some of the world’s largest emitters of GHGs⁸¹¹ and also to countries that are among the most vulnerable to the impacts of climate change.⁸¹² In the latter countries, hundreds of millions of people face existential threat from sea level rise alone, without considering other potentially deadly impacts.⁸¹³ In South America, apart from Brazil, the countries’ national GHG emissions are generally low,⁸¹⁴ while the key contributor to climate change is the loss of emissions-absorbing rainforests that comprise over twenty five per cent of the world’s global forest coverage.⁸¹⁵ In fact, ongoing rapid deforestation in the Amazon has raised growing concerns about the world’s largest land carbon sink turning into a major source of GHG emissions.⁸¹⁶ At the same time, many countries in South America face critical impacts of climate change, including flooding, landslides, and sea level rise, as well as risks posed by a decline in biodiversity,

⁸¹⁰ For a discussion on human rights and environmental challenges facing the Global South, see, for example: Carmen Gonzalez, ‘Human Rights, Environmental Justice, and the North-South Divide’ in Anna Grear and Louis J Kotzé (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar Publishing, 2015); Louis J Kotzé and Evadne Grant, ‘Environmental Rights in the Global South’ in Philippe Cullet and Sujith Koonan (eds), *Research Handbook on Law, Environment and the Global South* (Edward Elgar Publishing 2019).

⁸¹¹ See Global Carbon Atlas, CO2 emissions <<http://www.globalcarbonatlas.org/en/CO2-emissions>> accessed 30 June 2022.

⁸¹² See Yasuaki Hijioka and others, ‘2014: Asia’ in Vicente Barros and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1327.

⁸¹³ *ibid*

⁸¹⁴ See Global Carbon Atlas, CO2 emissions <<http://www.globalcarbonatlas.org/en/CO2-emissions>> accessed 30 June 2022

⁸¹⁵ The Amazon rainforest is also home to more species of plants and animals than any other terrestrial ecosystem on the planet. See Rhett A Blatner, ‘The Amazon Rainforest: The World’s Largest Rainforest’ *Mongabay* (4 June 2020) <<https://rainforests.mongabay.com/amazon/>> accessed 30 June 2022

⁸¹⁶ See Luciana V Gatti and others, ‘Amazonia as a carbon source linked to deforestation and climate change’ [2021] 595 *Nature* 388.

which is also the result of deforestation.⁸¹⁷ For its part, Sub-Saharan Africa is probably the most notable example of climate injustice – the phenomenon of being the least responsible for causing climate change, yet suffering most from its impacts.⁸¹⁸ With an overall population of over one billion people,⁸¹⁹ the national GHG emissions in almost all Sub-Saharan African countries, including per capita emissions, are by far the lowest in the world.⁸²⁰ At the same time, Sub-Saharan Africa is one of the most vulnerable regions on the planet when it comes to climate change.⁸²¹ The impacts of climate change, including severe droughts, extreme precipitation and devastating floods, critical failure in crop yields, and invasions of insects have all taken a great toll on communities in many Sub-Saharan African countries.⁸²² These impacts are expected to worsen in the coming decades.⁸²³

Given the specific circumstances of nearly eighty countries in this extremely diverse range of geographical regions,⁸²⁴ it might be expected that classifying rights-based climate change litigation in these countries under the umbrella of ‘Global South’ would be exceptionally difficult, if not impossible, given not only the diversity in terms of geography, but also extreme diversity in terms of legal cultures and other

⁸¹⁷ Graciela O Magrin and others, ‘2014: Central and South America’ in Vicente Barros and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1499.

⁸¹⁸ See John Magrath, ‘The Injustice of Climate Change: Voices from Africa’ [2010] 15 *Local Environment* 891.

⁸¹⁹ See World Bank Data, Population, total – Sub-Saharan Africa <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ZG&name_desc=false> accessed 30 June 2022.

⁸²⁰ The two exceptions are the two major fossil fuel producing countries in the region, South Africa and Nigeria.

⁸²¹ Isabelle Niang and others, ‘2014: Africa’ in Vicente Barros and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1199.

⁸²² *ibid.*

⁸²³ *ibid.*

⁸²⁴ This number is taken from the list of the Global South countries, maintained by the UN Finance Center for South-South Cooperation. As of early 2022, this list includes seventy-eight countries in South America, Africa, the Middle East, and Asia. See UN Finance Center for South-South Cooperation, Global South Countries (Group of 77 and China) <http://www.fc-ssc.org/en/partnership_program/south_south_countries> accessed 30 June 2022.

socio-economic factors. And yet, there are two important reasons that justify such an approach.

First, as compared to their counterparts in North America and Europe, countries in the Global South have generally been much slower to develop a body of climate change litigation (including rights-based cases), with climate change often being a peripheral issue.⁸²⁵ As a result, until recently, climate change litigation has not played a very prominent role in the Global South.⁸²⁶ The reasons behind this reflect some underlying problems – legal, political, technical, financial and so forth – that affect many countries in the Global South and often prevent people in communities from access to justice.⁸²⁷ Coincidentally, these communities are also the ones that bear the brunt of climate change. For example, in Sub-Saharan Africa, many of the affected communities lack the capacity to adapt to climate change impacts because of ongoing military conflicts, political instability, rampant destruction and depletion of natural resources by the extractives industry, the pervasive problem of

⁸²⁵ Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' [2019] 113 *American Journal of International Law* 679, 692; Joana Setzer and Lisa Benjamin, 'Climate Litigation in the Global South: Constraints and Innovations' [2020] 9 *Transnational Environmental Law* 77, 80, 84. The case of *Komari v Mayor of Samarinda* 138/PDT/2015/PT.SMR (District Court of Samarinda, 2014) [5] in Indonesia is a good example. In 2013, a coalition of Samarinda residents sued governmental agencies and local authorities, claiming that 'the defendants failed to take into account climate change in issuing permits for coal-mining operations', contrary to national laws on GHG emissions reduction. Among other things, the claimants alleged violation of the right to life and the right to enjoy a good and healthy environment under arts 28A and 28H respectively of the Constitution of Indonesia. The court agreed that the defendants did not fulfil their obligations with respect to climate change and granted the sought relief. The case, however, was more focused on local environmental impacts of coal mining. Andri G Wibisana and Conrado M Cornelius, 'Climate Change Litigation in Indonesia' in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020) 235) 236-237 and 248. For an additional discussion on this case and its context see also Deniza Ariani, 'The Effectiveness of Climate Change Litigation as a Venue to Uphold State Climate Change Obligations in Indonesia' [2019] 16 *Indonesian Journal of International Law* 210.

⁸²⁶ Joana Setzer and Lisa Benjamin, 'Climate Litigation in the Global South: Constraints and Innovations' [2020] 9 *Transnational Environmental Law* 77, 101.

⁸²⁷ See, for example, Jolene Lin, 'Litigating Climate Change in Asia' [2014] 4 *Climate Law* 140, 142:

In many Asian jurisdictions, litigation is not an option. It is prohibitively expensive; cases can get caught up for years in a tangle of bureaucratic channels; there are few, if any, well-trained environmental lawyers who are able and willing to litigate test cases. In some jurisdictions, the judiciary is simply not independent.

See also Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' [2019] 113 *American Journal of International Law* 679, 692.

widespread poverty, and related social, economic and environmental problems.⁸²⁸ In fact, even numerous instances of local environmental pollution, for example, from oil spills, rarely lead to court proceedings due to financial and administrative constraints and lack of lawyers with proper expertise to handle cases involving complex issues related to environmental degradation.⁸²⁹ On more than one occasion, this situation has led the affected communities to seek justice abroad, namely, in the home countries of parent companies, whose subsidiaries operated in Sub-Saharan Africa.⁸³⁰ For its part, the emergence of high profile rights-based climate change cases similar to those pursued in Europe and North America has been considered highly unlikely, if not impossible, in some Asian countries due to political reasons.⁸³¹

Second, the difficulties faced by countries in the Global South has not precluded a growing movement in these countries to develop a legal response to challenges posed by climate change, including rights-based climate change litigation.⁸³² For instance, concerns over local communities' vulnerability prompted the African Commission on Human and Peoples' Rights to adopt resolutions calling on African states to include human rights protection standards into climate laws and to ensure greater protection of vulnerable groups, including people affected by conflicts.⁸³³

⁸²⁸ Isabelle Niang and others, '2014: Africa' in Vicente Barros and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1199.

⁸²⁹ See Samvel Varvastian and Felicity Kalunga, 'Transnational Corporate Liability for Environmental Damage and Climate Change: Reassessing Access to Justice after *Vedanta v Lungowe*' [2020] 9 *Transnational Environmental Law* 323.

⁸³⁰ *ibid.*

⁸³¹ China is one of such examples – see Jianfeng Li, 'Climate Change Litigation: A Promising Pathway to Climate Justice in China?' in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020) 342-343; Zhu Yan, 'The Subordinate and Passive Position of Chinese Courts in Environmental Governance' in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020) 383-385.

⁸³² Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' [2019] 113 *American Journal of International Law* 679, 702-703; Joana Setzer and Lisa Benjamin, 'Climate Litigation in the Global South: Constraints and Innovations' [2020] 9 *Transnational Environmental Law* 77, 78.

⁸³³ See: Resolution on Climate Change and Human Rights and the Need to Study its Impact in Africa - ACHPR/Res.153(XLVI)09 (2009); Resolution on Climate Change and Human Rights in Africa - ACHPR/Res.342(LVIII)2016 (2016).

This development is hardly a surprise, given the fact that Sub-Saharan African countries were the first in the world to unanimously recognise and adopt an enforceable right to a healthy environment in the African regional human rights protection system,⁸³⁴ while at the national level, most countries in Sub-Saharan Africa have constitutional provisions recognising such a right.⁸³⁵ And although the recognition of the right to a healthy environment has not resolved the numerous problems faced by countries in this region,⁸³⁶ it has created a potentially useful tool for addressing these problems in the long term.⁸³⁷ Similarly, the emergence of high-profile rights-based climate change litigation, including cases focusing on regional problems such as deforestation in the Amazon rainforest in South America⁸³⁸ or the availability of safe drinking water in South Asia,⁸³⁹ has firmly put the Global South on the global map of rights-based climate change litigation.

6.2 Expansive interpretation of constitutional rights in India and Pakistan

6.2.1 Judicial activism as an impetus for climate change litigation in India

⁸³⁴ African Charter on Human and Peoples' Rights (Nairobi, 19 January 1982) United Nations, *Treaty Series*, vol 1520, p 217, art 24. See also Lilian Chenwi, 'The Right to a Satisfactory, Healthy, and Sustainable Environment in the African Regional Human Rights System' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018).

⁸³⁵ See: UN General Assembly, A/HRC/43/53, Right to a healthy environment: good practices. Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (30 December 2019). Annex IV: Recognition of the Right to a Healthy Environment in Constitutions, Legislation and Treaties: Africa Region (14 February 2020) 4-5.

⁸³⁶ UN Human Rights Council, A/HRC/43/54, Good practices of States at the national and regional levels with regard to human rights obligations relating to the environment. Summary report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (23 January 2020) 7.

⁸³⁷ *ibid* 13-15.

⁸³⁸ Namely, *Future Generations. Future Generations v Ministry of Environment* 11001-22-03-000-2018-00319-01; STC4360-2018 (Supreme Court of Colombia, 2018).

⁸³⁹ Most notably, in *Leghari. Leghari v Pakistan* WP No 25501/2015 orders 1 and 2 (Lahore High Court, 2015); *Leghari v Pakistan* WP No 25501/2015 judgment (Lahore High Court, 2018).

India has a rich history of active environmental public interest litigation and a proactive judiciary that has interpreted constitutional rights liberally and flexibly.⁸⁴⁰ Although the first Indian cases mentioning climate change date back to the 1990s, climate change litigation, including rights-based cases, is a relatively recent phenomenon, with climate change typically being a peripheral issue.⁸⁴¹ The case of *Singh v Himachal Pradesh*⁸⁴² is a clear example of the specifics of rights-based climate change litigation in India.

In 2014, the National Green Tribunal – a specialised environmental court⁸⁴³ – issued an opinion on its own motion against the State of Himachal Pradesh concerning multiple environmental challenges, including deforestation and climate change, facing the vulnerable Himalayan region.⁸⁴⁴ One of the two issues directly relevant to climate change in this case were emissions of black carbon – a short-lived yet potent GHG mostly produced by burning of agricultural waste and by vehicles, which is believed to be the biggest contributor to global warming after carbon dioxide.⁸⁴⁵ The Tribunal’s greatest concern was the contribution of black carbon to the melting of glaciers in the Himalayas, namely, through the residue of black carbon on snow and glaciers that caused them to absorb more light and therefore, heat, resulting in increased melting of the glaciers.⁸⁴⁶ The Tribunal identified the increased traffic in Himachal Pradesh, particularly from the tourist sector, as one of

⁸⁴⁰ Gitanjali Nain Gill, ‘Environmental Justice in India: The National Green Tribunal and Expert Members’ [2016] 5 Transnational Environmental Law 175, 177, 187; Shibani Ghosh, ‘Litigating Climate Claims in India’ [2020] 114 American Journal of International Law 45, 46.

⁸⁴¹ Shibani Ghosh, ‘Litigating Climate Claims in India’ [2020] 114 American Journal of International Law 45.

⁸⁴² *Singh v Himachal Pradesh* No. 237 (THC)/2013 (CWPII No.15 of 2010) (National Green Tribunal, 6 February 2014).

⁸⁴³ For a detailed analysis of the National Green Tribunal see: Gitanjali Nain Gill, ‘The National Green Tribunal of India: A Sustainable Future through the Principles of International Environmental Law’ [2014] 16 Environmental Law Review 183; Gitanjali Nain Gill, ‘Environmental Justice in India: The National Green Tribunal and Expert Members’ [2016] 5 Transnational Environmental Law 175; Gitanjali Nain Gill, *Environmental Justice in India: The National Green Tribunal* (Routledge 2017); Gitanjali Nain Gill, ‘Mapping the Power Struggles of the National Green Tribunal of India: The Rise and Fall?’ [2020] 7 Asian Journal of Law and Society 85.

⁸⁴⁴ *Singh v Himachal Pradesh* No. 237 (THC)/2013 (CWPII No.15 of 2010) (National Green Tribunal, 6 February 2014) 5.

⁸⁴⁵ *ibid* 3-4.

⁸⁴⁶ *ibid* 4.

the major sources of black carbon.⁸⁴⁷ The second major issue was deforestation, which was predominantly driven by uncontrolled grazing, soil erosion, forest fires, excessive tourism, and so forth,⁸⁴⁸ and also contributed to climate change.⁸⁴⁹

6.2.1.1 Deriving the right to a healthy environment from the right to life

The constitutional right that the Tribunal considered to be under threat because of the state government's lack of action was the right to life under Article 21,⁸⁵⁰ interpreted in the context of governmental and citizens' duties to protect the environment.⁸⁵¹ While the Constitution of India does not explicitly grant rights related to environmental protection, the long-standing interpretation of Article 21 by the Supreme Court of India has been systematically expanded to take within its scope the right to a healthy environment.⁸⁵² The Tribunal, therefore, provided a lengthy discussion on the Supreme Court's practice regarding the interpretation of Article 21 and the resulting recognition of 'unarticulated liberties that were implied by [it]', including the right to a healthy environment.⁸⁵³ Such an expansive interpretation is part of the quality of life dimension that is an essential part of the right to life.⁸⁵⁴ Accordingly, the Tribunal emphasised that the introduction of the

⁸⁴⁷ *ibid* 4-5.

⁸⁴⁸ *ibid* 14-15.

⁸⁴⁹ *ibid* 15.

⁸⁵⁰ India's Constitution of 1949 with Amendments through 2016, art 21 '(Protection of life and personal liberty): No person shall be deprived of his life or personal liberty except according to procedure established by law'.

⁸⁵¹ *ibid* art 48A (Protection and improvement of environment and safeguarding of forests and wild life): 'The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country'. For its part, art 51A(g) imposes a duty on every citizen of India 'to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures'.

⁸⁵² *Singh v Himachal Pradesh* No. 237 (THC)/2013 (CWPII No.15 of 2010) (National Green Tribunal, 6 February 2014) 5. Such an interpretation has a statutory recognition in the preamble to the National Green Tribunal Act 2010: '[I]n the judicial pronouncement in India, the right to healthy environment has been construed as a part of the right to life under article 21 of the Constitution'. The Gazette of India (No 19 of 2010), The National Green Tribunal Act 2010, 2 June 2010.

⁸⁵³ *Singh v Himachal Pradesh* No. 237 (THC)/2013 (CWPII No.15 of 2010) (National Green Tribunal, 6 February 2014) 6-8.

⁸⁵⁴ *ibid* 6-7: 'Proper and healthy environment enables people to enjoy a quality of life which is the essence of the right guaranteed under Article 21. The right to have congenial environment for human existence is the right to life.'

quality-of-life criterion when interpreting Article 21 was necessary to guarantee not just the right to life, but the right to life with dignity:

The expression 'life' enshrined in Article 21 of the Constitution does not connote mere animal existence or continued drudgery through life. It has a much wider meaning which includes right to livelihood, better standard of living, hygienic conditions in the workplace and leisure. The right to life with human dignity encompasses within its fold, some of the finer facets of human civilization which makes life worth living. The expanded connotation of life would mean the tradition and cultural heritage of the persons concerned.⁸⁵⁵

Such an interpretation, in the Tribunal's view, was also consistent with international human rights law⁸⁵⁶ as well as with its own case law and with that of other Indian courts that have also interpreted the right to life under Article 21 as covering the right to a healthy environment.⁸⁵⁷ Furthermore, such an interpretation encompassing protection of forests, was also necessary from the point of view of intergenerational equity as well as with due regard to the principles of international environmental law.⁸⁵⁸

⁸⁵⁵ *ibid* 8

⁸⁵⁶ *ibid* (referring to Art 25(2) of the Universal Declaration on Human Rights that 'ensures right to standard of adequate living for health and well-being of an individual including housing and medical care and the right to security in the event of sickness, disability etc.')

⁸⁵⁷ *ibid* 9.

⁸⁵⁸ *ibid*:

Where it is the bounden duty of the State to protect the above rights of the citizen in discharge of its constitutional obligation in the larger public interest, there the law also casts a duty upon the State to ensure due protection to the forests and environment of the country. Forests in India are an important part of the environment. They constitute a national asset. We may, at this stage, refer to the concept of inter-generational equity, which has been treated to be an integral part of Article 21 of the Constitution of India. The Courts have applied this doctrine of sustainable development and precautionary principle to the cases where development is necessary, but certainly not at the cost of environment. The Courts are expected to drive a balance between the two. In other words, the onerous duty lies upon the State to ensure protection of environment and forests on the one hand as well as to undertake necessary development with due regard to the fundamental rights and values.

6.2.1.2 Identifying deforestation as a sector contributing to climate change

The Tribunal identified the key role that forests play in the tackling of climate change⁸⁵⁹ and held that the state government must take a series of immediate and effective measures to stop deforestation and to initiate reforestation.⁸⁶⁰ Similarly, considering the impacts of climate change on the Himalayas, particularly the melting of the glaciers,⁸⁶¹ the Tribunal directed the government to address the emissions of black carbon, namely through rigorous regulation of vehicles, bans on harmful agricultural practices in the area, and other comprehensive measures.⁸⁶² The Tribunal emphasised that it was issuing these directions ‘in consonance with the Constitutional mandate’ provided by Article 21, given that the ‘State Government has neither formulated nor issued any specific guidelines – statutory or otherwise – on prevention and control of environmental degradation and damage’ in relation to the Himalayan glaciers.⁸⁶³ The constitutional right to a

⁸⁵⁹ *ibid* 15:

Deforestation seriously affects local and regional climates. Forests absorb more of the sun's radiation. Deforestation in the tropics increases surface temperatures, because grasslands are better reflectors of the sun's energy. Research has demonstrated that replacement of tropical forests with grassland increases local air and soil temperature, decreases evapotranspiration and decreases precipitation. The warming from a reduction in evapotranspiration more than compensates for the cooling from the increased albedo. Temperature decreases because of evapotranspiration, which is a cooling process, is reduced by deforestation. Evapotranspiration is reduced, in part because less radiant energy is absorbed (more is reflected), in part because atmospheric turbulence (surface roughness) is greater above a forest than above a grassland and hence can evaporate water more rapidly from forests, and in part because the roots of trees generally penetrate to deeper layers of soil than the roots of pastures, and hence have access to more water. If less water is available, the vegetation will respond by closing stomata and thereby increasing the resistance to evapotranspiration and increasing temperatures. Preservation of forested land helps reduce local and regional environmental variability. The greatest effect that forest management could have on atmospheric carbon dioxide would be through the elimination of fossil fuels. Gross emissions from burning would be approximately balanced by accumulations in forests producing fuel for the future. Management would have to be sustainable.

⁸⁶⁰ *ibid* 15-16.

⁸⁶¹ *ibid* 16-17.

⁸⁶² *ibid* 20.

⁸⁶³ *ibid*.

healthy environment, as an integral part to the right to life under Article 21, thus played a pivotal role in this case.⁸⁶⁴

6.2.2 The first successful sweeping challenge to national climate policy in the world: *Leghari v Pakistan*

It would probably be no exaggeration to say that the 2015 case of *Leghari*⁸⁶⁵ remains the most renowned climate change case against a government in Asia. The case was initiated by a farmer, who availed himself of rich public interest litigation traditions and expansive interpretation of constitutional rights by the Pakistani courts.⁸⁶⁶ The claimant argued that the federal government failed to implement the national climate change policy, which critically endangered his livelihood, thus violating his constitutional right to life under Article 9⁸⁶⁷ and to dignity under Article 14.⁸⁶⁸

6.2.2.1 Rights-based approach

⁸⁶⁴ Curiously, in a more recent case of *Pandey v India*, where a child-claimant asked the Tribunal to direct the Indian government to effectively 'reduce and minimize the adverse impacts of climate change in the country' under the public trust doctrine, referring among other things, to the right to life under art 21, the Tribunal dismissed the claim, stating that 'there is no reason to presume' that the government's climate policies fail to reflect the requirements of international climate change law. *Pandey v India* No 187/2017 (National Green Tribunal Principal Bench, 2019) [3]. In contrast, art 21 was considered by the Supreme Court of India in more recent cases where climate change was a peripheral issue, for example, *Aroskar v India* Civil Appeal No 12251 of 2018 (Supreme Court of India, 2019) [140] and *Association for Protection of Democratic Rights v West Bengal* Special Leave Petition (civil) No 25047 of 2018 (Supreme Court of India, 2021) 1-2. The latter case will be discussed in more detail in section 6.2.3.

⁸⁶⁵ *Leghari v Pakistan* WP No 25501/2015 orders 1 and 2 (Lahore High Court, 2015).

⁸⁶⁶ Waqqas Ahmad Mir, 'From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex than a Celebratory Tale' in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020).

⁸⁶⁷ Pakistan's Constitution of 1973, Reinstated in 2002, with Amendments through 2018, art 9 '(Security of person): No person shall be deprived of life or liberty save in accordance with law.'

⁸⁶⁸ *ibid* art 14 '(Inviolability of dignity of man): 1. The dignity of man and, subject to law, the privacy of home, shall be inviolable. 2. No person shall be subjected to torture for the purpose of extracting evidence.'

The Lahore High Court's first order was just eight pages long, but it fully captured the essence and extent of the problem, as the court acknowledged the specific threats posed by climate change in Pakistan.⁸⁶⁹ But the crux of the court's reasoning was the interrelationship between constitutional rights and values and the principles of international environmental law as well as the concepts of environmental and climate justice, that necessitated the rights-based approach to climate change, or in other words, climate justice. The court explained that the rights claimed should be read together with the above-mentioned constitutional principles and principles of international environmental law to achieve constant progress on the justice-based approach to climate change.⁸⁷⁰ The court concluded that 'the delay and lethargy of the State in implementing the Framework offends the fundamental rights of the citizens which need to be safeguarded', and accordingly, ordered the government to initiate the implementation of the climate change policy, including the creation of a special commission on climate change that would assist the court to monitor progress.⁸⁷¹ Notably, the court referred to the right to a healthy environment as 'included' in the fundamental right to life under Article 9,⁸⁷² which was consistent with the established practice of interpreting this explicitly unrecognised right as part of the right to life by courts in both India and Pakistan.⁸⁷³

6.2.2.2 Water justice

⁸⁶⁹ *Leghari v Pakistan* WP No 25501/2015 order 1 (Lahore High Court, 2015) [6]:

Climate change is a defining challenge of our time and has led to dramatic alterations in our planet's climate system. For Pakistan, these climatic variations have primarily resulted in heavy floods and droughts, raising serious concerns regarding water and food security. On a legal and constitutional plane this is clarion call for the protection of fundamental rights of the citizens of Pakistan, in particular, the vulnerable and weak segments of the society who are unable to approach this Court.

⁸⁷⁰ *ibid* [7].

⁸⁷¹ *ibid* [8].

⁸⁷² *ibid* [7].

⁸⁷³ See section 3.2.2.3 of this thesis.

An exceptional aspect of this case is that the Lahore High Court treated *Leghari* as a ‘rolling review or a continuing mandamus’,⁸⁷⁴ meaning that it kept an ongoing review of the government’s implementation of the court’s order.⁸⁷⁵ In its 2018 judgment, the court reiterated the logical evolution of environmental justice to climate justice, but this time added a new dimension to the latter by identifying water justice as an essential component – or ‘sub-concept’ – of climate justice:

Right to life and right to human dignity under articles 9 and 14 of the Constitution protect and realise human rights in general, and the human right to water and sanitation in particular. In adjudicating water and water-related cases, we have to be mindful of the essential and inseparable connection of water with the environment, land and other ecosystems. Climate Justice and Water Justice go hand in hand and are rooted in articles 9 and 14 of our Constitution and stand firmly on our preambular constitutional values of social and economic justice.⁸⁷⁶

In other words, the court’s interpretation of the rights to life and to dignity followed the already established practice of expansively interpreting the above-mentioned rights, only this time it specifically focused on the right to water, as opposed to a broader right to a healthy environment as in the court’s original order of 2015.⁸⁷⁷

6.2.2.3 Ground-breaking, but not unexpected?

To date, *Leghari* is undoubtedly the most renowned climate change case in South Asia, and one of the most well known rights-based climate change cases globally —

⁸⁷⁴ The court considered it to be a writ of *kalikasan* – ‘a legal remedy designed for the protection of one’s constitutional right to a healthy environment’ in the Philippines (*Leghari v Pakistan* WP No 25501/2015 judgment (Lahore High Court, 2018) [4] fn 2.

⁸⁷⁵ Waqqas Ahmad Mir, ‘From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex than a Celebratory Tale’ in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020) 267-268, observes that this is not the usual practice in Pakistan, ‘even in public interest litigation’.

⁸⁷⁶ *Leghari v Pakistan* WP No 25501/2015 judgment (Lahore High Court, 2018) [23].

⁸⁷⁷ See section 6.2.2.1 in this chapter.

and for good reasons. *Leghari* was the first successful sweeping challenge to national climate policy in the world. But perhaps more importantly, the Lahore High Court's expansive interpretation of constitutional rights in the context of climate change rendered *Leghari* one of the most prominent examples of the viability of rights claims in climate change litigation. At the time of the first court order in 2015, only a handful of climate change cases based on constitutional rights had made their way into national courts around the globe. *Leghari* not only did that but also persuaded the Lahore High Court to order the government of Pakistan to take comprehensive measures to implement national climate change policy.

And yet, landmark as it was, *Leghari* was not entirely unexpected, given the ripeness of Pakistan's legal system to process a case of this nature and magnitude.⁸⁷⁸ In fact, it can be argued that the successful outcome became possible due to the specific features of Pakistan's legal system that allowed such claim to proceed in the first place, then allowed the court to broadly interpret the respective rights, and finally, allowed the court to continue overseeing the progress of the climate change policy's implementation.⁸⁷⁹ However, regardless of these favourable conditions, the court's willingness to engage with the above-mentioned rights through the lens of unique challenges

⁸⁷⁸ 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 Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020) 263-265 and 270-283 (describing the public interest litigation traditions, the evolution of case law and judicial interpretation of constitutional rights as covering various environmental issues, and pro-active courts in Pakistan).

⁸⁷⁹ *Leghari v Pakistan* WP No 25501/2015 judgment (Lahore High Court, 2018) [24] – [27]. As the court was satisfied with the outcomes of the work carried out by the climate change commission and thus considered its mission accomplished, the court dissolved the commission. However, there was still an outstanding task of fully implementing the policy, which the court deemed 'critical for sustainable development and for the safeguard and protection of the fundamental rights of the people of Pakistan.' Given the continuing mandamus nature of its order, the court thus announced convening a new committee on climate change that 'will act as a link between the Court and the Executive' to ensure the policy continues to be implemented.

that people in Pakistan face remains a perfect example of interpreting rights to reflect the emerging and the most pressing problem of this century.⁸⁸⁰

6.2.3 What makes Indian and Pakistani courts a favourable forum?

The fact that Indian and Pakistani courts have been treating rights claims in climate change litigation favourably is probably unsurprising. The relaxed rules on standing, opening the door to public interest litigation, coupled with the generally proactive approach of the judiciary⁸⁸¹ have thus eliminated the procedural barriers haunting claimants in North America as well as in Europe, with courts being open to considering the impacts of inadequate governmental response to climate change on claimed rights.

Another critical issue is the broad interpretation of constitutional rights,⁸⁸² most notably, of the unwritten right to a healthy environment, as is demonstrated in both *Singh* and *Leghari*. Following the interpretation of the Indian and Pakistani courts, the absence of a formal recognition of the right to a healthy environment in the respective constitutions does not preclude the courts from deriving this right from established pre-existing recognised rights, namely, the right to life. Furthermore, the respective courts have clearly demonstrated their willingness to interpret the derived right to a healthy environment as imposing obligations on the respective states to take active measures against climate change. This is a

⁸⁸⁰ Following its ruling in *Leghari*, the Lahore High Court dealt with yet another case concerning climate change, this time, concerning deforestation. The court used this occasion to reiterate that the right to life under art 9 covers environmental issues, since the interpretation of constitutional rights ‘has to be dynamic and progressive and not pedantic’, and the fact that the national climate change policy identifies forestry among its priority areas (*Farooq v Pakistan* 2019 PLD 664 (Lahore High Court, 2019) [26] – [27] and [46] – [50]).

⁸⁸¹ See, for example, Gitanjali Nain Gill, ‘Environmental Standards and the Right to Life in India: Regulatory Frameworks and Judicial Enterprise’ in Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019) 222-224; Waqqas Ahmad Mir, ‘From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex than a Celebratory Tale’ in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020) 286-287.

⁸⁸² Waqqas Ahmad Mir, ‘From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex than a Celebratory Tale’ in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020) 263.

significantly different approach than the one in the European rights-based climate change cases: *Friends of the Irish Environment*, where the Supreme Court of Ireland declined to recognise the derived right to a healthy environment because of the alleged undefined parameters of this right,⁸⁸³ and *Greenpeace Nordic*, where the Norwegian courts significantly narrowed the application of the constitutional right to a healthy environment and, consequently, declined to recognise the licensing of offshore fossil fuel exploration and production activities as a violation of this right.⁸⁸⁴

In light of these factors, it is not surprising that the viability of rights-based climate change cases in India and Pakistan has been subsequently reinforced by favourable decisions of the Supreme Court of India and the Supreme Court of Pakistan respectively. For instance, the Supreme Court of India has reiterated the importance of the constitutional right to a healthy environment as part of the legal framework that requires sustainable development to be 'at the heart of any development policy implemented by the state'.⁸⁸⁵ Similar to *Singh*, this case also focused on deforestation that the Supreme Court described as an issue of significant national and international concern from the perspective of climate change and which the government has committed to tackle as part of its obligations under the Paris Agreement.⁸⁸⁶ For its part, the Supreme Court of Pakistan has upheld the government's decision barring the construction of new cement plants in environmentally vulnerable zones.⁸⁸⁷ One of the main factors that the Supreme Court considered was the impact on local water already severely affected by climate change.⁸⁸⁸ The Supreme Court presented a detailed discussion on the matter and reiterated the principles laid out by the Lahore High Court in *Leghari* concerning the interlinkage between climate justice and water justice and the

⁸⁸³ See section 4.4.5 of this thesis.

⁸⁸⁴ See section 4.5.6 of this thesis.

⁸⁸⁵ *Association for Protection of Democratic Rights v West Bengal* Special Leave Petition (civil) No. 25047 of 2018 (Supreme Court, 2021) 1-2.

⁸⁸⁶ *ibid* 3.

⁸⁸⁷ *Khan Cement Company v Punjab* C.P.1290-L/2019 (Supreme Court, 2019).

⁸⁸⁸ *ibid* [17].

need to consider the constitutional rights to life and to dignity when considering environmental impacts of such projects.⁸⁸⁹

6.3 A specific environmental clause in the constitution: the case of Nepal

Like *Leghari*, the Nepali case *Shrestha v Prime Minister*⁸⁹⁰ was a sweeping challenge to governmental climate policy. In 2017, the claimant – a resident of Kathmandu District – sued numerous governmental agencies, alleging violation of his constitutional rights to live with dignity under Article 16⁸⁹¹ and to a healthy environment under Article 30⁸⁹², that results from the absence of specific and comprehensive climate change mitigation and adaptation legislation.⁸⁹³ The claimant outlined numerous climate change-driven problems that communities in Nepal face, including ‘an imminent threat to water resources ..., changes in drinking water systems and structures, agriculture and forestry, longevity of humans, health and medicines, nature of diseases, and lifecycle, and [novel problems] due to the lack of treatment of epidemics and diseases that might be caused’.⁸⁹⁴ Although the government of Nepal adopted the national climate change policy as early as 2011, this policy did not lead to any concrete measures due to the absence of comprehensive climate change legislation.⁸⁹⁵ The claimant therefore criticised the existing framework of environmental protection legislation, as it contained no provisions with regard to climate change.⁸⁹⁶ Accordingly, the claimant asked the

⁸⁸⁹ *ibid* [18] – [19].

⁸⁹⁰ *Shrestha v Prime Minister* Decision no. 10210, Order 074-WO-0283 (Supreme Court, 2018).

⁸⁹¹ The Constitution of Nepal of 2015 (with Amendments through 2016), art 16(1): ‘Each person shall have the right to live with dignity’.

⁸⁹² *ibid* Art 30:

1. Each person shall have the right to live in a healthy and clean environment.
2. The victim of environmental pollution and degradation shall have the right to be compensated by the pollutant as provided for by law.
3. Provided that this Article shall not be deemed to obstruct the making of required legal provisions to strike a balance between environment and development for the use of national development works.

⁸⁹³ *Shrestha v Prime Minister* Decision no. 10210, Order 074-WO-0283 (Supreme Court, 2018) 3, 5.

⁸⁹⁴ *ibid* 4-5.

⁸⁹⁵ *ibid* 4.

⁸⁹⁶ *ibid* 5-6.

Supreme Court to issue a writ of mandamus instructing the government to adopt comprehensive climate change legislation, and to formulate and implement an effective climate change mitigation and adaptation plan.⁸⁹⁷ For their part, the defendants challenged the justiciability of the claim on separation of powers grounds.⁸⁹⁸

6.3.1 Climate change impacts

The Supreme Court acknowledged the universally disruptive nature of climate change, rendering it ‘a matter of public concern’, since it ‘not only affect[s] human lives, but all plants and animal species, their habitats and create[s] an imbalance in ecology and biodiversity’.⁸⁹⁹ Because of its disruptive nature, any engagement with climate change should be based on the concept of climate justice, and give due consideration to the wellbeing of both present and future generations.⁹⁰⁰ The Court drew the link between these considerations and the affected constitutional rights of the claimant:

Climate change, exploitation of natural resources and environmental pollution have posed a threat to the existence of ecology and biodiversity. Such threats do not just affect the organisms living today but also cause irreversible damage to nature and pose an imminent threat to several generations ahead. The matter of climate change and threat posed by pollution is directly connected to the well being of citizens who are guaranteed with the right to clean environment and conservation under the Constitution. Such kind of threat to present and future generations posed by climate change affects every citizen hence, the matters raised in the current petition are of public concern. Considering the public nature of concerns

⁸⁹⁷ *ibid* 6.

⁸⁹⁸ *ibid* 8-9.

⁸⁹⁹ *ibid* 11.

⁹⁰⁰ *ibid*.

raised in the present petition, there is a meaningful relation between the issues and the petitioners.⁹⁰¹

6.3.2 Need for comprehensive climate legislation

The Supreme Court recognised two key factors that favoured the adoption of comprehensive climate change legislation, and clarified how this step would help secure the above-mentioned constitutional rights and the implementation of governmental obligations to address environmental harms. First, such legislation would cover a range of social and environmental issues related to climate change, namely, biodiversity loss, desertification, promotion of renewable energy, and protection of communities, particularly in areas that are highly vulnerable to the impacts of climate change.⁹⁰² Accordingly, such legislation would promote environmental justice.⁹⁰³ Second, such legislation would facilitate compliance with both international and national environmental protection obligations.⁹⁰⁴ Most notably, the Supreme Court referred to Article 51(g) of the Constitution, which requires the state to adopt a policy regarding the preservation of natural resources, development of clean and renewable energy, promotion of awareness about environmental protection, reduction of the industry's impacts on the environment, and the adoption of measures aimed at prevention of harmful impact on the environment, including biodiversity, and mitigation of the risks of natural disasters.⁹⁰⁵

The Court, therefore, concluded that climate change mitigation and adaptation are directly relevant to the right to a healthy environment, and held that the above-mentioned factors required the adoption of a 'permanent legal mechanism' that would cover promotion of sustainable development and reforestation, renewable energy, reduction of fossil fuel consumption, assessment of vulnerable areas,

⁹⁰¹ *ibid.*

⁹⁰² *ibid* 12.

⁹⁰³ *ibid.*

⁹⁰⁴ *ibid.*

⁹⁰⁵ *ibid.*

compensation for environmental degradation, and so forth.⁹⁰⁶ Since the existing environmental protection legislation was inadequate to address these issues, the Supreme Court ordered the government to draft and implement a comprehensive climate change law as soon as possible.⁹⁰⁷

6.3.3 Environmental clause of the Constitution: the similarity between Nepal and India

While there is a considerable difference between *Shrestha* and *Singh*, the two cases share one notable feature, namely, the existence of specific constitutional provisions on environmental protection in Nepal and India and, accordingly, their use in the respective climate change cases. With Article 51(g) of the Constitution of Nepal directing the government to pursue various policies related to the conservation, management and use of natural resources, including biodiversity, renewable, energy, and so forth, the Supreme Court in *Shrestha* had little doubt that the lack of comprehensive climate change legislation violated the right to a healthy environment under Article 30 of the Constitution.⁹⁰⁸ Similarly, Articles 48A and 51A(g) of the Constitution of India, imposing a duty to protect the environment – including forests, wildlife, lakes and rivers – on the State and its citizens respectively, used in combination with the right to life, gave the Supreme Court the necessary ‘mandate’ for action.⁹⁰⁹ It should be observed that it is extremely rare to have explicit references to any areas of environmental concern enshrined in constitutions,⁹¹⁰ which makes both *Singh* and *Shrestha* quite unique, though not necessarily impossible to replicate outside the respective countries. After all, specific environmental obligations of the government, while very rarely enshrined

⁹⁰⁶ *ibid* 13-14.

⁹⁰⁷ *ibid* 14.

⁹⁰⁸ See section 6.3.2 in this chapter.

⁹⁰⁹ See section 6.2.1.2 in this chapter.

⁹¹⁰ Hence, although the majority of national constitutions ‘demonstrate some degree of environmental constitutionalism’, in those cases ‘where environmental duties are cast on the state, they are usually widely framed’ and often, ‘they are described in basic terms’ only. Roderic O’Gorman, ‘Environmental Constitutionalism: A Comparative Study’ [2017] 6 Transnational Environmental Law 435, 436 and 440.

in constitutions,⁹¹¹ are typically enshrined in primary or secondary legislation concerning environmental matters, for example, in legal acts concerning GHG emissions reduction targets, as in the cases of *Urgenda*,⁹¹² *Friends of the Irish Environment*,⁹¹³ and *Mathur*.⁹¹⁴ Consequently, such legislation could be used by courts to a similar effect when interpreting the claimed rights related to environmental protection.

6.4 Sectoral challenges in Colombia and Mexico

6.4.1 Deforestation: the main source of GHG emissions in Colombia

Similar to climate change cases based on constitutional rights claims that were brought in the US and Canada, the Colombian case of *Future Generations v Ministry of Environment*⁹¹⁵ was initiated by a group of children and young people.⁹¹⁶ The claimants brought a sectoral challenge against several governmental agencies, state officials and local authorities, including the President of Colombia, the Ministry of Environment, the Ministry of Agriculture and others, that targeted the most pressing climate change issue in the region – deforestation in the Colombian Amazon. The claimants were living in urban areas that were already at great risk from climate change, with the projected further warming of the average temperature in Colombia during their adulthood and old age.⁹¹⁷ However, the Colombian government was not fulfilling its 2015 commitments to reduce the rate of deforestation in the country – on the contrary, the rate of deforestation actually increased.⁹¹⁸ The claimants referred to multiple problems caused by deforestation

⁹¹¹ *ibid.*

⁹¹² See section 4.2 of this thesis.

⁹¹³ See section 4.4 of this thesis.

⁹¹⁴ See section 5.3.2 of this thesis.

⁹¹⁵ *Future Generations v Ministry of Environment* no 11001-22-03-000-2018-00319-01 (High Court of Bogota, 2018).

⁹¹⁶ *ibid* 3.

⁹¹⁷ *ibid.*

⁹¹⁸ *ibid* 3-4.

in the Amazon rainforest that have negative consequences not just at the local, but also at the national and international levels.⁹¹⁹ For instance, it affects the country's ecosystems by disrupting the hydrological cycles and the ability of soils to absorb the rainwater, as well as by disrupting the supply of water to the cities in the Andean mountains.⁹²⁰ Furthermore, deforestation contributes to global warming, as it reduces the carbon sink, thus leading to greater GHG emissions in Colombia.⁹²¹ In fact, according to Colombia's national inventory of GHGs, the forest sector is the major producer of GHG emissions in the country, with deforestation being responsible for ninety-eight per cent of these emissions.⁹²² The claimants also presented evidence of present and projected climate change impacts in Colombia.⁹²³

The claimants maintained that lack of action to address deforestation violated their constitutional rights, most notably, the rights to life⁹²⁴ and to a healthy environment.⁹²⁵ The claimants therefore requested the court to order the government: a) to prepare within six months a plan of action to address the rate of deforestation; b) to develop together with the claimants an intergenerational Act regarding the measures adopted to reduce deforestation and the GHG emissions, for example, climate change adaption and mitigation strategies.⁹²⁶ The claimants also asked the court to order other agencies and local authorities to adopt a range of measures against deforestation.⁹²⁷ The claim was brought as a 'tutela' action (*acción de tutela*), a special legal procedure under Article 86 of the Colombian

⁹¹⁹ *ibid* 4-5.

⁹²⁰ *ibid*.

⁹²¹ *ibid* 5.

⁹²² *ibid*.

⁹²³ *ibid* 5-6.

⁹²⁴ Colombia's Constitution of 1991 with Amendments through 2005, art 11: 'The right to life is inviolate. There will be no death penalty.'

⁹²⁵ *ibid* art 79:

Every individual has the right to enjoy a healthy environment. The law will guarantee the community's participation in the decisions that may affect it.

It is the duty of the State to protect the diversity and integrity of the environment, to conserve the areas of special ecological importance, and to foster education for the achievement of these ends.

⁹²⁶ *Future Generations v Ministry of Environment* no 11001-22-03-000-2018-00319-01 (High Court of Bogota, 2018) 2-3.

⁹²⁷ *ibid*.

Constitution that allows every individual to bring a fundamental constitutional rights claim before any national court in Colombia. For its part, the intervenor Public Ministry⁹²⁸ argued that the lack of adequate policy on forest governance affected not only the environment but also fundamental rights, and requested the court to declare the Colombian Amazon as a subject of rights.⁹²⁹ The defendant Ministry of Environment replied that the government was already taking climate change into consideration in its policies, including an agreement with Norway, Germany and the UK to reduce the GHG emissions resulting from deforestation, based on which the average annual deforestation was calculated.⁹³⁰ The defendants also maintained that a tutela claim was not a proper legal mechanism by which to claim the protection of collective constitutional rights, and that a claim based on public interest litigation – *actio popularis*⁹³¹ – should have been used instead.⁹³²

6.4.1.1 The right to a healthy environment as a collective right and its relationship with fundamental rights

The High Court of Bogota focused its analysis on the claimed right to a healthy environment. The court agreed with the defendants that a tutela claim cannot be made with regard to collective rights.⁹³³ However, the court observed that in exceptional circumstances such a claim can be made if the collective rights of the

⁹²⁸ According to art 118 of the Colombian Constitution:

The Public Ministry will be made up of the General Prosecutor of the Nation (Procurador General de la Nación), the Ombudsman (Defensor del Pueblo), the assigned public prosecutors, and the agents of the Public Ministry before the legal authorities, as well as by municipal representatives and other officials determined by the law. It is the responsibility of the Public Ministry to defend and promote human rights, to protect the public interest, and to oversee the official conduct of those who perform public functions.

⁹²⁹ *Future Generations v Ministry of Environment* no 11001-22-03-000-2018-00319-01 (High Court of Bogota, 2018) 7

⁹³⁰ *ibid* 9.

⁹³¹ Art 88 of the Colombian Constitution allows *actio popularis* ‘for the protection of collective rights and interests related to the homeland, space, public safety and health, administrative morality, the environment, free economic competition, and other areas of similar nature ... without barring appropriate individual action.’

⁹³² *Future Generations v Ministry of Environment* no 11001-22-03-000-2018-00319-01 (High Court of Bogota, 2018) 9.

⁹³³ *ibid* 11.

claimants are gravely and immediately affected.⁹³⁴ The court, therefore, analysed the potential violation of the right to a healthy environment. The court considered the following factors: 1) the fact that the right to a healthy environment was recognised at the international level as early as 1972, and has gained further recognition in subsequent international agreements; 2) the fact that similar to many other national constitutions adopted since the 1970s, the Colombian Constitution explicitly recognised environmental rights, including the right to a healthy environment, the obligation to protect cultural and natural resources, and so forth; 3) the case law of the Colombian Constitutional Court, which held that the right to a healthy environment is closely linked to the fundamental rights to life, to health, and to food and water, and thus cannot be separated from these rights; 4) the vital role that the Amazon rainforest plays in maintaining the climate and the importance of reducing deforestation to mitigate climate change; 5) the fact that the Colombian government has both national and international obligations to tackle climate change, with the reduction of deforestation being among the measures that the government has committed to; and 6) the fact that in spite of these commitments, deforestation in the Colombian Amazon actually increased.⁹³⁵

Despite taking all the above-mentioned points into consideration, the High Court of Bogota dismissed the claims on procedural grounds, namely, by holding that both the collective right to enjoy a healthy environment and the fundamental rights at issue should in this case be claimed via *actio popularis* mechanisms under Article 88 of the Colombian Constitution.⁹³⁶ Paradoxically, such a decision suggests that the court remained unpersuaded that the claimants were individually affected by deforestation and by the resulting contribution to climate change, despite the fact that the court itself fully acknowledged both the relevance of protecting the right to a healthy environment and the need to reduce deforestation as a climate change mitigation measure.

⁹³⁴ *ibid.*

⁹³⁵ *ibid* 12-17.

⁹³⁶ *ibid* 17.

The claimants appealed the decision to the Supreme Court of Colombia, and less than two months after the decision of the lower court, the Supreme Court reversed it,⁹³⁷ marking one of the most important wins for claimants in the history of rights-based climate change litigation. Similar to the lower court, the Supreme Court observed that in exceptional circumstances a ‘tutela’ claim can proceed to protect collective rights and interests.⁹³⁸ The Supreme Court enumerated several criteria that tutela claim must satisfy to fall under this exception, including: a) the existence of a link between violation of collective and fundamental rights, namely when a violation of collective rights also violates fundamental rights; b) that the claimant must be directly affected by these violations; c) that the violation of fundamental rights must be real and not hypothetical.⁹³⁹ With regard to the existence of a link between collective and individual rights, the Supreme Court took into consideration both its own and the Colombian Constitutional Court’s case law and declared that a tutela claim of the right to a healthy environment could proceed, because the violation of such a right inevitably affects fundamental rights, namely, the rights to life, to health and to the access to water.⁹⁴⁰ The Supreme Court based its interpretation of the nature and relevance of the right to a healthy environment on the fact that the above-mentioned fundamental rights and other fundamental rights, such as freedom and dignity, are ‘substantially linked and determined by the environment and the ecosystem’.⁹⁴¹

6.4.1.2 The obligation to protect the environment

One of the key elements of the Supreme Court’s interpretation of the right to a healthy environment was the extension of this right’s application beyond the present generation and, indeed, beyond humans. Hence, the Court stressed that

⁹³⁷ *Future Generations v Ministry of Environment* 11001-22-03-000-2018-00319-01; STC4360-2018 (Supreme Court of Colombia, 2018).

⁹³⁸ *ibid* 10-11.

⁹³⁹ *ibid* 11.

⁹⁴⁰ *ibid* 12-13.

⁹⁴¹ *ibid* 13.

without a healthy environment, ‘the subjects of rights and the sentient beings in general’ could not survive, let alone to defend these rights for themselves and for future generations.⁹⁴² The Supreme Court repeatedly referred to the fact that environmental degradation poses an existential threat not only to present, but also to future generations, and thus undermines the ability to enjoy fundamental rights.⁹⁴³ The Supreme Court therefore considered that the concern over fundamental rights in this case was sufficient to allow a tutela claim.⁹⁴⁴

As for the interpretation of the substantive elements of the right to a healthy environment, the Supreme Court based its assessment on both moral grounds and legal grounds. Hence, in the light of deteriorating conditions of ecosystems and the more frequent occurrence of extreme weather events driven by human activities, the Supreme Court considered environmental protection to be one of the moral precepts of the constitutional state.⁹⁴⁵ This protection is based on two principles – the ethical duty of the solidarity of species and the intrinsic value of nature itself.⁹⁴⁶ The first principle stipulates that without proper protection, natural resources would be gradually depleted, leaving future generations without the means of enjoying these resources in the same way as their ancestors did.⁹⁴⁷ With regard to the second principle, the Supreme Court stressed the vital importance of moving towards a balanced co-existence between humans and nature, whereby the former are part of the latter.⁹⁴⁸

Second, human rights treaties and multilateral environmental agreements, including the Paris Agreement,⁹⁴⁹ as well as environment-related rights and duties enshrined in the Constitution, including the right to a healthy environment under Article 79, created the legal grounds for action.⁹⁵⁰ Referring to the Constitutional

⁹⁴² *ibid.*

⁹⁴³ *ibid* 13-14.

⁹⁴⁴ *ibid* 14.

⁹⁴⁵ *ibid* 15-18.

⁹⁴⁶ *ibid* 19.

⁹⁴⁷ *ibid* 20.

⁹⁴⁸ *ibid* 20-21.

⁹⁴⁹ *ibid* 22-25.

⁹⁵⁰ *ibid* 26.

Court's post-1992 case law, which recognises that environmental problems are not merely a matter of moral concern, but a matter of survival,⁹⁵¹ the Supreme Court thus observed that the Colombian Constitution could well be considered to be a 'green', or 'ecological' constitution, since it elevated environmental protection to the level of fundamental constitutional rights.⁹⁵² Indeed, in its case law, the Constitutional Court held that environmental rights are both fundamental and collective, since environmental protection itself is a constitutional value that is of both fundamental and collective nature.⁹⁵³

6.4.1.3 The impacts of deforestation on fundamental rights of present and future generations

The Supreme Court had no difficulty in identifying the potential violation of fundamental rights resulting from the impacts of deforestation.⁹⁵⁴ The Court recognised that deforestation in the Amazon causes 'grave and imminent harm to children, adolescents, and adults' – both the claimants and everyone living in the country, as well as future generations – in the short, medium and long term.⁹⁵⁵ Because deforestation results in greater GHG emissions, which harm ecosystems and disrupt water resources, the Supreme Court also considered the localised negative impacts of deforestation, namely its threat to biodiversity, to be important.⁹⁵⁶

The Supreme Court based its assessment of deforestation's impacts on fundamental rights on three principles of environmental law – the precautionary

⁹⁵¹ See: *Tello Varón Case* T-411/92 (Constitutional Court of Colombia, 17 June 1992) [2.5]; *Monsalve Case* C-431/00 (Constitutional Court of Colombia, 12 April 2000) [3].

⁹⁵² *Future Generations v Ministry of Environment* 11001-22-03-000-2018-00319-01; STC4360-2018 (Supreme Court of Colombia, 2018) 27-29.

⁹⁵³ *ibid* 29-30, referring to *Gélvez Cáceres Case* C-449/15 (Constitutional Court of Colombia, 16 July 2015) [4.1].

⁹⁵⁴ *Future Generations v Ministry of Environment* 11001-22-03-000-2018-00319-01; STC4360-2018 (Supreme Court of Colombia, 2018) 33.

⁹⁵⁵ *ibid* 34.

⁹⁵⁶ *ibid* 35.

principle, the principle of intergenerational equity, and the principle of solidarity.⁹⁵⁷ The projected temperature increase in Colombia: harms to biodiversity; water contamination and droughts – all attributed to the increase in GHG emissions resulting from deforestation in the Colombian Amazon – were deemed sufficient to demonstrate irreversibility and scientific certainty and to trigger the application of the precautionary principle.⁹⁵⁸ Similarly, deforestation was found to violate the principle of intergenerational equity, since the projected temperature increase would occur all the way into the second half of this century, thus affecting the infants and the future generations.⁹⁵⁹ For its part, the principle of solidarity

is determined by the duty and co-responsibility of the Colombian state to stop the causes of the GHG emissions from the abrupt forest reduction in the Amazon, thus, it is imperative to adopt immediate mitigation measures, protecting the right to environmental wellbeing, both of the claimants, and of the other people who inhabit and share the territory of the Amazon, not only nationals, but also foreigners, together with all inhabitants of the globe, including ecosystems and living beings.⁹⁶⁰

6.4.1.4 Human rights and rights of nature

The considerations of the principle of solidarity played a particularly important role in the Supreme Court's analysis. For example, the Court took into account Colombia's international obligations to reduce deforestation in the region to zero by as early as 2020, highlighting the Ministry of Environment's own conclusion that such a reduction would result in significant contribution to the decrease of GHG emissions.⁹⁶¹ The Supreme Court enumerated various measures that the state and local authorities would need to take to achieve this, including measures addressing the expansion of large-scale agro-industrial practices; farming and crops; forest

⁹⁵⁷ *ibid.*

⁹⁵⁸ *ibid* 35-37.

⁹⁵⁹ *ibid* 37.

⁹⁶⁰ *ibid.*

⁹⁶¹ *ibid* 38.

fires; the practice of land-grabbing; the aftermath of the military conflicts; and so forth.⁹⁶² The increasing rate of deforestation showed that the authorities were not addressing these measures adequately, and were thus failing to ensure the fundamental guarantees to water, air, life with dignity and health, all linked to the environment.⁹⁶³ The Supreme Court also used this occasion to provide ample references to the 2016 decision of the Constitutional Court recognising the rights of the Atrato river⁹⁶⁴ and emphasising the interdependence between healthy environment, the rights of nature, and the rights of human communities.⁹⁶⁵

In the light of these considerations, the Supreme Court agreed with the claimants that the defendant authorities have failed to stop deforestation.⁹⁶⁶ Consequently, following the example of the Constitutional Court in the above-mentioned 2016 decision regarding the Atrato river, the Supreme Court declared the Amazon rainforest to be the subject of rights, 'entitled to protection, conservation, maintenance and restoration by the State and the territorial agencies'.⁹⁶⁷ The Supreme Court, therefore, granted the relief sought, ordering the defendant governmental agencies to formulate within four months from the date of its order a short-, medium-, and long-term action plan counteracting the deforestation rate in the Amazon and tackling the impacts of climate change.⁹⁶⁸ The Supreme Court also ordered the governmental agencies and local authorities to develop national, regional and local implementation strategies aimed at bringing deforestation to zero and reducing GHG emissions.⁹⁶⁹ Notably, in ordering the agencies to carry out the above-mentioned measures, the Supreme Court also directed them to ensure that the claimants, affected communities, scientific organisations and

⁹⁶² *ibid* 39.

⁹⁶³ *ibid*.

⁹⁶⁴ *The Atrato River Case* T-622/16 (Constitutional Court of Colombia, 10 November 2016).

⁹⁶⁵ *Future Generations v Ministry of Environment* 11001-22-03-000-2018-00319-01; STC4360-2018 (Supreme Court of Colombia, 2018) 39.

⁹⁶⁶ *ibid* 41-45.

⁹⁶⁷ *ibid* 45.

⁹⁶⁸ *ibid* 48.

⁹⁶⁹ *ibid* 48-49.

environmental research groups as well as members of the public with general interest in this matter, would participate in the process.⁹⁷⁰

6.4.2 Applying the right to a healthy environment in the renewable energy sector: the case of Mexico

The Mexican case of *Greenpeace Mexico v Director General of National Center of Energy Control*⁹⁷¹ is one of the first climate change cases where constitutional rights claims were employed in the context of renewable energy. The claimant NGOs challenged several legal Acts, including two agreements adopted by the National Center of Energy Control⁹⁷² and the Ministry of Energy⁹⁷³ in Spring 2020. The contested Acts suspended the authorisation of preoperative tests that solar and wind power plants are required to carry out to become commercially available.⁹⁷⁴ As a result, such a restriction impeded the development of clean renewable energy in Mexico, thus replacing it with more polluting sources of energy, namely fossil fuels, and ultimately causing greater environmental and health harms, including climate change.⁹⁷⁵ The claimants alleged, among other things, that the contested agreements violated the right to a healthy environment under Article 4 of the Constitution.⁹⁷⁶ The defendants maintained that because the claimants are

⁹⁷⁰ *ibid.*

⁹⁷¹ *Greenpeace Mexico v Director General of National Center of Energy Control*, No. 104/2020 (Second District Court in Administrative Matters, Specialised in Economic Competition, Broadcasting and Telecommunications, 2020).

⁹⁷² The agreement to ensure the efficiency, quality, reliability, continuity and security of the National Electricity System in the face of the epidemic caused by the SARS-CoV2 virus (COVID-19) (National Center of Energy Control, 29 April 2020).

⁹⁷³ The agreement laying out the Policy of Reliability, Security, Continuity and Quality of the National Electricity System (Ministry of Energy, 15 May 2020).

⁹⁷⁴ *Greenpeace Mexico v Director General of National Center of Energy Control*, No. 104/2020 (Second District Court in Administrative Matters, Specialised in Economic Competition, Broadcasting and Telecommunications, 2020) 32.

⁹⁷⁵ *ibid* 36.

⁹⁷⁶ *ibid* 10, 34. Mexico's Constitution of 1917 with Amendments through 2015. Notably, art 4 explicitly mentions a range of rights relevant in the context of environmental degradation, including the right to food, the right of access to water, the right to health protection, and the right to adequate housing. With regard to the right to healthy environment, art 4 stipulates that:

Any person has the right to a healthy environment for his/her own development and well-being. The State will guarantee the respect to such right. Environmental damage and

environmental NGOs they are not affected by the agreements in question; furthermore, the defendants declared that the agreements were adopted as a response measure to the health and sanitation emergency caused by COVID-19, and were necessary to ensure proper protection of the national energy system.⁹⁷⁷

6.4.2.1 The two dimensions of the right to a healthy environment

The District Court held that the claimants had standing to claim the protection of the respective right, given the fact that Greenpeace Mexico is an environmental NGO seeking to affect public policies in order to tackle climate change and biodiversity loss and to foster public awareness and action in environmental protection.⁹⁷⁸ As regards the constitutional right to a healthy environment under Article 4 of the Constitution, the court provided a lengthy analysis of this right's relevance and interpretation.

First, the court observed that the right goes beyond affording protection to just human beings, but also extends to protect nature itself, thus emphasising the fact that human beings are part of natural ecosystems.⁹⁷⁹ Second, like the Supreme Court of Colombia in *Future Generations*, the Mexican court recognised that the right to a healthy environment has both individual and collective dimensions.⁹⁸⁰ The individual dimension may be triggered when the violation of the right leads to direct or indirect violations of related rights, such as the right to life, or to health.⁹⁸¹ For its part, the collective dimension is the result of the global concern to preserve a healthy environment for present and future generations.⁹⁸² The court made clear that the state has positive obligations to protect both these dimensions of the right

deterioration will generate a liability for whoever provokes them in terms of the provisions by the law.

⁹⁷⁷ *Greenpeace Mexico v Director General of National Center of Energy Control*, No. 104/2020 (Second District Court in Administrative Matters, Specialised in Economic Competition, Broadcasting and Telecommunications, 2020) 30-31.

⁹⁷⁸ *ibid* 32-38, 51-52.

⁹⁷⁹ *ibid* 67-68.

⁹⁸⁰ *ibid* 68-69. See also section 6.4.1.1 in this chapter.

⁹⁸¹ *ibid* 68.

⁹⁸² *ibid*.

to a healthy environment.⁹⁸³ Third, the right to a healthy environment is based on several principles recognised in both national and international environmental law, including the precautionary principle, the principle of *in dubio pro natura*, the principle of public participation and the principle of non-regression.⁹⁸⁴ Accordingly, in cases concerning the right to a healthy environment, courts and judges must first assess the existence of a risk of harm or the already existing harm to the environment in accordance with the above-mentioned principles.⁹⁸⁵

With these considerations in mind, the court assessed the potential impacts of the contested Acts on the environment. The court agreed with the claimants that the Acts in question limit the availability of renewable energy sources, thus putting fossil fuel-based energy sources in an advantageous position, which ultimately leads to the increase of the emissions that Mexico needs to curb.⁹⁸⁶ Because the use of fossil fuel energy results in GHG emissions and air pollution, such a situation indeed endangers the right to a healthy environment, since these emissions affect human health.⁹⁸⁷ Even in the absence of the immediately perceived harm, there is a high probability that such harm will occur if restrictions on the availability of renewable energy sources continue.⁹⁸⁸

The court, therefore, considered the risks to both dimensions of the right to a healthy environment to be real because of anticipated harm to human health, which could affect individuals, on the one hand, and because of the failure to mitigate climate change, which undermined the global concern of preserving and protecting the natural resources for present and future generations, on the other hand.⁹⁸⁹ Hence, the Acts ran against the above-mentioned principles of environmental law that form the basis of the right to a healthy environment.⁹⁹⁰

⁹⁸³ *ibid* 68-69.

⁹⁸⁴ *ibid* 69-72.

⁹⁸⁵ *ibid* 72.

⁹⁸⁶ *ibid* 169-171.

⁹⁸⁷ *ibid* 171-172.

⁹⁸⁸ *ibid* 172.

⁹⁸⁹ *ibid* 172-173.

⁹⁹⁰ *ibid* 173.

6.4.2.2 Policy considerations

Policy considerations played a significant part in the court's analysis. The court considered the fact that ensuring the right to a healthy environment has been among the objectives of Mexico's framework climate legislation.⁹⁹¹ Similarly, the court referred to the national energy policy's objectives of promoting clean energy sources, as part of the broader environmental protection and sustainable development goals.⁹⁹² Finally, the court recalled that the national energy policy also reflects concerns about energy security and present energy demand, and thus stipulates that the proportion of economically viable clean energy sources should gradually increase.⁹⁹³

The court also acknowledged the fact that concerns over the short-term and long-term environmental impacts of the use of fossil fuels was one of the key drivers of the shift in the national energy policy.⁹⁹⁴ Since the court was satisfied that solar and wind energy-producing technologies are sufficiently well-developed to compete with fossil fuels in the energy market,⁹⁹⁵ it considered that further development of these technologies and their availability falls within the objectives of the national energy policy, ensuring Mexico's fulfilment of its commitments to achieve progress in environmental protection.⁹⁹⁶ Accordingly, the court held that any measures undermining such progress pose a risk to the natural heritage of present and future generations.⁹⁹⁷ For these reasons, the court concluded that the contested Acts were unconstitutional because they violated the right to a healthy environment and the principles of environmental law that form the basis of the right.⁹⁹⁸

⁹⁹¹ *ibid* 174-175, namely, General Law on Climate Change of 6 June 2012.

⁹⁹² *ibid* 175-176.

⁹⁹³ *ibid* 177-178.

⁹⁹⁴ *ibid* 184.

⁹⁹⁵ *ibid*.

⁹⁹⁶ *ibid* 185.

⁹⁹⁷ *ibid*.

⁹⁹⁸ *ibid* 186-189.

6.4.3 The transferrable value of successful sectoral challenges

While the transferrable value of *Future Generations* and *Greenpeace Mexico* to other types of rights-based climate change litigation still needs to be tested, the importance of both these cases to other sectoral challenges seems quite clear. First, as discussed in chapter 2, such rights-based challenges are very rare and are geographically restricted to the countries in the Global South.⁹⁹⁹ However, even in the Global South, such cases may not necessarily revolve around climate change, and instead focus on local environmental pollution, for example, air pollution as in the case of *Gbemre*,¹⁰⁰⁰ discussed in chapter 1 of this thesis. Coupled with the fact that the driving force behind such claims is the constitutional right to a healthy environment, *Future Generations* and *Greenpeace Mexico* offer an interesting avenue for similar claims in other countries where this right is recognised, though admittedly, in these countries the above-mentioned right might not necessarily be interpreted as broadly as in Colombia or Mexico.¹⁰⁰¹

Furthermore, it is useful to observe the importance of the sectors that the respective claims challenged. Hence, apart from its severe local environmental impacts, deforestation is one of the critical problems that need to be addressed in order to mitigate climate change.¹⁰⁰² Yet, until now, deforestation has hardly ever

⁹⁹⁹ See section 2.3.3 of this thesis.

¹⁰⁰⁰ As already mentioned, it is highly contentious whether *Gbemre* can even count as a ‘climate’ case – see section 1.4.1 of this thesis.

¹⁰⁰¹ Of course, the explicit recognition of the right to a healthy environment does not automatically guarantee success in climate change litigation, as seen in *Greenpeace Nordic* – see section 4.5 of this thesis.

¹⁰⁰² For example, according to art 5 of the Paris Agreement under the United Nations Framework Convention on Climate Change (Paris, 12 December 2015), CFCCC/CP/2015/L.9/Rev.1:

1. Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases ... including forests.
2. Parties are encouraged to take action to implement and support, including through results-based payments, the existing framework as set out in related guidance and decisions already agreed under the Convention for: policy approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and

appeared as a central issue in climate change litigation.¹⁰⁰³ Recently, several rights-based climate change cases that revolve around deforestation have emerged in other Latin American countries, including several such cases in Brazil.¹⁰⁰⁴ It may well be that *Future Generations* served as an inspiration for these claims, but as deforestation continues to be a particularly acute problem in the region, the growing attention to protecting forests as a means of combating climate change could definitely benefit from the Colombia Supreme Court's approach.

Similarly, the promotion of renewable energy sources that could serve as a viable alternative to fossil fuels is among the major goals in climate action. Consequently, the transfer value of *Greenpeace Mexico* could arguably be even greater than that of *Future Generations*. While the experience offered by the latter is highly useful in countries with shrinking forest areas, the one offered by the former is universally applicable. Although countries have different capacity in terms of renewable energy sources, ensuring that the respective sources of such energy can successfully enter the market is critical for the transition away from fossil fuels and, accordingly, for climate change mitigation.¹⁰⁰⁵

6.5 Challenging permits: the case of South Africa

To date, the South African case of *Earthlife*¹⁰⁰⁶ remains one of the very few rights-based challenges to permits in the world. In 2015, the Director of the Department of Environmental Affairs granted a private company, Thabametsi, an authorisation

sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches.

¹⁰⁰³ Typically, 'climate change concerns are incidental in complaints concerning deforestation'. Annalisa Savaresi and Joana Setzer, 'Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers' [2022] 13 *Journal of Human Rights and the Environment* 7, 16.

¹⁰⁰⁴ Juan Auz, 'Human Rights-Based Climate Litigation: A Latin American Cartography' [2022] 13 *Journal of Human Rights and the Environment* 114, 133.

¹⁰⁰⁵ Rajendra K Pachauri and Leo Meyer (eds), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) 30.

¹⁰⁰⁶ *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 65662/16 (High Court, 8 March 2017).

to construct a new coal-fired power station.¹⁰⁰⁷ The claimant, an environmental NGO called Earthlife, appealed against this decision to the Minister of Environmental Affairs, claiming that the authorisation was granted without investigation or consideration of the climate change impacts of such a project, thus violating the requirements of the environmental impact assessment legislation.¹⁰⁰⁸ In her 2016 decision, the Minister admitted that the Director did not comprehensively assess and consider the impacts of the proposed project on climate change before issuing the authorisation, and amended the authorisation to include a climate change impact assessment requirement.¹⁰⁰⁹

What then followed was an act of administrative irregularity that defeated the very purpose of environmental impact assessment requirements: the Minister upheld the Director's authorisation provided that it would include the added condition on climate change impact assessment.¹⁰¹⁰ In other words, the Minister upheld the decision to allow the construction of the project *regardless* of the outcome of the climate change impact assessment that she herself mandated. Earthlife therefore challenged the decisions of both the Director and the Minister in the High Court of South Africa.¹⁰¹¹ While the claimant's argument was based on environmental impact assessment legislation,¹⁰¹² it also maintained that the above-mentioned legislation should be interpreted in the light of Section 24 of the Constitution of South Africa protecting the right to a healthy environment.¹⁰¹³

¹⁰⁰⁷ *ibid* [2].

¹⁰⁰⁸ *ibid* [4] – [6].

¹⁰⁰⁹ *ibid* [7] - [8].

¹⁰¹⁰ *ibid* [9].

¹⁰¹¹ *ibid* [2].

¹⁰¹² National Environmental Management Act, Act 107 of 1998.

¹⁰¹³ South Africa's Constitution of 1996 with Amendments through 2012: Section 24 (Environment):

Everyone has the right –

a. to an environment that is not harmful to their health or well-being; and
b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-

i. prevent pollution and ecological degradation;

ii. promote conservation; and

iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

6.5.1 Assessment of climate change impacts

At the outset, the court considered the general impacts of climate change in South Africa and the specific impacts associated with coal-fired power plants in the country.¹⁰¹⁴ Yet, the Director's authorisation did not include any questions relating to climate change or to GHG emissions. Furthermore, the environmental impact assessment report presented to the Director provided no details on the climate change impacts of the project.¹⁰¹⁵ Specifically, the above-mentioned report did not quantify the anticipated GHG emissions (namely, carbon dioxide and methane) from the project, and focussed only on local issues of air quality, namely, emissions of the air pollutants: sulphur dioxide, nitrogen dioxide and particulates.¹⁰¹⁶ Similarly, there was a failure to assess the impacts related to climate change and water availability, so crucial in the context of South Africa.¹⁰¹⁷ But most importantly, the court took note of the fact that the GHG emissions report and the climate change resilience assessment report, both being parts of the climate change impact assessment report prepared after the Minister's decision,¹⁰¹⁸ revealed critical

¹⁰¹⁴ *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 65662/16 (High Court, 8 March 2017) [25]:

South Africa is significant contributor to global GHG emissions as a result of the significance of mining and minerals processing in the economy and our coal-intensive energy system. Coal is an emissions-intensive energy carrier and coal-fired power stations emit significant volumes of GHGs, which cause climate change. Coal-fired power stations are the single largest national source of GHG emissions in South Africa. South Africa is therefore particularly vulnerable to the effects of climate change due to our socio-economic and environmental context. Climate variability, including the increased frequency and intensity of extreme weather events will be consequential for society as a whole. South Africa is moreover a water-stressed country facing future drying trends and weather variability with cycles of droughts and sudden excessive rains. Coal-fired power stations thus not only contribute to climate change but are also at risk from the consequences of climate change. As water scarcity increases due to climate change, this will place electricity generation at risk, as it is a highly water intensive industry.

¹⁰¹⁵ *ibid* [35], [42].

¹⁰¹⁶ *ibid* [43].

¹⁰¹⁷ *ibid* [44]:

Nor did the [environmental impact assessment report] address the impact that climate change may have on water scarcity in the region and how this will impact on the power station. The power station will require 1,500,000m³ of water each year in a highly water stressed region and hence is likely to aggravate the impact of climate change in the region by contributing to water scarcity, raising in turn questions about the viability of the power station over its lifetime. Climate change thus poses risks to the Thabametsi coal-fired power station over its lifetime.

¹⁰¹⁸ *ibid* [46].

inadequacies in the environmental impact assessment report on the basis of which the Director had issued the contested authorisation.¹⁰¹⁹

6.5.2 Does the constitutional right to a healthy environment require climate change impact assessment?

The court's subsequent analysis mainly focused on the relevant provisions of the environmental impact assessment legislation. It was this analysis that prompted the court to refer to the constitutional right to a healthy environment. The court emphasised that in interpreting the relevant provisions of the environmental impact assessment legislation, it had to give proper consideration to the affected constitutional rights, in this case, Section 24 of the Constitution.¹⁰²⁰ In this context, the court dedicated a single, yet decisive reference to the above-mentioned provision and its scope:

Section 24 recognises the interrelationship between the environment and development. Environmental considerations are balanced with socio-economic considerations through the ideal of sustainable development. This is apparent from section 24(b)(iii) which provides that the environment will

¹⁰¹⁹ *ibid* [47] – [50]:

The GHG emissions report estimates that the power station will generate over 8.2 million tonnes of carbon dioxide per year and over 246 million tonnes of carbon dioxide over its lifetime. The report characterises these emissions as very large by international standards based on a GHG magnitude scale drawn from standards set by various international lender organisations such as the International Finance Corporation, the European Bank for Reconstruction and Development. The expected emissions could constitute 1,9% to 3,9% of South Africa's total GHGs. The [environmental impact assessment report] made no attempt to consider how climate change may impact on the power station itself over its lifetime and how this power station may aggravate the effects of climate change. The resilience report confirms that climate change in fact poses several "high risks" that cannot be effectively mitigated, most significant being the threat of increasing water scarcity in the Lephalale district. Increasing water scarcity in the region will affect the operation of the plant and deprive local communities of water. It expresses doubt that the Mokolo Crocodile Water Augmentation Project (involving piping water from the Mokolo dam and the Crocodile River catchment area) will be able to provide sufficient water for the power station as climate change increases in pace. The risks of water scarcity cannot be fully mitigated. The [environmental impact assessment report] made only passing mention of climate change impacts, describing these as being of "low" and "relatively small" significance, when it now seems these impacts are potentially substantial.

¹⁰²⁰ *ibid* [81].

be protected by securing ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. Climate change poses a substantial risk to sustainable development in South Africa. The effects of climate change, in the form of rising temperatures, greater water scarcity, and the increasing frequency of natural disasters pose substantial risks. Sustainable development is at the same time integrally linked with the principle of intergenerational justice requiring the state to take reasonable measures to protect the environment ‘for the benefit of present and future generations’ and hence adequate consideration of climate change. Short-term needs must be evaluated and weighed against long-term consequences.¹⁰²¹

That said, the court rejected Thabametsi’s argument that invoking Section 24 of the Constitution would amount to a constitutional challenge to the environmental impact assessment legislation itself, in case the claimant wanted to interpret this section as requiring detailed climate change impact assessment to any proposed coal-fired power plants.¹⁰²² The argument was much narrower, namely, ‘whether a climate change impact assessment is required before authorising new coal-fired power stations’.¹⁰²³ Answering this question positively, the court referred to a similar case in the US,¹⁰²⁴ and stressed the vital importance of considering climate change when granting permits to such projects.¹⁰²⁵

Ultimately, while the court considered the Director’s decision to be ‘irregular’, it held that ‘the essential and most consequential defect’ was the Minister’s decision to uphold the authorisation, despite the fact that the Director had failed to take

¹⁰²¹ *ibid* [82].

¹⁰²² *ibid* [86] – [87].

¹⁰²³ *ibid* [90].

¹⁰²⁴ *ibid* [118], referring to *Communities for a Better Environment v City of Richmond* 184 Cal.App.4th 70 (2010).

¹⁰²⁵ *ibid* [119]:

I accept fully that the decision to grant the authorisation without proper prior consideration of the climate change impacts is prejudicial in that permission has been granted to build a coal-fired power station which will emit substantial GHGs in an ecologically vulnerable area for 40 years without properly researching the climate change impacts for the area and the country as a whole before granting the authorisation.

into account the international and national obligations to mitigate climate change and to take positive steps against it.¹⁰²⁶ The court, therefore, decided to set aside the Minister's ruling concerning these obligations and to remit the matter of climate change impacts to her for reconsideration in the light of new evidence in the climate change report.¹⁰²⁷

6.5.3 Can *Earthlife* be indicative of future developments in Sub-Saharan Africa?

Earthlife offers three interesting perspectives on the application and viability of rights claims in climate change litigation in Sub-Saharan Africa, which, however, must be presented very cautiously to avoid any potential generalisation.

¹⁰²⁶ *ibid* [121]. These national obligations referred to by *Earthlife* in its initial appeal were primarily the requirements of the Air Quality Act with regard to GHG emissions. National Environmental Management: Air Quality Act, Act 39 of 2004. See para 93 of the appeal: *Earthlife Africa Johannesburg v Chief Director* <<https://cer.org.za/wp-content/uploads/2014/06/Annexure-A-Appeal-Submissions-Thabametsi-IPP.pdf>> accessed 30 June 2022. But *Earthlife* also emphasised the pivotal role of the Air Quality Act in giving effect to the above-mentioned Article 24 of the Constitution (*ibid* para 67):

In the context of giving effect to the environmental right in section 24 of the Constitution of the Republic of South Africa, 1996, AQA was promulgated as the framework legislation to ensure that levels of air pollution are not harmful to human health or well-being. The AQA commenced on 11 September 2005 and aims to: protect and enhance of the quality of air in the Republic; prevent air pollution and ecological degradation; secure ecologically sustainable development while promoting justifiable economic and social development; and generally give effect to section 24(a) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.

¹⁰²⁷ *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 65662/16 (High Court, 8 March 2017) [121]. In 2018, the Minister issued the new decision, once again upholding the environmental authorisation. The claimant returned to the court, once again referring to the above-mentioned S 24 (see *Earthlife Africa NPC v Minister of Environmental Affairs* (High Court, 26 March 2018) <<https://cer.org.za/wp-content/uploads/2018/03/Signed-Founding-Affidavit-PL-26-3-18.pdf>> accessed 30 June 2022, paras 7, 26-29). This time, however, the court did not have to consider it: following the mounting legal and social pressure, the major funders withdrew from the project and Thabametsi agreed to settle the dispute with the claimants, announcing cancellation of the project. *Earthlife Africa NPC v Minister of Environmental Affairs* No 21559/2018 (High Court, 19 November 2020).

6.5.3.1 National and regional recognition of the right to a healthy environment

First, it is clear from *Earthlife* that at least in South Africa, the right to a healthy environment can inform the courts of the nature of state climate change obligations. Hence, the court explicitly referred to Section 24 as clarifying the nature of the environmental impact assessment legislation that mandated the consideration of the climate change impacts when issuing environmental authorisations for such projects.¹⁰²⁸ This reliance indicates the informative role that Section 24 played in this particular case and could potentially play in any subsequent action. Also, the court's consideration of Section 24 could be an encouragement to such subsequent action in itself. For example, the positive outcome in *Earthlife* prompted the lawyers who represented the claimant NGO to consider using Section 24 to challenge broader policy on coal-fired power plants in South Africa.¹⁰²⁹ In late April 2021, they submitted written arguments on South Africa's draft nationally determined contribution under the Paris Agreement, calling on the government to set more ambitious GHG emission reduction targets and referring, among other things, to the government's duty to uphold and protect the right to a health environment under Section 24 of the Constitution.¹⁰³⁰ These developments are highly important, not least because South Africa is by far the largest GHG emitter on the continent, and one of the major emitters globally.¹⁰³¹

However, the precedential value of *Earthlife* may also extend beyond South Africa. All Sub-Saharan African countries have recognised the right to a healthy environment at the regional level, and the majority of them have also recognised the right at the constitutional level.¹⁰³² Therefore, it can be argued that *Earthlife* has created a potentially powerful precedent for future action brought under this right

¹⁰²⁸ See section 6.5.2 in this chapter.

¹⁰²⁹ Nicole Loser, 'Human Rights Strategies in Climate Change Litigation in Africa,' Global Network for the Study of Human Rights and the Environment webinar, 26 November 2020.

¹⁰³⁰ Centre for Environmental Rights, 'Comments on South Africa's Draft Updated under the Paris Agreement' (30 April 2021) <https://cer.org.za/wp-content/uploads/2021/05/CER-Comments_Draft-Updated-NDC_30-April-2021.docx.pdf> accessed 30 June 2022

¹⁰³¹ See Global Carbon Atlas, CO₂ emissions <<http://www.globalcarbonatlas.org/en/CO2-emissions>> accessed 30 June 2022

¹⁰³² See section 6.1 in this chapter.

in other Sub-Saharan African countries and perhaps even at the regional level, namely, through potential applications to the regional human rights courts and treaty bodies, invoking the right to a healthy environment under Article 24 of the ACHPR.

6.5.3.2 The contribution of individual projects to climate change

Second, *Earthlife* also clearly demonstrated that states have to consider the impacts of climate change on rights even in the context of individual polluting projects, hence, permits. This crucial development was ground-breaking, and so far, *Earthlife* probably remains the only successful rights-based climate change case of the very few such cases globally where claimants challenged a permit. Apart from the fact that the decision created a precedent for further action demanding adequate assessment of the climate change impacts of other individual projects in South Africa,¹⁰³³ the transferrable value of *Earthlife* has a particular importance in the context of Sub-Saharan African countries where the overall GHG emissions are the lowest in the world and where individual projects such as Thabametsi coal-fired power station remain a major source of national, or even regional emissions.¹⁰³⁴

¹⁰³³ For example, in May 2021, environmental NGOs filed a lawsuit in the Pretoria High Court, challenging the government's authorisation of a new gas powerplant (*South Durban Community Environmental Alliance v Minister of Environment, Forestry and Fisheries* (High Court, pending). Among other things, the claimants argued that the government failed to adequately consider the climate change impacts, including methane leaks during gas production, transport, and consumption. This is the first such case in South Africa. See also Natural Justice, 'Ground-breaking litigation sees organisations challenge new power plant in Richards Bay' (6 May 2021) <<https://naturaljustice.org/ground-breaking-litigation-sees-organisations-challenge-new-power-plant-in-richards-bay/>> accessed 30 June 2022

¹⁰³⁴ For example, in *Save Lamu v National Environmental Management Authority* Appeal No. Net 196 of 2016 (National Environmental Tribunal, 26 June 2019), the proposed Lamu coal-fired power station in Kenya was estimated to increase Kenya's national emissions by six to ten per cent (see DeCOALonize, 'The Impacts on the Community of the Proposed Coal Plant in Lamu: Who, if Anyone, Benefits from Burning Fossil Fuels?' *Perspectives* <https://wedocs.unep.org/bitstream/handle/20.500.11822/25363/Perspectives31_ImpactCoalPlantLamu_28032018_WEB.pdf?sequence=1&isAllowed=y> accessed 30 June 2022 5). Another example is even more illustrative: in November 2020, a coalition of environmental NGOs from Uganda, Kenya and Tanzania filed a petition with the East African Court of Justice asking it to nullify an agreement for construction of the 1,443 kilometres East African Crude Oil Pipeline in Uganda and Tanzania. Maina Waruru, 'Campaigners Take Tanzanian and Ugandan Governments to Court to Stop Total's Oil Pipeline' *DeSmog* (13 November 2020) <<https://www.desmog.com/2020/11/13/campaigners-take->

The only question is whether any such potential future challenges would focus exclusively on the long-term impacts of such projects – namely, contribution to climate change – or on the immediate local environmental impacts, such as air, water, and soil pollution, or, possibly, on both.

6.5.3.3 Large-scale challenges

While on the face of it, the relevance of *Earthlife* to prospective sweeping challenges to climate policy or to challenges to GHG emission reduction targets may not seem very straightforward, it would be wrong to rule out the transferrable value of this case to such large-scale challenges. As mentioned above, by interpreting the right to a healthy environment through the lens of sustainable development, the court in *Earthlife* indicated that the government has a duty to take reasonable measures to protect the environment, which includes adequate consideration of climate change.¹⁰³⁵ Such consideration, therefore, could easily include, for instance, nationwide climate change mitigation measures. Given the particular vulnerability of communities in Sub-Saharan Africa,¹⁰³⁶ such an interpretation of the right to a healthy environment could well be used with regard to governmental duties. Although the lack of relevant cases does not allow any concrete assumptions, there is a particular case that can be used as an example. In 2012, a group of children initiated a case against the government of Uganda.¹⁰³⁷ The claimants invoked a constitutionally recognised right to a healthy environment

tanzanian-and-ugandan-governments-court-stop-total-s-oil-pipeline)./> accessed 30 June 2022. Among other things, it was estimated that the total emissions from the project ‘will dwarf the current annual emissions of its two host countries combined, and will in fact be roughly equivalent to the carbon emissions of Denmark’. Re: East Africa Crude Oil Pipeline – letter to Mr. Akinwumi Adesina, President of the African Development Bank (19 March 2020) <https://www.inclusivedevelopment.net/wp-content/uploads/2020/12/EACOP_letter_to_AfDB_March-19-2020_Final.pdf> accessed 30 June 2022 2. See also *Friends of the Earth v UK Export Finance* [2022] EWHC 568 (Admin) [63], concerning significant estimated contribution of liquified natural gas project to GHG emissions in Mozambique.

¹⁰³⁵ See section 6.5 in this chapter.

¹⁰³⁶ See section 6.1 in this chapter.

¹⁰³⁷ *Mbabazi v The Attorney General* No. 283/2012, amended complaint (2015) (High Court, pending).

to make a sweeping challenge to climate policy. Unfortunately, nine years after the filing, the case remains undecided, which once again demonstrates the procedural difficulties faced by claimants when litigating such matters in the region.

6.6 Conclusion

Compared to their counterparts in Europe and North America, courts in the Global South have been much more sympathetic to rights claims in climate change litigation. This success has predominantly stemmed from the lack of procedural hurdles related to standing and justiciability, as well as from the favourable interpretation of the right to a healthy environment, explicitly recognised in the majority of constitutions, or derived from the constitutional right to life as in the cases of India and Pakistan. This favourable interpretation has been observed in all types of rights claims litigated in the Global South, including sweeping challenges to climate policy, challenges to sectors contributing to climate change, and challenges to permits. A notable aspect of such an interpretation is that the respective courts have generally viewed the healthy environment as a prerequisite for the enjoyment of fundamental human interests, as well as the interests of future generations. Such an approach has created fertile soil for expansive interpretations of constitutional environmental rights, thus making courts in the Global South an arguably ideal forum for rights claims in climate change litigation.¹⁰³⁸

¹⁰³⁸ This finding is also consistent with findings of the existing scholarly works on climate change litigation in the Global South that observe innovative approaches and outcomes in such cases. See Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' [2019] 113 *American Journal of International Law* 679; Joana Setzer and Lisa Benjamin, 'Climate Litigation in the Global South: Constraints and Innovations' [2020] 9 *Transnational Environmental Law* 77. It has been observed, however, that the favourable outcomes in these cases do not necessarily reveal all the complexities and systemic problems that affect the respective legal systems – see, for example, Shibani Ghosh, 'Litigating Climate Claims in India' [2020] 114 *American Journal of International Law* 45, 49 (outlining such problems in India).

CHAPTER 7. OVERALL CONCLUSION

7.1 The three factors

Anthropogenic climate change poses an unprecedented threat of planetary scale.¹⁰³⁹ Its dire consequences endanger the very existence of humankind, without mentioning countless species and ecosystems that will be obliterated in the process.¹⁰⁴⁰ Thirty years ago, governments from all over the world agreed to take active steps to stop climate change by systematically curbing GHG emissions.¹⁰⁴¹ But they did not deliver. By the beginning of this decade, global GHG emissions were at their peak and rising.¹⁰⁴² Governments are still permitting new fossil fuel exploration activities and the expansion of the existing projects,¹⁰⁴³ and are still clinging to unambitious GHG emissions reduction targets.¹⁰⁴⁴ Deforestation and obstacles to renewable energy sources make the problem even worse.¹⁰⁴⁵ Overall, climate change presents an extraordinary challenge. And as such, it requires extraordinary measures, including in law.

Pursuing rights claims in climate change litigation against states is exactly one of such measures and it offers important strategic advantages.¹⁰⁴⁶ By 2020s, rights-based climate change cases have become truly universal.¹⁰⁴⁷ Although still forming but a small fraction of the global body of climate change litigation, these cases quickly draw widespread attention, including outside their litigation forum, given the usually high profile of these cases.¹⁰⁴⁸ The dramatic and global

¹⁰³⁹ See sections 1.1 and 2.4.2.1 of this thesis.

¹⁰⁴⁰ *ibid.*

¹⁰⁴¹ See section 2.2 of this thesis.

¹⁰⁴² *ibid.*

¹⁰⁴³ See, for example, *Greenpeace Nordic*, *Earthlife*, and *Merriman*.

¹⁰⁴⁴ See, for example, *Urgenda* and *Mathur*.

¹⁰⁴⁵ See, for example, *Future Generations* and *Greenpeace Mexico*.

¹⁰⁴⁶ See section 2.2 of this thesis.

¹⁰⁴⁷ See chapters 4 – 6 of this thesis.

¹⁰⁴⁸ See section 1.2 of this thesis.

increase in the number of decided cases has now allowed for a systematic analysis of the factors that determine the viability of rights claims in climate change litigation. Notably, these factors do not exist in isolation from each other. Rather, it is the combination of these factors that has played a decisive role in the outcome of all the cases analysed above.

This final chapter will summarise the findings from this thesis by discussing each of the three factors that determine the viability of rights claims in climate change litigation: 1) the types of claims (section 7.1.1); 2) the invoked rights (section 7.1.2); and the litigation forum (section 7.1.3). This chapter will also consider the theoretical and practical significance of these findings (section 7.2) and the potential for future research in this area (section 7.3).

7.1.1 Types of claims

The difference between sweeping challenges to climate policy and specific laws setting national GHG emissions reduction targets, between climate change mitigation plans and deforestation policy, or between challenges to the renewable energy policy and approval of new fossil fuel exploration or operation projects,¹⁰⁴⁹ has proved to be a significant factor determining the viability of rights claims in climate change litigation. While nowadays courts have largely moved beyond the debate over whether national climate policies, GHG emission reduction targets, sectoral problems such as deforestation, or even individual polluting projects contribute to climate change, the question of whether such governmental action or inaction can be legally challenged is still highly relevant.¹⁰⁵⁰

Among the four identified types of claims, sweeping challenges to climate policy have probably faced the greatest obstacles, which, however, as this analysis has

¹⁰⁴⁹ See chapter 2 of this thesis.

¹⁰⁵⁰ *ibid.*

demonstrated, are largely specific to the respective litigation forums.¹⁰⁵¹ Indeed, while the claimants in the South Asian cases of *Leghari* and *Shrestha* did not encounter this obstacle,¹⁰⁵² their counterparts in the North American cases of *Juliana*,¹⁰⁵³ and *La Rose and Dini Ze*¹⁰⁵⁴ litigated in the US and the Canadian federal courts respectively, were much less successful, precisely because the claims made in those cases were sweeping challenges. At the same time, claimants in North America have had little difficulty in persuading the respective courts that they have suffered concrete personal injuries resulting from the absence of comprehensive national climate change policy.¹⁰⁵⁵ This position is different from challenges to GHG emissions reduction targets in Europe, namely *KlimaSeniorinnen*¹⁰⁵⁶ and *Carvalho*,¹⁰⁵⁷ where the respective claims were dismissed not because of the separation of powers, but because the alleged harm from the contested GHG emissions reduction targets arguably affects virtually everyone, meaning — in those jurisprudential contexts — that the harm is too generalised to establish standing.

For its part, the outcome in *Greenpeace Nordic* demonstrates the perils faced by rights claims when challenging permits or, in other words, when confronting the contribution of individual polluting projects to such a global and diffuse environmental problem as climate change.¹⁰⁵⁸ That said, it should be observed that the position adopted by the Norwegian courts may not necessarily reflect the ‘mainstream’ judicial approaches in contemporary climate change litigation.¹⁰⁵⁹ For example, the fundamentally flawed theory that climate change will occur regardless of the defendant’s action or inaction,¹⁰⁶⁰ which in this case was presented as the market substitution argument, has been nearly universally rejected by courts

¹⁰⁵¹ See chapters 4 – 6 of this thesis.

¹⁰⁵² See sections 6.2.2 and 6.3 of this thesis. Although, as may be recalled, the government of Nepal invoked the doctrine of the separation of powers to challenge justiciability.

¹⁰⁵³ See section 5.2.1 of this thesis.

¹⁰⁵⁴ See section 5.3.1 of this thesis.

¹⁰⁵⁵ See chapter 5 of this thesis.

¹⁰⁵⁶ See section 4.3 of this thesis.

¹⁰⁵⁷ See section 4.7.1 of this thesis.

¹⁰⁵⁸ See section 4.5 of this thesis.

¹⁰⁵⁹ See section 2.4.2.2 of this thesis.

¹⁰⁶⁰ It is fundamentally flawed because it focuses only on collective *contribution* to the problem and completely ignores collective *responsibility* to deal with it.

outside Norway.¹⁰⁶¹ Admittedly, almost all such cases concerned much greater sources of GHG emissions, except for *Earthlife*, which was also a challenge to permit, and had a completely different outcome than *Greenpeace Nordic*.¹⁰⁶²

As for challenges to sectors contributing to climate change, these faced no opposition on justiciability grounds, though it has to be kept in mind that all such claims were filed before courts in the Global South that were open to such claims,¹⁰⁶³ as shall be discussed in more detail in section 7.1.3.

7.1.2 Invoked rights

While the rights to life, to a healthy environment, and to respect for private and family life have all proved to be applicable in the context of climate change, it is not the case that courts would automatically recognise the contested governmental action or inaction on climate change as violating the above-mentioned rights. Indeed, in their analysis of such potential violations, courts have largely relied on climate science and their approaches to the latter have dictated the outcome.

7.1.2.1 Right to life

The two main questions that courts in the cases analysed had to answer regarding the right to life were whether governmental action or inaction on climate change can interfere with this right and, if it can, what should the extent of such interference be to amount to a violation of this right. The answer to the first question is undoubtedly yes. Courts in all cases where claimants invoked the right

¹⁰⁶¹ See section 2.4.2.2 of this thesis. The only exception is the case of *Dini Ze'*, where the Federal Court of Canada was convinced that the sweeping challenge to national climate policy disclosed no reasonable cause of action because GHG emissions are cumulative – see section 5.3.1.3 of this thesis.

¹⁰⁶² See section 6.5 of this thesis.

¹⁰⁶³ See sections 6.2.1 and 6.4 of this thesis.

to life have found that governments have both positive and negative obligations with regard to climate change in order to protect human life.¹⁰⁶⁴

The answer to the second question, though, is more nuanced and depends both on the types of claims and litigation forum. For example, the National Green Tribunal in *Singh* in India and the Lahore High Court in *Leghari* in Pakistan were ready to interpret the constitutional right to life as requiring protection against various environmental harms, including in challenges to sectors contributing to climate change and in sweeping challenges to climate policy respectively.¹⁰⁶⁵ Even more so, these courts interpreted the constitutional right to life as providing the basis for an unwritten right to a healthy environment.¹⁰⁶⁶ For their part, the Dutch courts in *Urgenda* recognised that unambitious GHG emissions reduction target violated the right to life under Article 2 of the ECHR.¹⁰⁶⁷ Similarly, the Ontario Court of Justice in *Mathur* was convinced that the right to life under Section 7 of the Canadian Charter could be violated by unambitious GHG emissions because of the increased risk of death of the province's residents.¹⁰⁶⁸ Equally so, but this time with regard to a sweeping challenge, the US courts in *Juliana* held that the right to life under the Due Process Clause of the US Constitution was properly engaged, given the significant contribution of the US federal climate policy to global climate change and the resulting harms to the claimants.¹⁰⁶⁹ In all the above-mentioned cases, the courts considered that the current and future threats posed by climate change in the respective countries were sufficient to violate the right to life.

In contrast, the Federal Court of Canada declined to recognise the applicability of the right to life because the claims were sweeping challenges to national climate policy, which arguably made the analysis of this right impossible.¹⁰⁷⁰

¹⁰⁶⁴ See chapters 4 – 6.

¹⁰⁶⁵ See section 6.2 of this thesis.

¹⁰⁶⁶ *ibid.* See also section 6.3.3 of this thesis.

¹⁰⁶⁷ See sections 4.2.2 and 4.2.3 of this thesis.

¹⁰⁶⁸ See section 5.3.2.2 of this thesis.

¹⁰⁶⁹ See sections 5.2.1.3 and 5.2.1.5 of this thesis.

¹⁰⁷⁰ See section 5.3.1.3 of this thesis.

That said though, the Court did not rule out the possibility of this right being applicable in the context of climate change, or in other words, in other types of claims.¹⁰⁷¹ But the most restrictive interpretation of the right to life was provided by the Swiss and Norwegian courts. In *KlimaSeniorinnen*, the Swiss courts were unwilling to recognise that the existing impacts of climate change were severe enough in their effects on the claimants to violate the right to life: hence they dismissed the challenge to national GHG emissions reduction targets.¹⁰⁷² For a very similar reason, the Norwegian courts dismissed the challenge to permit in *Greenpeace Nordic*, with an additional argument that the actual contribution of the contested permit to global GHG emissions was either negligible or uncertain.¹⁰⁷³

7.1.2.2 Right to a healthy environment

The application and interpretation of the right to a healthy environment is arguably one of the most interesting aspects of the viability of rights claims in climate change litigation. Similar to the right to life, the right to a healthy environment has been invoked nearly universally, but the respective courts have demonstrated radically different approaches.¹⁰⁷⁴

With regard to the scope, or in other words, the content, of the right to a healthy environment, since all the cases analysed in this thesis were based on the *constitutional right* to a healthy environment, the difference between the interpretation of this right by the respective courts is not particularly surprising. For example, with Article 51(g) of the Constitution of Nepal directing the government to pursue various policies related to the conservation, management, and use of natural resources, including biodiversity, renewable, energy, and so forth, the Supreme Court in *Shrestha* was able to be persuaded that the lack of comprehensive climate change legislation violated the right to a healthy

¹⁰⁷¹ *ibid.*

¹⁰⁷² See section 4.3.2 of this thesis.

¹⁰⁷³ See section 4.5 of this thesis.

¹⁰⁷⁴ See chapters 4 – 6.

environment under Article 30 of the Constitution.¹⁰⁷⁵ Of course, it is extremely rare to have explicit references to climate change – or to any other areas of environmental concern for that matter – enshrined in constitutions, which makes *Shrestha* quite unique, though not necessarily impossible to replicate outside Nepal.¹⁰⁷⁶ After all, environmental obligations of the government, while very rarely enshrined in constitutions, are typically enshrined in primary or secondary legislation concerning environmental matters.¹⁰⁷⁷ Consequently, legislation setting national policy on climate change, biodiversity, and so forth, could be used by the courts to a similar effect when interpreting the right to a healthy environment.¹⁰⁷⁸

Meanwhile, in other countries, national constitutions may be less ‘detailed’ with regard to specific areas of environmental concern, yet the concept of environmental protection may be so deeply entrenched in the fabric of the constitutional traditions that not only does the right to a healthy environment enjoy a broad interpretation by the respective courts, but nature itself is often declared to be the subject of rights.¹⁰⁷⁹ In other words, in legal systems that follow such a tradition – most notably, countries in Latin America – the right to a healthy environment can blur the distinction between the rights of humans and the rights of nature.¹⁰⁸⁰ Indeed, one of the claims in *Future Generations* concerned the recognition of the Amazon rainforest as the subject of rights, which the Colombian Supreme Court accordingly granted.¹⁰⁸¹

Such a broad interpretation of the right to a healthy environment in some countries is in stark contrast to the situation elsewhere. A typical example of the latter is Norway, where one of the key questions addressed by the respective courts in *Greenpeace Nordic* was whether the right to a healthy environment under Article

¹⁰⁷⁵ See section 6.3.3 of this thesis.

¹⁰⁷⁶ *ibid.*

¹⁰⁷⁷ *ibid.*

¹⁰⁷⁸ *ibid.*

¹⁰⁷⁹ See section 3.2.2.3 of this thesis.

¹⁰⁸⁰ *ibid.*

¹⁰⁸¹ See section 6.4.1.4 of this thesis.

112 is a 'rights' provision.¹⁰⁸² Given the courts' questioning of the very 'rights' nature of this right, it is perhaps of little surprise that the courts ultimately limited the application of Article 112 to cases where the government 'grossly disregarded' its duties.¹⁰⁸³ Along the same lines was the approach taken by the Pennsylvanian state courts in *Funk*, with the only difference that *Funk* was a sweeping challenge to state climate policy.¹⁰⁸⁴

It thus seems that the explicit recognition of the right to a healthy environment does not automatically render this right more instrumental than in countries where it is not explicitly recognised.¹⁰⁸⁵ Hence, for example, the absence of this right from the Constitutions of India and Pakistan has not precluded the respective courts from interpreting its 'derived' version as imposing broad obligations on the respective governments.¹⁰⁸⁶ Nor has it precluded US federal courts from recognising an unenumerated 'right to a climate system capable of protecting human life' in *Juliana*, although in this particular case, the recognition of this right was not enough to secure a successful outcome.¹⁰⁸⁷ But again, the approach adopted by above-mentioned courts is not universal and as seen in the Supreme Court of Ireland's treatment of the right to a healthy environment in *Friends of the Irish Environment*, some courts may decline to recognise it altogether.¹⁰⁸⁸ In other words, the regional variations of the right to a healthy environment range from altogether unrecognised or narrowly interpreted variation of this right in Europe to an explicitly recognised or at least derived, but either way, applicable in the context of environment degradation variation in countries like India and Pakistan, to a particularly broad interpretation of this right, blurring with the rights of nature, in a country such as Colombia.

¹⁰⁸² See section 4.5 of this thesis.

¹⁰⁸³ See section 4.5.6 of this thesis.

¹⁰⁸⁴ See section 5.2.2.2 of this thesis.

¹⁰⁸⁵ See section 4.6 of this thesis.

¹⁰⁸⁶ See sections 3.2.2.3 and 6.2 of this thesis.

¹⁰⁸⁷ See sections 5.2.1.4 and 5.2.1.5 of this thesis

¹⁰⁸⁸ See section 4.4.5 of this thesis.

The question, then, is what the narrow or the broad interpretation of the scope of the right to a healthy environment means for climate action. This question is more complex, as it depends on what falls within the scope of the right – as enshrined or interpreted in each jurisdiction. At one end of the spectrum is the right to a healthy environment, which may be recognised as protecting at least some elements of the environment, but with limited ability to challenge the threats to them – in other words, the *Greenpeace Nordic* scenario.¹⁰⁸⁹ In such a scenario, the right to a healthy environment would most likely be triggered only in very rare circumstances, for example, in a rather unrealistic situation where there is no environmental impact assessment prior to granting a permit to produce petroleum. Or, if the challenge was not against an individual permit, but rather Norway's petroleum production sector as a whole, thus concerning much greater GHG emissions – in other words, a broader scope claim. But that could still be insufficient because the government could once again successfully argue that it took adequate measures to offset the harm.¹⁰⁹⁰ Nevertheless, the very fact that the Norwegian courts held that the government has to consider the right to a healthy environment in its activities (or lack of action) in Norway and abroad suggests that the right could be successfully used in future litigation concerning climate change, biodiversity loss, and other environmental harm.¹⁰⁹¹ In other words, the narrow interpretation of the right to a healthy environment does not necessarily deprive it of its 'teeth'.¹⁰⁹²

At the other end of the spectrum is the right to a healthy environment that transcends the boundary between the rights of humans and the rights of nature, as seen in *Future Generations* and *Greenpeace Mexico*.¹⁰⁹³ As such, the scope of such a broadly construed right can potentially be limitless concerning the range of the values it protects and the obligations it imposes. On the face of it, such a broad interpretation could be extremely useful, particularly when applied to protect wildlife and ecosystems, since they would be recognised as having intrinsic

¹⁰⁸⁹ See section 4.5 of this thesis.

¹⁰⁹⁰ *ibid.*

¹⁰⁹¹ See section 4.6 of this thesis.

¹⁰⁹² *ibid.*

¹⁰⁹³ See section 6.4 of this thesis

value.¹⁰⁹⁴ Alluring as it may be, however, such a broad interpretation can also cause certain problems, mainly by diluting the contours of the right and thus reducing the potential transferrable value of any successful cases that are brought under it.¹⁰⁹⁵ Indeed, such a broad interpretation would hardly satisfy courts in those countries where the rights of nature are not recognised¹⁰⁹⁶ and given the fact that most countries do not recognise them,¹⁰⁹⁷ the transferrable value of such an interpretation would arguably be very low, if any.

In other words, just as with region- or even country- specific variations of the right to a healthy environment, different elements of this right seem to be emerging piecemeal from litigation, with tangible progress on certain specific issues yet with little development in other areas. Of course, such a fragmented approach can also be explained given the existing legal pluralism, unique circumstances of different countries in terms of development: geographical location: specific local environmental challenges: and so forth. These differences can dictate the need for a specific interpretation of the right's content, for example, by focusing on certain elements such as the protection of forest flora and fauna as in *Future Generations*,¹⁰⁹⁸ access to clean water as in *Leghari*,¹⁰⁹⁹ or the inter-relationship between the environment and sustainable development as in *Earthlife*.¹¹⁰⁰ However, in the absence of a universally accepted definition of the right, there is a certain risk that in some countries the level of protection offered by it can fall below the bare minimum and thus prove to be of little if any practical value.

These considerations reveal the importance of having the content of the right to a healthy environment defined at the international level and, accordingly, the importance of the recent developments in the international recognition of this right

¹⁰⁹⁴ See section 3.2.2.3 of this thesis.

¹⁰⁹⁵ *ibid.*

¹⁰⁹⁶ Hence, the obvious example is the case of *Friends of the Irish Environment*. See sections 3.2.2.3 and 4.4.5 of this thesis.

¹⁰⁹⁷ It is estimated that eighty per cent of country initiatives on the rights of nature are clustered on the American continents. See Alex Putzer and others, 'Putting the Rights of Nature on the Map. A Quantitative Analysis of Rights of Nature Initiatives Across the World' [2022] 17 *Journal of Maps* 1, 4.

¹⁰⁹⁸ See section 6.4.1 of this thesis.

¹⁰⁹⁹ See section 6.2.2 of this thesis.

¹¹⁰⁰ See section 6.5 of this thesis.

discussed in section 3.2.2.1 of this thesis. As for the right itself, despite the differences in its interpretation and application, it has already proved to be at the very least a useful legal tool for demanding governmental action or restraint with regard to climate change.

7.1.2.3 Right to respect for private and family life

As the right to respect for private and family life is exclusively invoked under Article 8 of the ECHR before the European courts,¹¹⁰¹ it is hardly surprising that its interpretation in the context of climate change has largely followed the approach adopted by the respective courts on the right to life. In general, European courts have agreed that governmental action or inaction on climate change can violate this right.¹¹⁰² However, there is currently no single approach or interpretation concerning when such a violation could be identified and established. Hence, the approach adopted by the Dutch courts in *Urgenda* was that the right to respect for private and family life, alongside the right to life, imposed positive obligations on the state to adopt ambitious GHG emissions reduction targets.¹¹⁰³ In contrast, the Norwegian courts in *Greenpeace Nordic* set the threshold for triggering the right in challenges to permits very high, because unlike local environmental damage, the effects of future GHG emissions from individual polluting projects would not be direct and immediate within the meaning of the ECHR.¹¹⁰⁴ For their part, the Swiss courts in *KlimaSeniorinnen* treated the right to respect for private and family life exactly the same way as the right to life – namely, that it was not currently affected to a sufficient extent to amount to a violation.¹¹⁰⁵

7.1.3 Litigation forum

¹¹⁰¹ See section 3.2.3 and chapter 4 of this thesis.

¹¹⁰² *ibid.*

¹¹⁰³ See section 4.2 of this thesis.

¹¹⁰⁴ See section 4.5 of this thesis.

¹¹⁰⁵ See section 4.3 of this thesis.

The litigation forum has proved to be an extremely important factor in determining the viability of rights claims in climate change litigation. There is a clear correlation between the use of different types of claims and invoked rights on the one hand, and litigation forums on the other hand. Among the three major regions where rights-based climate change litigation has developed, the following patterns specific to litigation forum can be observed: a) Europe, dominated by challenges to GHG emissions reduction targets and invocations of the rights to life and to respect for private and family life under the ECHR;¹¹⁰⁶ b) North America, dominated by sweeping challenges and invocations of the constitutional right to life;¹¹⁰⁷ and c) the Global South, with no single dominating type of claims, yet all brought under the right to a healthy environment.¹¹⁰⁸ One thing that rights-based climate change cases widely share in terms of litigation forum, is that so far, the overwhelming majority of such cases have been litigated before national courts and not supranational courts or treaty bodies, although in the last few years, litigation at supranational level has also started to become more common.¹¹⁰⁹

7.1.3.1 Europe

The successful outcome in *Urgenda* ushered in a wave of rights-based climate change cases outside the Netherlands and seemingly signalled the beginning of a triumphant era for rights claims in other European countries. However, it quickly became obvious that *Urgenda*'s success could not be easily replicated, following a diluted victory in *Friends of the Irish Environment* and the unsuccessful outcomes in *KlimaSeniorinnen* and *Greenpeace Nordic*. The decisions reached by the respective courts reveal three different approaches to rights claims: the progressive approach adopted by the Dutch courts in *Urgenda*, the cautious approach in *Friends of the Irish Environment* and the restrictive approach in

¹¹⁰⁶ See chapter 4 of this thesis.

¹¹⁰⁷ See chapter 5 of this thesis.

¹¹⁰⁸ See chapter 6 of this thesis.

¹¹⁰⁹ See sections 2.4.3 and 4.7 of this thesis.

KlimaSeniorinnen and *Greenpeace Nordic*.¹¹¹⁰ In the two latter cases, the Swiss and the Norwegian courts significantly limited the application of the ECHR rights to life and to respect for private and family life in the context of claims related to climate change.¹¹¹¹ While *KlimaSeniorinnen* and *Greenpeace Nordic* were based on different types of challenges, the courts' treatment of the respective rights claims followed a similar pattern, namely, a dismissive approach to the extent of the risk posed by climate change to the respective rights.¹¹¹² Yet, even despite the unsuccessful outcome in these two cases, rights claims could potentially be viable even in these countries because the courts recognised that climate change could potentially affect the claimed rights.¹¹¹³

Reflecting on the role of the litigation forum as a factor determining the viability of rights claims in climate change cases also involves an important consideration, namely, the standing requirements for NGOs. Here, rights-based climate change cases in Europe offer a particularly valuable experience. As may be recalled, while Dutch and Norwegian law allowed claimants-NGOs in *Urgenda* and *Greenpeace Nordic* respectively to bring rights claims,¹¹¹⁴ the Irish courts dismissed such claims in *Friends of the Irish Environment* precisely because the claimant was a corporate entity.¹¹¹⁵ This decision followed the established approach against *actio popularis* in Ireland that significantly limits NGOs' ability to bring such claims.¹¹¹⁶ In other words, similar to non-rights-based climate change cases in some litigation forums,¹¹¹⁷ claimants-NGOs may encounter an insurmountable obstacle in pursuing such claims

¹¹¹⁰ See section 4.6 of this thesis.

¹¹¹¹ See sections 4.3 and 4.5 respectively.

¹¹¹² See section 4.6 of this thesis.

¹¹¹³ *ibid.*

¹¹¹⁴ See sections 4.2 and 4.5 respectively.

¹¹¹⁵ See section 4.4 of this thesis.

¹¹¹⁶ See section 4.4.4 of this thesis.

¹¹¹⁷ See Samvel Varvastian, 'Access to Justice in Climate Change Litigation from a Transnational Perspective: Private Party Standing in Recent Climate Cases' in Jerzy Jendrośka and Magdalena Bar (eds), *Procedural Environmental Rights: Principle X of the Rio Declaration in Theory and Practice* (Intersentia 2017).

that stems solely from their corporate status, which, however, does not mean that similar claims would not be viable if brought by natural persons.¹¹¹⁸

7.1.3.2 North America

The politicisation of governmental response to climate change¹¹¹⁹ and the inconsistent or unfavourable interpretation of the relevant constitutional rights¹¹²⁰ have so far made North American courts a difficult forum for pursuing rights claims in climate change litigation. With all but one rights-based climate change cases dismissed, the viability of rights claims in the region is uncertain. On the one hand, it is evident that the lack of viability of such claims is only restricted to sweeping challenges, at least for the time being.¹¹²¹ In such cases, the US and the Canadian courts' tendency to politicise the governmental approach to climate change has been the chief factor resulting in the outcome unfavourable to the claimants.¹¹²² It remains to be seen whether this politicisation could be an obstacle to other types of challenges, but considering the outcome in the Canadian case of *Mathur*, and the long history of successful non-rights-based climate change cases in the US where claimants did not pursue sweeping challenges to climate policy, the potentially greater viability of such other types of challenges should not be ruled out.¹¹²³ On the other hand, however, it should be noted that at the time of writing this thesis, the Canadian courts have no consistent interpretation of the relevant constitutional rights with regard to climate change,¹¹²⁴ while the US courts' interpretation of such rights has been either extremely limited, as in *Juliana*,¹¹²⁵ or restrictive as in *Funk*.¹¹²⁶ While it is impossible to say whether these difficulties could be overcome

¹¹¹⁸ See section 4.4.4 of this thesis.

¹¹¹⁹ See section 5.4.1 of this thesis.

¹¹²⁰ See section 5.4.2 of this thesis.

¹¹²¹ See section 5.4.1 of this thesis.

¹¹²² See sections 5.2 and 5.3 respectively.

¹¹²³ See section 5.4.1 of this thesis.

¹¹²⁴ See section 5.3 of this thesis.

¹¹²⁵ See sections 5.2.1.4 and 5.2.1.5 of this thesis.

¹¹²⁶ See section 5.2.2.2 of this thesis.

in the future, it is already clear that for the time being, pursuing rights claims in climate change cases in the US and Canada has proved to be very challenging.

7.1.3.3 The Global South

Despite the fact that the very term 'Global South' encompasses an extremely wide range of countries with different legal cultures and other relevant specific circumstances, there are several critical similarities between the ways in which courts in the respective countries have treated rights claims in climate change litigation.¹¹²⁷ Some of these similarities are specific to litigation in certain regions, most notably, South Asia (India and Pakistan)¹¹²⁸ and Latin America (Colombia and Mexico),¹¹²⁹ while others are applicable to cases before all, or before nearly all courts in the Global South discussed in chapter 6.

With regard to regional specifics, the proactive role of courts in India and Pakistan has allowed the respective courts to treat rights claims in a way that could hardly be possible elsewhere.¹¹³⁰ Similarly, the expansive interpretation of the right to life, from which the respective courts have derived the right to a healthy environment has created favourable conditions for sweeping challenges to climate policy and challenges to sectors contributing to climate change in these South Asian countries.¹¹³¹ For their part, courts in Colombia and Mexico have also been expansive in their interpretation of constitutional rights, namely, the right to a healthy environment, by extending this right to protecting nature itself, which is a common approach in Latin America.¹¹³²

As for global similarities between the ways in which courts in the Global South have treated rights claims in climate change litigation, the generally favourable interpretation of the right to a healthy environment is a relatively clear and

¹¹²⁷ See section 6.1 of this thesis.

¹¹²⁸ See section 6.2 of this thesis.

¹¹²⁹ See section 6.4 of this thesis.

¹¹³⁰ See section 6.3.3 of this thesis.

¹¹³¹ *ibid.*

¹¹³² See sections 3.2.2.3 and 6.4 of this thesis.

established trend.¹¹³³ And, as noted above in the relevant discussion, such favourable treatment of this right has largely stemmed from several interrelated issues. Among these issues is the recognition of the interconnectedness between the right to a healthy environment and other human rights and interests.¹¹³⁴ Furthermore, in their interpretation of both this right, and of governmental climate change obligations, the respective courts have generally paid considerable attention to the concept of climate justice.¹¹³⁵ While climate injustice arising from inequality in contribution to climate change and the unevenness of its impact on vulnerable individuals and populations can be traced in practically all rights-based climate change cases in Europe, North America, and the Global South, its consideration in rights-based climate change cases has been limited to the Global South courts only. A similar pattern has occurred with the concept of intergenerational justice. For instance, all rights-based climate change cases in the US and Canada have featured the concept,¹¹³⁶ which, however, has largely been ignored by the respective courts in their analysis.¹¹³⁷ In contrast, all courts in the Global South have explicitly referred to intergenerational justice in their interpretation of the respective rights.¹¹³⁸ Furthermore, courts in the Global South have also paid considerable attention to the vulnerability of specific communities to both climate change and the immediate environmental impacts resulting from inadequate climate policies, as well as polluting sectors and projects.¹¹³⁹ Finally, in their interpretation of the invoked rights, courts in the Global South have also largely been willing to consider the international commitments of

¹¹³³ See section 6.6 of this thesis.

¹¹³⁴ *ibid.*

¹¹³⁵ *ibid.*

¹¹³⁶ Given the fact that the claimants in these cases are children or young people, who claim to be representing the interests of future generations and who are affected by climate change much more severely than their predecessors who are responsible for contributing to climate change in the first place.

¹¹³⁷ Except for the case of *Mathur* – see section 5.3.2.3 of this thesis.

¹¹³⁸ Including in cases where its application was not necessarily evident, namely, *Singh*, *Leghari*, *Earthlife*, *Shrestha*, and *Greenpeace Mexico*.

¹¹³⁹ See chapter 6 of this thesis.

the respective governments and/or principles of international environmental law as informing the courts' reasoning about the nature and scope of these rights.¹¹⁴⁰

Overall, despite the relatively small number of decided cases and the fact that these cases do not necessarily represent all the realities of an extremely vast and diverse region spanning across three continents, rights claims in climate change litigation in the Global South have proved to be viable. Among other things, the favourable treatment of such claims reflects the potential of less explored pathways in rights-based climate change litigation, namely, challenges to sectors contributing to climate change and to permits.¹¹⁴¹ Given the global strategic importance of such sectors as deforestation and renewable energy projects, and the considerable contribution of individual polluting projects to climate change at a national or even regional level, the cases analysed could be indicative of similar future developments in other litigation forums.¹¹⁴² It is also likely that courts in the Global South will continue to be among the most progressive and favourable litigation forums for rights-based climate change cases in the future.

7.2 Theoretical and practical significance of the findings

The thesis demonstrates that the rights to life, to a healthy environment, and to respect for private and family life¹¹⁴³ can be successfully invoked in various types of claims, ranging from narrow-scope challenges to government permitting processes; to broader challenges to governmental action or inaction with regard to specific sectors (such as deforestation); challenges to GHG emission reduction targets; and even to sweeping challenges to climate policy.¹¹⁴⁴ As this thesis has demonstrated, while not all litigation forums are equally favourable to such claims, even in less favourable forums such as Europe and North America, rights claims in

¹¹⁴⁰ *ibid.*

¹¹⁴¹ See sections 6.4.3 and 6.5.3 respectively.

¹¹⁴² *ibid.*

¹¹⁴³ See section 7.1.1 in this chapter.

¹¹⁴⁴ See section 7.1.2 in this chapter.

climate change litigation *can* be successful.¹¹⁴⁵ These findings support three points of theoretical and practical significance.

First and foremost, it is clear that despite legal pluralism and the individuality of the circumstances relevant to each case, there are some key similarities between the ways in which courts in different litigation forums treat rights claims in climate change cases. These similarities suggest that the findings of the analysis offered by this thesis are arguably relevant well beyond the countries where the analysed cases were litigated, and thus fill a critical gap in the legal literature, helping advance new theoretical insights into research on climate change litigation. Accordingly, the thesis offers a hopeful theoretical ground — and some jurisprudential resources — for anyone interested in pursuing rights claims in climate change litigation, and more generally, anyone interested in litigating, researching, or studying climate change cases. Furthermore, while the difficulties related to the application and interpretation of the invoked rights are specific to rights-based climate change litigation, the two other factors analysed here — the types of claims and litigation forum — might also play a significant role in determining the prospects for non-rights-based climate change litigation.¹¹⁴⁶ In other words, the relevance of the findings is not limited to the cases analysed in this thesis, and nor is it limited to climate change cases where claimants allege violations of rights protected by human rights treaties or constitutions, whether within one of the litigation forums discussed in this thesis, or beyond.

Second, the findings of the analysis offered make clear that rights protected by human rights treaties and constitutions can be successfully invoked even in the context of such a complex and extremely diffuse and cumulative problem as climate change.¹¹⁴⁷ This conclusion contributes to understanding the role that the above-mentioned rights mechanisms play in protecting individuals and communities against large-scale global environmental problems, including in situations where

¹¹⁴⁵ See section 7.1.3 in this chapter.

¹¹⁴⁶ See chapters 2 and 4 – 6 of this thesis

¹¹⁴⁷ See chapters 3 – 6 of this thesis.

alternative non-rights legal avenues may not be available. Two particularly salient points of importance are: a) the courts' general willingness to recognise that rights can be violated by governmental action or inaction on climate change,¹¹⁴⁸ and b) the growing importance of the right to a healthy environment, which can act as an umbrella right in cases of environmental harms resulting from governmental action or failure to act.¹¹⁴⁹ Once again, these findings help advance the theoretical knowledge on the relevance of rights protected by human rights treaties and constitutions to climate change action and, more broadly, to action on problems of complex, diffuse, and cumulative nature.

The latter point leads to the final consideration, namely, the role of the judiciary in tackling climate change. While courts in Europe and North America have largely been very cautious with regard to the justiciability of national climate policies, they have generally agreed that questions related to climate change are judicially reviewable in the context of large-scale challenges to GHG emissions reduction targets.¹¹⁵⁰ As for courts in the Global South, the latter have demonstrated their full willingness to consider all types of questions related to climate change and to direct the respective governments to take action or to refrain from action where the courts have deemed that such a step was necessary to protect the rights in question.¹¹⁵¹ Yet again, this finding is critical to expanding the theoretical underpinnings for the role of the judiciary in interpreting human rights and constitutional rights against the backdrop of novel, large-scale, and transboundary crises.

Overall, by bringing together different aspects of climate change law, international human rights law, and constitutional law in different jurisdictions, the thesis connects and contributes to broader scholarship in the respective fields, particularly, in a comparative context. For example, it has long been observed that understanding jurisdictional interrelationship is challenging, yet highly important

¹¹⁴⁸ See section 7.1.2 in this chapter.

¹¹⁴⁹ See section 7.1.2.2 in this chapter.

¹¹⁵⁰ See sections 7.1.3.1 and 7.1.3.2 respectively.

¹¹⁵¹ See section 7.1.3.3 in this chapter.

when analysing environmental and climate change law.¹¹⁵² Despite these challenges, the body of scholarship on comparative environmental law is constantly growing, with cross-cutting, or region- or country-focused approaches.¹¹⁵³ A similar trend can be observed in scholarship on environmental rights,¹¹⁵⁴ including works on environmental and climate constitutionalism.¹¹⁵⁵ Similarly, the thesis also contributes to comparative constitutional law scholarship, most notably, with respect to constitutional rights in different jurisdictions and the role of the judiciary in protecting these rights, as well as the role of political institutions in the respective countries in addressing climate change.¹¹⁵⁶

The theoretical contribution of this thesis to knowledge in the abovementioned fields paves the way for further research on the intersection of climate change and human rights, as shall be discussed in more detail in the final section.

7.3 Looking ahead

¹¹⁵² See, for example: Elizabeth Fisher and others, 'Maturity and Methodology: Starting a Debate about Environmental Law Scholarship' [2009] 21 *Journal of Environmental Law* 213; Tseming Yang and Robert V Percival, 'The Emergence of Global Environmental Law' [2009] 36 *Ecology Law Quarterly* 615; Kati Kulovesi, 'Exploring the Landscape of Climate Law and Scholarship: Two Emerging Trends' in Erkki J Hollo, Kati Kulovesi and Michael Mehling (eds) *Climate Change and the Law* (Springer 2013) 31-62; Elisa Morgera, 'Global Environmental Law and Comparative Legal Methods' [2015] 24 *Review of European, Comparative & International Environmental Law* 254; Michael Mehling, 'The Comparative Law of Climate Change: A Research Agenda' [2015] 24 *Review of European, Comparative & International Environmental Law* 341.

¹¹⁵³ Jorge E Viñuales, 'Comparative Environmental Law: Structuring a Field' in Emma Lees and Jorge E Viñuales (eds), *The Oxford Handbook of Comparative Environmental Law* (Oxford University Press 2019), 4-7.

¹¹⁵⁴ See, for example: John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018); James R May and Erin Daly (eds), *Human Rights and the Environment: Legality, Indivisibility, Dignity and Geography* (Edward Elgar Publishing 2019); Stephen J Turner and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019).

¹¹⁵⁵ See, for example: James R May and Erin Daly (eds), *Global Environmental Constitutionalism* (Cambridge University Press 2015); Joshua C Gellers, *The Global Emergence of Constitutional Environmental Rights* (Routledge 2017); Jordi Jaria-Manzano and Susana Borràs (eds), *Research Handbook on Global Climate Constitutionalism* (Edward Elgar Publishing 2019).

¹¹⁵⁶ For a general discussion on the the role of political institutions and courts in comparative constitutional law see, for example, David Landau, 'Political Institutions and Judicial Role in Comparative Constitutional Law' [2010] 51 *Harvard International Law Journal* 319.

As it often happens in scholarship, this thesis marks the end of one research inquiry and at the same time, opens new ground for future research. With the factors determining the viability of rights claims in climate change litigation now identified, the most important next step will be to assess the impacts of such cases. After all, the *real* protection of claimants' rights – as opposed to validation on paper – ultimately depends on the implementation of court decisions.¹¹⁵⁷ And as claimants in such cases seek the respective governments to mitigate climate change, the ultimate goal of such cases, therefore, is to ensure that governments should take more active steps to curb GHG emissions and refrain from any action that would lead to more emissions. Accordingly, adequate implementation of court decisions remains paramount in order for litigation to be an effective tool against climate change. In certain types of claims, implementation is much more palpable than in others: for example, when governmental agencies revoke a permit to a polluting project. In broader types of claims, particularly in sweeping challenges to climate policy, implementation is, of course, much more complicated and might require continuous judicial supervision.¹¹⁵⁸

Another prospective avenue for subsequent research would involve exploring the prospects of invoking certain rights that have so far largely been unused in rights-based climate change cases. Among these is the right to property, which could become increasingly relevant given the growing threats posed by rising sea levels and by more frequent and severe extreme weather events to coastal communities, communities living in close proximity to forests and thus vulnerable to wildfires, and so forth.¹¹⁵⁹ In fact, the right to property has been invoked in several rights-based climate change cases,¹¹⁶⁰ but thus far, it has practically been unaddressed by

¹¹⁵⁷ See, for example, the discussion on the lack of implementation of courts' orders in *Gbemre* and in *Future Generations* in sections 1.4.1 and 1.4.2 respectively.

¹¹⁵⁸ Which, as may be recalled, was the chief concern of the Ninth Circuit in *Juliana* – see section 5.2.1.5 of this thesis.

¹¹⁵⁹ See sections 1.1, 2.4.2.1 and 3.1 of this thesis.

¹¹⁶⁰ Most notably, in the *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* No P-1413-05 (7 December 2005) 6, and in the case of *Carvalho v The European Parliament* C-565/19 P ECLI:EU:C:2021:252 (25 March 2021) [33]. See also section 2.4.2.2 of this thesis, discussing tort-based climate change litigation that concerned damage to property.

the courts.¹¹⁶¹ The right to culture is yet another relevant example, particularly in the light of the recent UN Human Rights Committee's decision in the case of *Billy v Australia*.

Relatedly, further research on rights-based climate change litigation could proliferate from the analysis of prospective new types of claims. Among these, claims brought by people displaced by climate change – in other words, climate refugees – seeking asylum abroad is possibly one of the most likely scenarios. Again, it is notable that such cases already exist, most notably, the case of *Teitiota* against New Zealand discussed in section 3.2.1.1.2 of this thesis. With the impacts of climate change becoming worse, and with entire nations facing forced relocation due to sea level rise over the next few decades,¹¹⁶² such cases could well become routine. Similarly, questions related to the interrelationship between human rights and the rights of nature, the human rights obligations of corporate entities, just transition, vulnerability of particular groups to climate change, and so forth, are likely to become increasingly common in rights-based climate change litigation, thus demanding an in-depth scholarly assessment.

Finally, and also related, is the fact that rights-based climate change litigation is likely to become increasingly transnational. Following the very early attempt of

¹¹⁶¹ The possible exception to this is the case of *Agostinho*, where, as mentioned in section 4.7.2 of this thesis, the ECtHR requested the defendant countries to provide information on potential violations of the right to property under Article 1 of Protocol No. 1 of the ECHR.

¹¹⁶² For example, according to the latest IPCC report:

Climate change is contributing to humanitarian crises where climate hazards interact with high vulnerability (*high confidence*). Climate and weather extremes are increasingly driving displacement in all regions (*high confidence*), with Small Island States disproportionately affected (*high confidence*). Flood and drought-related acute food insecurity and malnutrition have increased in Africa (*high confidence*) and Central and South America (*high confidence*). While non-climatic factors are the dominant drivers of existing intrastate violent conflicts, in some assessed regions extreme weather and climate events have had a small, adverse impact on their length, severity or frequency, but the statistical association is weak (*medium confidence*). Through displacement and involuntary migration from extreme weather and climate events, climate change has generated and perpetuated vulnerability (*medium confidence*).

Hans-Otto Pörtner and others, 'Summary for Policymakers' in Hans-Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2022) 13.

such litigation, the Inuit petition against the US,¹¹⁶³ there has been an increase in the number of such cases before transnational courts and treaty bodies in recent years, most notably, *Carvalho* and *Agostinho*, as discussed in section 4.7 of this thesis. Such transnational cases bring in a whole myriad of questions¹¹⁶⁴ that would need to be addressed by future research.

Needless to say, the list of above-mentioned examples of potential future research in this area is not exhaustive. Unfortunately, climate change and its devastating impacts will persist for at least the next several decades even under the most aggressive global GHG emissions reduction scenarios, while ‘vulnerability will continue to concentrate where the capacities of local, municipal and national governments, communities and the private sector are least able to provide infrastructures and basic services.’¹¹⁶⁵ The magnitude of the challenge and its long feedback loops, of course, does not mean that tackling climate change with litigation, including rights-based claims, is meaningless. It does mean, however, that just like rights-based climate change litigation itself, any future research on it will need to reflect the realities of its time and learn from experience. Hopefully, this thesis will help scholars and practitioners alike to fulfil that task in the years ahead.

¹¹⁶³ See section 5.2 of this thesis.

¹¹⁶⁴ Who could bring such claims and against whom? Would such claimants necessarily need to exhaust domestic remedies? And so forth.

¹¹⁶⁵ Hans-Otto Pörtner and others, ‘Summary for Policymakers’ in Hans-Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2022) 14-22.

Bibliography

Scholarship

Abate RS, 'Atmospheric Trust Litigation in the United States: Pipe Dream or Pipeline to Justice for Future Generations?' in Abate RS (ed), *Climate Justice: Case Studies in Global and Regional Governance Challenges* (Environmental Law Institute 2016) 548

Acosta A, Andrea P and Rivas-Ramírez D, 'A Milestone in Environmental and Future Generations' Rights Protection: Recent Legal Developments before the Colombian Supreme Court' [2018] 30 *Journal of Environmental Law* 519

Adelman S, 'Human Rights in the Paris Agreement: Too Little, Too Late?' [2018] 7 *Transnational Environmental Law* 17

Adelmant V, Alston P and Blainey M, '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

Anagnostou D and Mungiu-Pippidi A, 'Domestic Implementation of Human Rights Judgments in Europe: Legal Infrastructure and Government Effectiveness Matter' (2014) 25 *European Journal of International Law* 205

Anomohanran O, 'Determination of Greenhouse Gas Emission Resulting from Gas Flaring Activities in Nigeria' [2012] 45 *Energy Policy* 666

Ariani D, 'The Effectiveness of Climate Change Litigation as a Venue to Uphold State Climate Change Obligations in Indonesia' [2019] 16 *Indonesian Journal of International Law* 210

Atapattu S and Schapper A, *Human Rights and the Environment: Key Issues* (Routledge 2019)

Atapattu S, 'Environmental Rights and International Human Rights Covenants: What Standards are Relevant?' in Turner SJ and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019)

— — 'The Right to a Healthy Environment and Climate Change' in Knox JH and Pejan R (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 258

— — ‘Climate Change under Regional Human Rights Systems’ in Duyck S, Jodoin S and Johl A (eds), *The Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018)

Auz J, ‘Human Rights-Based Climate Litigation: A Latin American Cartography’ [2022] 13 *Journal of Human Rights and the Environment* 114

Babcock HM, ‘Using the Federal Public Trust Doctrine to Fill Gaps in the Legal Systems Protecting Migrating Wildlife from the Effects of Climate Change’ [2016] 95 *Nebraska Law Review* 649

Bähr CC and others, ‘KlimaSeniorinnen: Lessons from the Swiss Senior Women's Case for Future Climate Litigation’ [2018] 9 *Journal of Human Rights and the Environment* 194

Bell-James J and Collins B, ‘Human Rights and Climate Change Litigation: Should Temporal Imminence Form Part of Positive Rights Obligations?’ [2022] 13 *Journal of Human Rights and the Environment* 212

Below R, Grover-Kopec E and Dilley M, ‘Documenting Drought-Related Disasters: A Global Reassessment’ [2007] 16 *The Journal of Environment & Development* 329

Benjamin L and Seck SL, ‘Mapping Human Rights-based Climate Litigation in Canada’ [2022] 13 *Journal of Human Rights and the Environment* 178

Bergkamp L and Hanekamp JC, ‘Climate Change Litigation against States: The Perils of Court-made Climate Policies’ [2015] 24 *European Energy and Environmental Law Review* 102

Besson S, ‘The Extraterritoriality of the European Convention on Human Rights: Why Human Rights Depend on Jurisdiction and What Jurisdiction Amounts to’ [2012] 25 *Leiden Journal of International Law* 857

Blanco E and Grear A, ‘Personhood, Jurisdiction and Injustice: Law, Colonialities and the Global Order’ [2019] 10 *Journal of Human Rights and the Environment* 86

Blumm MC and Wood MC, ‘No Ordinary Lawsuit: Climate Change, Due Process, and the Public Trust Doctrine’ [2017] 67 *American University Law Review* 20

Bodansky D, Brunnée J and Rajamani L, *International Climate Change Law* (Oxford University Press 2017)

Bouwer K, 'The Influence of Human Rights on Climate Litigation in Africa' [2022] 13 *Journal of Human Rights and the Environment* 157

Boyd DR, 'Catalyst for Change: Evaluating Forty Years of Experience in Implementing the Right to a Healthy Environment' in Knox HJ and Pejan R (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018)

— — 'Constitutions, Human Rights, and the Environment: National Approaches' in Grear A and Kotzé LJ (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar Publishing 2015)

— — *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (University of British Columbia Press 2012)

Boyle A, 'Human Rights and the Environment: Where Next?' [2012] 23 *European Journal of International Law* 613

Brunkard J, Namulanda G and Ratard R, 'Hurricane Katrina Deaths, Louisiana, 2005' [2008] 2 *Disaster Medicine and Public Health Preparedness* 215

Burke M and others, 'The Changing Risk and Burden of Wildfire in the United States' [2021] 118 *Proceedings of the National Academy of Sciences* 2

Butt EW and others, 'Large Air Quality and Human Health Impacts due to Amazon Forest and Vegetation Fires' [2020] 2 *Environmental Research Communications* 2

Caldwell LK, 'The Case for an Amendment to the Constitution of the United States for Protection of the Environment' [1991] 1 *Duke Environmental Law & Policy Forum* 1

Cameron C and Weyman R, 'Recent Youth-Led and Rights-Based Climate Change Litigation in Canada: Reconciling Justiciability, Charter Claims and Procedural Choices' [2022] 34 *Journal of Environmental Law* 195

Caminade CK, McIntyre M and Jones AE, 'Impact of Recent and Future Climate Change on Vector-Borne Diseases' [2019] 1436 *Annals of the New York Academy of Sciences* 157

Campbell-Durufilé C and Atapattu S, 'The Inter-American Court's Environment and Human Rights Advisory Opinion: Implications for International Climate Law' [2018] 8 *Climate Law* 321

Carlarne CP, Gray KR and Tarasofsky R (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016)

Chan S and others, 'Effective and Geographically Balanced? An Output-based Assessment of Non-state Climate Actions' [2018] 19 *Climate Policy* 24

Chavez A and Ramaswami A, 'Articulating a Trans-boundary Infrastructure Supply Chain Greenhouse Gas Emission Footprint for Cities: Mathematical Relationships and Policy Relevance' [2013] 54 *Energy Policy* 376

— — 'Progress Toward Low Carbon Cities: Approaches for Transboundary GHG Emissions' Footprinting' [2011] 2 *Carbon Management* 471

Chenwi L, 'The Right to a Satisfactory, Healthy, and Sustainable Environment in the African Regional Human Rights System' in Knox JH and Pejan R (eds), *The Human Right to a Healthy Environment* (Cambridge University Press, 2018)

Cohen BS, 'The Constitution, the Public Trust Doctrine, and the Environment' [1970] *Utah Law Review* 388

Cox R, 'A Climate Change Litigation Precedent: Urgenda Foundation v The State of the Netherlands' [2016] 34 *Journal of Energy & Natural Resources Law* 143

Craig RK, 'A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries' [2007] 16 *Penn State Environmental Law Review* 1

— — 'Comparative Guide to the Western Public Trust Laws: A Case Study' [2010] 45 *Environmental Law* 431

Davis K and others, 'The Declaration on Human Rights and Climate Change: A New Legal Tool for Global Policy Change' [2017] 8 *Journal of Human Rights and the Environment* 217

De Graaf KJ and Jans JH, 'The Urgenda Decision: Netherlands Liable for Role in Causing Dangerous Global Climate Change' [2015] 27 *Journal of Environmental Law* 517

De Witte B, 'EU law: is it international law?' in Barnard C and Peers S (eds), *European Union Law*, 2nd edition (Oxford University Press 2017)

Dellinger M, 'See You in Court: Around the World in Eight Climate Change Lawsuits' [2018] 42 *William & Mary Environmental Law and Policy Review* 525

Dugard J and others (eds), *Research Handbook on Economic, Social and Cultural Rights as Human Rights* (Edward Elgar Publishing 2020)

Ebeku K, 'Constitutional Right to a Healthy Environment and Human Rights Approaches to Environmental Protection in Nigeria: Gbemre v Shell Revisited' [2007] 16 *Review of European Community & International Environmental Law* 312

Farber DA, 'Uncertainty' (2010) 99 *Georgetown Law Journal* 901

Faturoti B, Agbaitoro G and Onya O, 'Environmental Protection in the Nigerian Oil and Gas Industry and Jonah Gbemre v Shell PDC Nigeria Limited: Let the Plunder Continue?' [2019] 27 *African Journal of International and Comparative Law* 225

Fischer Kuh K, 'The Legitimacy of Judicial Climate Engagement' [2019] 46 *Ecology Law Quarterly* 731

Fisher E, 'Climate Change Litigation, Obsession and Expertise: Reflecting on the Scholarly Response to Massachusetts v EPA' [2013] 35 *Law & Policy* 236

— — Scotford E and Barritt E, 'The Legally Disruptive Nature of Climate Change' [2017] 80 *Modern Law Review* 173

Fisher E and others, 'Maturity and Methodology: Starting a Debate about Environmental Law Scholarship' [2009] 21 *Journal of Environmental Law* 213

Frank RM, 'The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future' [2011] 45 *University of California, Davis Law Review* 665

Galvão Ferreira P, 'Common but Differentiated Responsibilities' in the National Courts: Lessons from *Urgenda v The Netherlands*' [2016] 5 *Transnational Environmental Law* 329

Ganguly G, Setzer J and Heyvaert V, 'If at First You Don't Succeed: Suing Corporations for Climate Change' [2018] 38 *Oxford Journal of Legal Studies* 841

Gardbaum S, 'Human Rights as International Constitutional Rights' [2008] 19 *European Journal of International Law* 749

Gatti LV and others, 'Amazonia as a carbon source linked to deforestation and climate change' [2021] 595 *Nature* 388

Gellers JC, *The Global Emergence of Constitutional Environmental Rights* (Routledge 2017)

- Gilbert J, 'The Rights of Nature, Indigenous Peoples and International Human Rights Law: From Dichotomies to Synergies' [2022] 13 *Journal of Human Rights and the Environment* 399
- Gill GN, 'Environmental Justice in India: The National Green Tribunal and Expert Members' [2016] 5 *Transnational Environmental Law* 175
- — 'Environmental Standards and the Right to Life in India: Regulatory Frameworks and Judicial Enterprise' in Turner SJ and others (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press 2019)
- — 'Mapping the Power Struggles of the National Green Tribunal of India: The Rise and Fall?' [2020] 7 *Asian Journal of Law and Society* 85
- — 'The National Green Tribunal of India: A Sustainable Future through the Principles of International Environmental Law' [2014] 16 *Environmental Law Review* 183
- — *Environmental Justice in India: The National Green Tribunal* (Routledge 2017)
- Gonzalez C, 'Human Rights, Environmental Justice, and the North-South Divide' in Gear A and Kotzé LJ (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar Publishing, 2015)
- Ghosh S, 'Litigating Climate Claims in India' [2020] 114 *American Journal of International Law* 45
- Grant, E 'International Courts, and Environmental Human Rights: Re-imagining adjudicative Paradigms' in Gear A and Kotzé LJ (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar Publishing 2015) 379
- Gear A and Kotzé LJ, 'An Invitation to Fellow Epistemic Travellers – Towards Future Worlds in Waiting: Human Rights and the Environment in the Twenty-First Century' in Gear A and Kotzé LJ (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar Publishing 2015)
- Gear A and others (eds), *Posthuman Legalities: New Materialism and Law Beyond the Human* (Edward Elgar Publishing 2021)
- Grossman DA, 'Warming Up to a not-so-Radical Idea: Tort-Based Climate Change Litigation' [2003] 28 *Columbia Journal of Environmental Law* 1

Gunningham N, 'Can Climate Activism Deliver Transformative Change? Extinction Rebellion, Business and People Power' [2020] 11 *Journal of Human Rights and the Environment* 10

Hartmann J and Willers QC M, 'Protecting Rights through Climate Change Litigation before European Courts' [2022] 13 *Journal of Human Rights and the Environment* 90

Heede R, 'Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854–2010' [2014] 122 *Climatic Change* 229

Hollo EJ, Kulovesi K and Mehling M (eds), *Climate Change and the Law* (Springer 2013)

Huneeus A, 'Courts Resisting Courts: Lessons from the Inter-American Court's Struggle to Enforce Human Rights' (2011) 44 *Cornell International Law Journal* 493.

Hunter D and Salzman J, 'Negligence in the Air: The Duty of Care in Climate Change Litigation' [2006] 155 *University of Pennsylvania Law Review* 1741

Jones E 'Posthuman International Law and the Rights of Nature' [2021] 12 *Journal of Human Rights and the Environment* 76

Kauffman CM and Martin PL, *The Politics of Rights of Nature: Strategies for Building a More Sustainable Future* (MIT Press 2021)

Kelleher O, 'Incorporating Climate Justice into Legal Reasoning: Shifting towards a Risk-Based Approach to Causation in Climate Litigation' [2022] 13 *Journal of Human Rights and the Environment* 290

Klass AB, 'The Public Trust Doctrine in the Shadow of State Environmental Rights Doctrines: Public Values, Private Rights, the Evolution toward an Ecological Public Trust' [2015] 37 *Ecology Law Quarterly* 5

Knox JH, 'Climate Change and Human Rights Law' [2009] 50 *Virginia Journal of International Law* 163

— — 'Constructing the Human Right to a Healthy Environment' [2020] 16 *Annual Review of Law and Social Science* 79

— — 'Linking Human Rights and Climate Change at the United Nations' [2009] 33 *Harvard Environmental Law Review* 477

— — ‘The Global Pact for the Environment: At the Crossroads of Human Rights and the Environment’ [2019] 28 *Review of European, Comparative & International Environmental Law* 40

— — ‘The Past, Present, and Future of Human Rights and the Environment’ [2018] 53 *Wake Forest Law Review* 649

— — ‘The United Nations Mandate on Human Rights and the Environment’ in May JR and Daly E (eds), *Human Rights and the Environment: Legality, Indivisibility, Dignity and Geography* (Edward Elgar Publishing 2019)

Kotzé LJ and Grant E, ‘Environmental Rights in the Global South’ in Cullet P and Koonan S (eds), *Research Handbook on Law, Environment and the Global South* (Edward Elgar Publishing 2019)

Kotzé LJ, ‘Neubauer et al. versus Germany: Planetary Climate Litigation for the Anthropocene?’ [2021] 22 *German Law Journal* 1423

Kravchenko S, ‘Right to Carbon or Right to Life: Human Rights Approaches to Climate Change’ [2008] 9 *Vermont Journal of Environmental Law* 513

Kristl KT, ‘The Devil Is in the Details: Articulating Practical Principles for Implementing the Duties in Pennsylvania’s Environmental Rights Amendment’ [2016] 28 *Georgetown Environmental Law Review* 589

Kysar DA, ‘What Climate Change Can Do about Tort Law’ (2011) 41 *Environmental Law* 1

Lambrecht J and Ituarte-Lima C, ‘Legal Innovation in National Courts for Planetary Challenges: Urgenda v State of the Netherlands’ [2016] 18 *Environmental Law Review* 57

Landau D, ‘Political Institutions and Judicial Role in Comparative Constitutional Law’ [2010] 51 *Harvard International Law Journal* 319

Lazarus RJ, ‘Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future’ [2009] 94 *Cornell Law Review* 1153

Lees E and Viñuales JE (eds), *The Oxford Handbook of Comparative Environmental Law* (Oxford University Press 2019)

Leijten I, ‘Human Rights v Insufficient Climate Action: The Urgenda Case’ [2019] 37 *Netherlands Quarterly of Human Rights* 112

Lewis B, 'The Rights of Future Generations within the Post-Paris Climate Regime' [2018] 7 *Transnational Environmental Law* 69

Li J, 'Climate Change Litigation: A Promising Pathway to Climate Justice in China?' in Lin J and Kysar D (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020)

Limon M, 'The Politics of Human Rights, the Environment, and Climate Change at the Human Rights Council' in Knox JH and Pejan R (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 195

Lin J, 'Climate Change and the Courts' [2012] 32 *Legal Studies* 35

— — 'Litigating Climate Change in Asia' [2014] 4 *Climate Law* 140

— — 'The First Successful Climate Negligence Case: A Comment on Urgenda Foundation v The State of the Netherlands (Ministry of Infrastructure and the Environment)' [2015] 5 *Climate Law* 65

Lo E and others, 'Increasing Mitigation Ambition to Meet the Paris Agreement's Temperature Goal Avoids Substantial Heat-Related Mortality in US Cities' [2019] 5 *Science Advances* 4373

Long LN and Hamilton T, 'The Climate Necessity Defense: Proof and Judicial Error in Climate Protest Cases' [2018] 38 *Stanford Environmental Law Journal* 57

Loth MMA, 'Climate Change Liability After All: A Dutch Landmark Case' [2016] 21 *Tilburg Law Review* 5

Magrath J, 'The Injustice of Climate Change: Voices from Africa' [2010] 15 *Local Environment* 891

Mahar Francisco Lagmay A and others, 'Devastating Storm Surges of Typhoon Haiyan' [2015] 11 *International Journal of Disaster Risk Reduction* 1

Mank BC, 'Does the Evolving Concept of Due Process in Obergefell Justify Judicial Regulation of Greenhouse Gases and Climate Change: *Juliana v United States*' [2018] 52 *University of California Davis Law Review* 855

— — 'Standing and Global Warming: Is Injury to All Injury to None' [2005] 35 *Environmental Law* 1

Markell D and Ruhl JB, 'An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?' [2012] 64 *Florida Law Review* 15

Maxwell L, Mead S and Van Berkel D, 'Standards for Adjudicating the Next Generation of Urgenda-Style Climate Cases' [2022] 13 *Journal of Human Rights and the Environment* 35

May J and Romanowicz W, 'Environmental Rights in State Constitutions' in May J (ed), *Principles of Constitutional Environmental Law* (American Bar Association 2011)

May JR and Daly E (eds), *Global Environmental Constitutionalism* (Cambridge University Press 2015)

— — 'Global Climate Constitutionalism and Justice in Courts' in Jaria-Manzano J and Borràs S (eds), *Research Handbook on Global Climate Constitutionalism* (Edward Elgar Publishing 2019) 236

May JR and Dayo T, 'Dignity and Environmental Justice in Nigeria: The Case of *Gbemre v Shell*' [2019] 25 *Widener Law Review* 269

Mayer B, '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

McAdam J, *Climate Change, Forced Migration, and International Law* (Oxford University Press 2012)

McCormick S and others, 'Strategies in and Outcomes of Climate Change Litigation in the United States' [2018] 8 *Nature Climate Change* 829

— — 'The Role of Health in Climate Litigation' [2018] 108 *American Journal of Public Health* 104

McCrudden C, 'Common Law of Human Rights? Transnational Judicial Conversations on Constitutional Rights' [2000] 20 *Oxford Journal of Legal Studies* 499

Mehling M, 'The Comparative Law of Climate Change: A Research Agenda' [2015] 24 *Review of European, Comparative & International Environmental Law* 341

Meyer LH (ed), *Intergenerational Justice* (Routledge 2017)

Meze-Hausken E, 'Migration Caused by Climate Change: How Vulnerable Are People in Dryland Areas?' [2000] 5 *Mitigation and Adaptation Strategies for Global Change* 379

Mir WA, 'From Shehla Zia to Asghar Leghari: Pronouncing Unwritten Rights is More Complex than a Celebratory Tale' in Lin J and Kysar D (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020)

Mitchell D and others, 'Attributing Human Mortality during Extreme Heat Waves to Anthropogenic Climate Change' [2016] 11 *Environmental Research Letters* 74006

— — 'Extreme Heat-Related Mortality Avoided under Paris Agreement Goals' [2018] 8 *Nature Climate Change* 551

Moncel R and Van Asselt H, 'All Hands on Deck! Mobilizing Climate Change Action Beyond the UNFCCC' [2012] 21 *Review of European Community & International Environmental Law* 163

Morgera E, 'Global Environmental Law and Comparative Legal Methods' [2015] 24 *Review of European, Comparative & International Environmental Law* 254

Mormann F, 'Constitutional Challenges and Regulatory Opportunities for State Climate Policy Innovation' [2017] 41 *Harvard Environmental Law Review* 189

Morrow K, 'The ECHR, Environment-Based Human Rights Claims and the Search for Standards' in Turner SJ and others (eds) *Environmental Rights: The Development of Standards* (Cambridge University Press 2019) 42

Neuman GL, 'Human Rights and Constitutional rights: Harmony and Dissonance' [2002] 55 *Stanford Law Review* 1863

Nosek G, 'The Climate Necessity Defense: Protecting Public Participation in the US Climate Policy Debate in a World of Shrinking Options' [2019] 49 *Environmental Law* 249

O'Donnell EL and Talbot-Jones J, 'Creating Legal Rights for Rivers' [2018] 23 *Ecology and Society* 7

O'Gorman R, 'Environmental Constitutionalism: A Comparative Study' [2017] 6 *Transnational Environmental Law* 435

Ohdedar B, 'Climate Adaptation, Vulnerability and Rights-Based Litigation: Broadening the Scope of Climate Litigation Using Political Ecology' [2022] 13 *Journal of Human Rights and the Environment* 137

Osofsky HM and Peel J, 'Litigation's Regulatory Pathways and the Administrative State: Lessons from US and Australian Climate Change Governance' [2012] 25 Georgetown International Environmental Law Review 207

Osofsky HM, 'Climate Change and Environmental Justice: Reflections on Litigation over Oil Extraction and Rights Violations in Nigeria' [2010] 1 Journal of Human Rights and the Environment 189

— — 'Climate Change Litigation as Pluralist Legal Dialogue' [2007] 26 Stanford Environmental Law Journal 181

— — 'Inuit Petition as a Bridge? Beyond Dialectics of Climate Change and Indigenous Peoples' Rights' [2007] 31 American Indian Law Review 675

— — 'The Continuing Importance of Climate Change Litigation' [2010] 1 Climate Law 3

Pace BJ, 'The Children's Climate Lawsuit: A Critique of the Substance and Science of the Preeminent Atmospheric Trust Litigation Case, *Juliana v United States*' [2019] 55 Idaho Law Review 85

Parker L and others, 'When the kids Put Climate Change on Trial: Youth-Focused Rights-Based Climate Litigation around the World' [2022] 13 Journal of Human Rights and the Environment 64

Pedersen OW, 'The Networks of Human Rights and Climate Change: The State of the *Netherlands v Stichting Urgenda*, Supreme Court of the Netherlands, 20 December 2019 (19/00135)' [2020] 22 Environmental Law Review 227

Peel J and Lin J, 'Transnational Climate Litigation: The Contribution of the Global South' [2019] 113 American Journal of International Law 679

Peel J and Osofsky HM, 'A Rights Turn in Climate Change Litigation?' [2018] 71 Transnational Environmental Law 37

— — 'Climate Change Litigation' [2020] 16 Annual Review of Law and Social Science 21

— — 'Climate Change Litigation's Regulatory Pathways: A Comparative Analysis of the United States and Australia' [2013] 35 Law & Policy 150

— — *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press 2015)

Peel J, 'Issues in Climate Change Litigation' [2011] 5 Carbon & Climate Law Review 15

— — Osofsky HM and Foerster A, 'Shaping the Next Generation of Climate Change Litigation in Australia' [2017] 41 Melbourne University Law Review 793

Peeters M, 'Urgenda Foundation and 886 Individuals v The State of the Netherlands: The Dilemma of More Ambitious Greenhouse Gas Reduction Action by EU Member States' [2016] 25 Review of European, Comparative & International Environmental Law 123

Phillips SK and Anschell N, 'Building Business, Human Rights and Climate Change Synergies in Southeast Asia: What the Philippines' National Inquiry on Climate Change Could Mean for ASEAN' [2022] 13 Journal of Human Rights and the Environment 238

Posner E, 'Climate Change and International Human Rights Litigation: A Critical Appraisal' [2007] 155 University of Pennsylvania Law Review 1925

Powers M, 'Juliana v United States: The Next Frontier in US Climate Mitigation?' [2018] 27 Review of European, Comparative & International Environmental Law 199

Preston BJ, 'Climate Change Litigation (Part 1)' [2011] 5 Carbon & Climate Law Review 3

— — 'The Contribution of the Courts in Tackling Climate Change' [2016] 28 Journal of Environmental Law 11

— — 'The Evolving Role of Environmental Rights in Climate Change Litigation' [2018] 2 Chinese Journal of Environmental Law 131

Putzer A and others, 'Putting the Rights of Nature on the Map. A Quantitative Analysis of Rights of Nature Initiatives Across the World' [2022] 17 Journal of Maps 1

Rajamani L, 'Human Rights in the Climate Change Regime' in Knox JH and Pejan R (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018)

Rawson A and Mansfield B, 'Producing Juridical Knowledge: "Rights of Nature" or the Naturalization of Rights?' [2018] 1 Nature and Space 99

- Richardson BJ, *Time and Environmental Law: Telling Nature's Time* (Cambridge University Press 2017)
- — 'Climate Strikes to Extinction Rebellion: Environmental Activism Shaping Our Future' [2020] 11 *Journal of Human Rights and the Environment* 1
- — 'Protesting against Climate Breakdown: Novel Legal Options' [2020] 35 *Australian Environment Review* 21
- Richardson BJ and Hamaski N, 'Rights of Nature Versus Conventional Nature Conservation: International Lessons from Australia's Tarkine Wilderness' [2021] 51 *Environmental Policy and Law* 159
- Richardson BJ (ed), *From Student Strikes to the Extinction Rebellion: New Protest Movements Shaping our Future* (Edward Elgar Publishing 2020)
- Robine JM and others, 'Death Toll Exceeded 70,000 in Europe during the Summer of 2003' [2008] 331 *Comptes Rendus Biologies* 171
- Rogers N, 'Victim, Litigant, Activist, Messiah: The Child in a Time of Climate Change' [2020] 11 *Journal of Human Rights and the Environment* 103
- Roy S and Woerdman E, 'Situating Urgenda v the Netherlands Within Comparative Climate Change Litigation' [2016] 34 *Journal of Energy & Natural Resources Law* 165
- Sachs NM, 'The Paris Agreement in the 2020s: Breakdown or Breakup' [2019] 46 *Ecology Law Quarterly* 865
- Salas RN, Jacobs W and Perera F, 'The Case of Juliana v US—Children and the Health Burdens of Climate Change' [2019] 380 *New England Journal of Medicine* 2085
- Savaresi A and Setzer J, 'Rights-based Litigation in the Climate Emergency: Mapping the Landscape and New Knowledge Frontiers' [2022] 13 *Journal of Human Rights and the Environment* 7
- Setzer J and Benjamin L, 'Climate Litigation in the Global South: Constraints and Innovations' [2020] 9 *Transnational Environmental Law* 77
- Shelton D, 'Complexities and Uncertainties in Matters of Human Rights and the Environment: Identifying the Judicial Role' in Knox JH and Pejan R (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018)
- Silbert N, 'In Search of Impact: Climate Litigation Impact through a Human Rights Litigation Framework' [2022] 13 *Journal of Human Rights and the Environment* 265

Smith DC, “No Ordinary Lawsuit’: Will Juliana v United States Put the Judiciary at the Centre of US Climate Change Policy?’ [2018] 36 Journal of Energy & Natural Resources Law 259

Spoelman N, ‘Urgenda: A How-To Guide for Enforcing Greenhouse Gas Emission Targets by Protecting Human Rights’ [2020] 47 Ecology Law Quarterly 751

Sunstein CR, ‘What's Standing After Lujan? Of Citizen Suits, "Injuries," and Art III’ [1992] 91 Michigan Law Review 163

Tabau AS and Cournil C, ‘New Perspectives for Climate Justice: District Court of The Hague, 24 June 2015, Urgenda Foundation versus the Netherlands’ [2015] 12 Journal for European Environmental & Planning Law 221

Tănăsescu M, ‘Rights of Nature, Legal Personality, and Indigenous Philosophies’ [2020] 9 Transnational Environmental Law 429

Ukala E, ‘Gas flaring in Nigeria’s Niger Delta: Failed Promises and Reviving Community Voices’ [2010] 2 Washington and Lee Journal of Energy, Climate, and the Environment 97

Van Asselt H, Mehling M and Kehler Siebert C, ‘The Changing Architecture of International Climate Change Law’ in Van Calster G, Vandenberghe W and Reins L (eds), *Research Handbook on Climate Change Mitigation Law* (Edward Elgar Publishing 2015) 24

Van Zeven J, ‘Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?’ [2015] 4 Transnational Environmental Law 339

Varvastian S and Kalunga F, ‘Transnational Corporate Liability for Environmental Damage and Climate Change: Reassessing Access to Justice after *Vedanta v Lungowe*’ [2020] 9 Transnational Environmental Law 323

Varvastian S, ‘A Natural Resource Beyond the Sky: Invoking the Public Trust Doctrine to Protect the Atmosphere from Greenhouse Gas Emissions’ in Tegner Anker H and Egelund Olsen B (eds), *Sustainable Management of Natural Resources: Legal Instruments and Approaches* (Intersentia 2018)

— — ‘Access to Justice in Climate Change Litigation from a Transnational Perspective: Private Party Standing in Recent Climate Cases’ in Jendrośka J and Bar

M (eds), *Procedural Environmental Rights: Principle X of the Rio Declaration in Theory and Practice* (Intersentia 2017)

— — ‘The Advent of International Human Rights Law in Climate Change Litigation’ [2021] 38 Wisconsin International Law Journal 369

Verschuuren J, ‘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 & International Environmental Law 94

Vicedo-Cabrera AM and others, ‘The Burden of Heat-Related Mortality Attributable to Recent Human-Induced Climate Change’ [2021] 11 Nature Climate Change 492

Wibisana AG and Cornelius CM, ‘Climate Change Litigation in Indonesia’ in Lin J and Kysar D (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020)

Wilensky M, ‘Climate Change in the Courts: An Assessment of Non-US Climate Litigation’ [2015] 26 Duke Environmental Law & Policy Forum 131

Winter G, ‘Armando Carvalho and Others v EU: Invoking Human Rights and the Paris Agreement for Better Climate Protection Legislation’ [2020] 9 Transnational Environmental Law 137

Wood MC and Galpern D, ‘Atmospheric Recovery Litigation: Making the Fossil Fuel Industry Pay to Restore a Viable Climate System’ [2015] 45 Environmental Law 259

Wood MC and Woodward IV CW, ‘Atmospheric Trust Litigation and the Constitutional Right to a Healthy Climate System: Judicial Recognition at Last’ [2016] 6 Washington Journal of Environmental Law and Policy 647

Wood MC, ‘“On the Eve of Destruction”: Courts Confronting the Climate Emergency’ [2022] 97 Indiana Law Journal 239

Yan Z, ‘The Subordinate and Passive Position of Chinese Courts in Environmental Governance’ in Jolene Lin and Douglas Kysar (eds), *Climate Change Litigation in the Asia Pacific* (Cambridge University Press 2020)

Yang T and Percival RV, ‘The Emergence of Global Environmental Law’ [2009] 36 Ecology Law Quarterly 615

Zemel MAR, 'The Rise of Rights-Based Climate Litigation and Germany's Susceptibility to Suit' [2018] 29 Fordham Environmental Law Review 484

Treaties

Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (San Salvador, 17 November 1988)

African Charter on Human and Peoples' Rights (Nairobi, 19 January 1982) United Nations, *Treaty Series*, vol 1520, p 217

American Convention on Human Rights (San José, 22 November 1969), United Nations, *Treaty Series*, vol 1144, p 123

American Declaration of the Rights and Duties of Man, O.A.S. Res. adopted by the Ninth International Conference of American States (2 May 1948), reprinted *in* Basic Documents Pertaining to Human Rights in the Inter-American System, OEA/Ser.L.V/II.82 doc.6 rev.1 17 (1992)

European Convention for the Protection of Human Rights and Fundamental Freedoms (Rome, 4 November 1950), United Nations, *Treaty Series*, vol 213, p 221

European Social Charter (Turin, 18 October 1961), United Nations, *Treaty Series*, vol 529, p 89

International Covenant on Civil and Political Rights (New York, 16 December 1966), United Nations, *Treaty Series*, vol 999, p 171

Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, 11 December 1997), United Nations, *Treaty Series*, vol 2303, p 162

Paris Agreement under the United Nations Framework Convention on Climate Change (Paris, 12 December 2015), CFCCC/CP/2015/L.9/Rev.1

United Nations Framework Convention on Climate Change (New York, 9 May 1992), United Nations, *Treaty Series*, vol 1771, p 107

European Union's primary law

Charter of Fundamental Rights of the European Union (26 October 2012), *OJ C 326*, 26.10.2012, p 391

National law

Bolivia

Bolivia's Constitution of 2009

Canada

Canada's Constitution of 1867 with Amendments through 2011

Cap and Trade Cancellation Act, 2018, S.O. 2018, c 13

Climate Change Mitigation and Low-carbon Economy Act, 2016, S.O. 2016, c 7

Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan 013-4208 (29 November 2018)

Colombia

Colombia's Constitution of 1991 with Amendments through 2005

Dominican Republic

Dominican Republic's Constitution of 2015

Ecuador

Ecuador's Constitution of 2008 with Amendments through 2021

India

India's Constitution of 1949 with Amendments through 2016

The National Green Tribunal Act 2010

Indonesia

Indonesia's Constitution of 1945, Reinstated in 1959, with Amendments through 2002

Ireland

Climate Action and Low Carbon Development Act, 2015

Ireland's Constitution of 1937 with Amendments through 2019

Mexico

General Law on Climate Change of 6 June 2012

Mexico's Constitution of 1917 with Amendments through 2015

The agreement to ensure the efficiency, quality, reliability, continuity and security of the National Electricity System in the face of the epidemic caused by the SARS-CoV2 virus (COVID-19) (National Center of Energy Control, 29 April 2020)

The agreement laying out the Policy of Reliability, Security, Continuity and Quality of the National Electricity System (Ministry of Energy, 15 May 2020)

Nepal

Nepal's Constitution of 2015 with Amendments through 2016

The Environment Protection Act 2019, No. 9 (11 October 2019)

Nigeria

Nigeria's Constitution of 1999 with Amendments through 2011

Norway

Norway's Constitution of 1814 with Amendments through 2016

Royal Decree of 10 June 2016 on awarding production licences on the Norwegian continental shelf 'the 23rd licensing round'

Pakistan

Pakistan's Constitution of 1973, reinstated in 2002, with Amendments through 2018

South Africa

National Environmental Management Act, Act 107 of 1998

National Environmental Management: Air Quality Act, Act 39 of 2004

South Africa's Constitution of 1996 with Amendments through 2012

Switzerland

Federal Act on the Reduction of CO₂ Emissions (CO₂ Act, SR 641.71)

Switzerland's Constitution of 1999 with Amendments through 2014

United States

Air Pollution Control Act of January 8, 1960, P.L. 2119, *as amended*, 35 P.S. §§ 4001–4015

Climate Change Act of July 9, 2008, P.L. 935, 71 P.S. §§ 1361.1–1361.8

Constitution of the Commonwealth of Pennsylvania of 1776

Final Rule: Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (23 October 2015)

Final Rule: Standards for Performance for Greenhouse Gas Emissions for New Power Stationary Sources: Electric Generating Units, 80 Fed. Reg. 64,510 (23 October 2015)

The Clean Air Act (CAA) (42 U.S.C. 7401 et seq)

United States of America's Constitution of 1789 with Amendments through 1992

Cases

Australia

Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7 (Land and Environment Court of New South Wales, 2019)

Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch Inc v Minister for the Environment and Heritage [2006] FCA 736 (Federal Court of Australia, 2006).

Canada

Blencoe v British Columbia (Human Rights Commission) 2000 SCC 44, [2000] 2 S.C.R. 307 (Supreme Court of Canada, 2000)

Canada (Attorney General) v PHS Community Services Society 2011 SCC 44 (Supreme Court of Canada, 2011)

Carter v Canada (Attorney General) 2015 SCC 5, [2015] 1 S.C.R. 331 (Supreme Court of Canada, 2015)

Chaoulli v Quebec (Attorney General) 2005 SCC 35 (Supreme Court of Canada, 2005)

Dini Ze' v Canada 2020 FC 1059 (Federal Court of Canada, 16 November 2020)

Friends of the Earth v Canada (Governor in Council) 2008 FC 1183 [2009] 3 F.C.R. 201, aff'd 2009 FCA 297, leave to appeal refused, [2010] S.C.C.A. No. 33469 (Supreme Court of Canada, 2010)

Godbout v Longueuil (City) [1997] 3 S.C.R. 844 (Supreme Court of Canada, 1997)

Gosselin v Quebec (Attorney General) 2002 SCC 84 (Supreme Court of Canada, 2002)

In the Matter of the Greenhouse Gas Pollution Pricing Act SC 2018, c. 12 2020 ABCA 74 (Court of Appeal of Alberta, 2020)

Kreishan v Canada (Citizenship and Immigration) 2019 FCA 223, 438 D.L.R. (4th) 148

La Rose v Canada 2020 FC 1008 (Federal Court of Canada, 27 October 2020)

Mathur v Ontario 2020 ONSC 6918 (Ontario Superior Court of Justice, 12 November 2020)

Nevsun Resources Ltd v Araya 2020 SCC 5 (Supreme Court of Canada, 2020)

Ontario v Canada re Greenhouse Gas Pollution Pricing Act 2019 ONCA 544 (Court of Appeal for Ontario, 2019)

Operation Dismantle v The Queen [1985] 1 SCR 441 (Supreme Court of Canada, 1985)

Singh v Minister of Employment and Immigration [1985] 1 S.C.R. 177 (Supreme Court of Canada, 1985)

Turp v Canada 2012 FC 893 [2014] 1 F.C.R. 439 (Federal Court of Canada, 2014)

Colombia

The Atrato River Case T-622/16 (Constitutional Court of Colombia, 10 November 2016).

Future Generations v Ministry of Environment no 11001-22-03-000-2018-00319-01 (High Court of Bogota, 2018)

Future Generations v Ministry of Environment no 11001-22-03-000-2018-00319-01; STC4360-2018 (Supreme Court of Colombia, 2018)

Gélvez Cáceres Case C-449/15 (Constitutional Court of Colombia, 16 July 2015)

Monsalve Case C-431/00 (Constitutional Court of Colombia, 12 April 2000)

Tello Varón Case T-411/92 (Constitutional Court of Colombia, 17 June 1992)

Germany

Lliuya v RWE AG 1-5 U 15/17 (Higher Regional Court of Hamm, 2017)

Neubauer v Germany Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20 (Federal Constitutional Court of Germany, 24 March 2021)

Ireland

Friends of the Irish Environment v Ireland [2019] IEHC 747 (The High Court, 19 September 2019)

Friends of the Irish Environment v Ireland [2020] No: 205/19 (Supreme Court, 31 July 2020)

Merriman v Fingal County Council No.344 JR IEHC 695 (The High Court, 2017)

Mohan v Ireland [2019] IESC 18 (Supreme Court, 2019)

India

Aroskar v India Civil Appeal No 12251 of 2018 (Supreme Court of India, 2019)

Association for Protection of Democratic Rights v West Bengal Special Leave Petition (civil) No. 25047 of 2018 (Supreme Court, 2021)

Gaur v Haryana Appeal (civil) 9151 of 1994 (Supreme Court, 1994)

Pandey v India No 187/2017 (National Green Tribunal Principal Bench, 2019)

Singh v Himachal Pradesh No. 237 (THC)/2013 (CWPIIL No.15 of 2010) (National Green Tribunal, 6 February 2014)

Indonesia

Komari v Mayor of Samarinda 138/PDT/2015/PT.SMR (District Court of Samarinda, 2014)

Kenya

Save Lamu v National Environmental Management Authority Appeal No. Net 196 of 2016 (National Environmental Tribunal, 26 June 2019)

Mexico

Greenpeace Mexico v Director General of National Center of Energy Control No. 104/2020 (Second District Court in Administrative Matters, Specialised in Economic Competition, Broadcasting and Telecommunications, 2020)

Nepal

Shrestha v Prime Minister Decision no. 10210, Order 074-WO-0283 (Supreme Court, 2018)

The Netherlands

Urgenda Foundation v The Netherlands C/09/456689 / ha za13–1396 (the Hague District Court, 24 June 2015)

The Netherlands v Urgenda Foundation case 200.178.245/01 (The Hague Court of Appeal, 9 October 2018)

The Netherlands v Urgenda Foundation case ECLI:NL:HR:2019:2007 (Supreme Court, 20 December 2019)

Verening Milieudefensie v Royal Dutch Shell C/09/571932 / HA ZA 19-379 (Hague District Court, 26 May 2021)

New Zealand

Teitiota v The Chief Executive of the Ministry of Business, Innovation and Employment [2015] NZSC 107 (20 July 2015)

Nigeria

Gbemre v Shell Petroleum Development Corporation of Nigeria Ltd FHC/B/CS/53/05 (Federal High Court, 14 November 2005)

Norway

Greenpeace Nordic Association v Ministry of Petroleum and Energy 16-166674TVI-OTIR/06 (Oslo District Court, 4 January 2018)

Greenpeace Nordic Association v Ministry of Petroleum and Energy 18-060499ASD-BORG/03 (Borgarting Court of Appeal, 23 January 2020)

Greenpeace Nordic Association v Ministry of Petroleum and Energy HR-2020-2472-P (case no. 20-051052SIV-HRET) (Supreme Court, 22 December 2020)

Pakistan

Farooq v Pakistan 2019 PLD 664 (Lahore High Court, 2019)

Khan Cement Company v Punjab C.P.1290-L/2019 (Supreme Court, 2019)

Leghari v Pakistan WP No 25501/2015 judgment (Lahore High Court, 2018)

Leghari v Pakistan WP No 25501/2015 orders 1 and 2 (Lahore High Court, 2015)

Zia v WAPDA [1994] PLD 693 SC (Supreme Court, 1994)

South Africa

Earthlife Africa Johannesburg v Minister of Environmental Affairs 65662/16 (High Court, 8 March 2017)

Earthlife Africa NPC v Minister of Environmental Affairs No 21559/2018 (High Court, 19 November 2020)

South Durban Community Environmental Alliance v Minister of Environment, Forestry and Fisheries (High Court, pending)

Switzerland

Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications A-2992/2017 (Federal Administrative Court, 27 November 2018)

Verein KlimaSeniorinnen Schweiz v Federal Department of the Environment, Transport, Energy and Communications 1C_37/2019 (Federal Supreme Court, 5 May 2020)

Uganda

Mbabazi v The Attorney General No. 283/2012, amended complaint (2015) (High Court, pending)

United Kingdom

Friends of the Earth v UK Export Finance [2022] EWHC 568 (Admin)

United States

Alec ex rel. Loorz v McCarthy 561 Fed.Appx. 7 (D.C. Cir. 2014)

Alec v Jackson 863 F. Supp. 2D 11 (D. D.C. 2012)

American Electric Power Co. v Connecticut, 564 U.S. 410 (2011)

Baker v Carr 369 U.S. 186 (1962)

Brown v Board of Education of Topeka 347 U.S. 483 (1954)

Chernaik v Brown 367 Or 143 (Or. 2020)

City of Los Angeles v National Highway Traffic Safety Admin 912 F.2d 478 (DC Cir 1990)

City of New York v BP PLC 325 F.Supp.3d 466 (S.D. New York 2018)

City of Oakland v BP Plc 325 F.Supp.3d 1017 (N.D. California 2018)

City of Philadelphia v Com. 838 A.2d 566 (Pa. 2003)

Comer v Murphy Oil USA 585 F.3d 855 (5th Cir 2009)

Comer v Murphy Oil USA 839 F.Supp.2d 849 (S. D. Miss. 2012)

Communities for a Better Environment v City of Richmond 184 Cal.App.4th 70 (2010)

District of Columbia v Air Florida, Inc 750 F.2d 1077 (D.C. Cir. 1984)

Dobbs v Jackson Women's Health Organization No. 19-1392 597 U.S. ____ (2022)

Elk Grove Unified School District v Newdow 542 U.S. 1 (2004)

Friends of the Earth Inc v Laidlaw Environmental Services 528 U.S. 167 (2000)

Fumo v City of Philadelphia 972 A.2d 487 (Pa. 2009)

Funk v Wolf 144 A.3d 228 (Pa. Cmwlth. 2016)

Funk v Wolf 88 MAP 2016 Appeal from Final Order of Commonwealth Court, 467 MD 2015

Funk v Wolf A.3d 2017 WL 1151148 (Mem) (Pa. 2017)

Juliana v United States 217 F.Supp.3d 1224 (D. Or. 2016)

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

Lujan v Defenders of Wildlife 504 U.S. 555 (1992)

Massachusetts v EPA 549 US 497 (2007)

Native Village of Kivalina v ExxonMobil Corp 696 F.3d 849 (9th Cir 2012)

Obergefell v Hodges 576 U.S. 644 (2015)

Payne v Kassab 361 A.2d 263 (Pa. 1976)

Planned Parenthood v Casey 505 U.S. 833 (1992)

PPL Montana, LLC v Montana 565 U.S. 576 (D. Mont. 2012)

Rhode Island v Chevron Corp 393 F.Supp.3d 142 (D. Rhode Island 2019)

Robinson Twp., Washington Cnty. v Commonwealth 83 A.3d 901 (Pa. 2013)

Roe v Wade 410 U.S. 113 (1973)

Sierra Club v Morton 405 U.S. 727 (1972)

Washington Environmental Council v Bellon 732 F.3d 1131 (9th Cir. 2013)

Washington v Glucksberg 521 U.S. 702 (1997)

West Virginia v EPA 597 U.S. ____ (2022)

Wildearth Guardians v US Bureau of Land Management 457 F. Supp. 3d 880 (D. Mont. 2020)

Wm. Penn Parking Garage, Inc. v City of Pittsburgh 346 A.2d 269 (Pa. 1975)

European Committee of Social Rights

Marangopoulos v Greece 30/2005 (European Committee of Social Rights, 6 December 2006)

European Court of Human Rights

Agostinho v Portugal application no. 39371/20 (pending)

Atanasov v Bulgaria application no. 12853/03 (2 December 2010)

Brincat v Malta application nos. 60908/11, 62110/11, 62129/11, 62312/11 and 62338/11 (24 July 2014)

Budayeva v Russia application nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02 (20 March 2008)

Centre for Legal Resources on behalf of Valentin Câmpeanu v Romania [GC] application no. 47848/08 (17 July 2014)

Cordella v Italy application nos. 54414/13 and 54264/15 (24 January 2019)

Di Sarno v Italy application no. 30765/08 (10 January 2012)

Dubetska v Ukraine application no. 30499/03 (10 February 2011)

Fadeyeva v Russia application no. 55723/00 (9 June 2005)

Giacomelli v Italy application no. 59909/00 (2 November 2006)

Greenpeace Nordic v Norway application no. 34068/21 (pending)

Guerra v Italy application no. 14967/89 [GC] (19 February 1998)

Hatton v United Kingdom [GC] application no. 36022/97 (of 8 July 2003)

Jugheli v Georgia application no. 38342/05 (13 July 2017)

Kolyadenko v Russia application nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05 and 35673/05 (28 February 2012)

Kyrtatos v Greece application no. 41666/98 (22 May 2003)

Ledyayeva v Russia application nos. 53157/99, 53247/99, 56850/00, 53695/00 (26 October 2006)

Lopes De Sousa Fernandes v Portugal [GC] application no. 56080/13 (19 December 2019)

López Ostra v Spain application no. 16798/90 (9 December 1994)

Öneryildiz v Turkey [GC] application no. 48939/99 (30 November 2004)

Özel v Turkey application nos. 14350/05, 15245/05 and 16051/05 (17 November 2015)

Tătar v Romania application no. 67021/01 (27 January 2009)

Udovičić v Croatia application no. 27310/09 (24 April 2014)

Vasileva v Bulgaria application no. 23796/10 (17 March 2016)

Verein Klimaseniorinnen Schweiz v Switzerland application no. 53600/20 (pending)

Court of Justice of the European Union

Carvalho v The European Parliament T-330/18 (General Court, 8 May 2019)

Carvalho v The European Parliament C-565/19 P ECLI:EU:C:2021:252 (European Court of Justice, 25 March 2021)

Plaumann v Commission of the European Economic Community case 25-62 (European Court of Justice, 15 July 1963)

Inter-American Court of Human Rights

The 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) of the American Convention on Human Rights), Advisory Opinion OC-23/18, Inter-Am. Ct. H.R., (ser. A) No. 23 (15 November 2017)

Kawas-Fernández v Honduras Judgment of 3 April 2009, Series C No. 196

Inter-American Commission on Human Rights

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 No P-1413-05 (7 December 2005)

Response of the Inter-American Commission on Human Rights regarding *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* No P-1413-05 (16 November 2006)

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 submitted 23 April 2013 (pending)

United Nations Human Rights Committee

Billy v Australia CCPR/C/135/D/3624/2019 (22 September 2022)

Portillo Cáceres v Paraguay CCPR/C/126/D/2751/2016 (25 July 2019)

Teitiota v New Zealand CCPR/C/127/D/2728/2016 (24 October 2019)

Toussaint v Canada CCPR/C/123/D/2348/2014 (24 July 2018)

United Nations Committee on the Rights of the Child

Sacchi v Argentina CRC/C/88/D/104/2019 (8 October 2021)

Resolutions and reports of treaty bodies

African Commission on Human and Peoples' Rights, general comment No. 3 on the African Charter on Human and Peoples' Rights: The Right to Life (article 4), 57th Ordinary Session of the African Commission on Human and Peoples' Rights, 2015

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/31/52 (2016)

Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment: Framework Principles on Human Rights and the Environment, UN Doc. A/HRC/37/59 (2018)

Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, No. A/74/161 (2019)

Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (A/73/188) (2018)

Resolution adopted by the Human Rights Council on 8 October 2021, A/HRC/RES/48/13, The human right to a clean, healthy and sustainable environment

Resolution on Climate Change and Human Rights and the Need to Study its Impact in Africa - ACHPR/Res.153(XLVI)09 (2009)

Resolution on Climate Change and Human Rights in Africa - ACHPR/Res.342(LVIII)2016 (2016)

UN General Assembly A/HRC/43/53, Right to a healthy environment: good practices. Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (2019)

UN General Assembly, Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972, A/CONF.48/14/Rev1, Declaration of the United Nations Conference on the Human Environment

UN General Assembly, Universal Declaration of Human Rights, 10 December 1948, 217 A (III)

UN Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework, 2011

UN Human Rights Committee, General comment no. 36, Article 6 (Right to Life), 3 September 2019, CCPR/C/GC/35

UN Human Rights Council resolution 29/15 (30 June 2015) UN DOC A/HRC/29/L.21; 'Understanding Human Rights and Climate Change. Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change'

UN Human Rights Council, A/HRC/43/54, Good practices of States at the national and regional levels with regard to human rights obligations relating to the environment. Summary report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (23 January 2020)

Intergovernmental Panel on Climate Change reports

Pörtner HO and others, 'Summary for Policymakers' in Pörtner HO and others (eds), *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of*

Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge University Press 2022)

Masson-Delmotte V and others, '2021: Summary for Policymakers' in Masson-Delmotte V and others (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2021)

Pachauri RK and Meyer L (eds), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014)

Valentini R and others, '2014: Europe' in Barros V and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014)

Hijioka Y and others, '2014: Asia' in Barros V and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1327

Magrin GO and others, '2014: Central and South America' in Barros V and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1499

Niang I and others, '2014: Africa' in Barros V and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1199

Romero-Lankao P and others, '2014: North America' in Barros V and others (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) 1439

Other reports

Asian Development Bank, *Climate change, Coming Soon to a Court Near You. Climate Litigation in Asia and the Pacific and Beyond* (Asian Development Bank 2020) <<https://www.adb.org/publications/climate-litigation-asia-pacific>> accessed 30 June 2022

Boden TA, Marland G and Andres RJ, 'National CO₂ Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2014' [2017] Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy <https://data.ess-dive.lbl.gov/view/doi:10.3334/CDIAC/00001_V2017> accessed 30 June 2022

Burger M and Metzger DJ, *Global Climate Litigation Report: 2020 Status Review* (United Nations Environment Programme and Sabin Center for Climate Change Law 2020)

<<https://wedocs.unep.org/bitstream/handle/20.500.11822/34818/GCLR.pdf?sequence=1&isAllowed=y>> accessed 30 June 2022

Commission on Human Rights of the Philippines, 'National Inquiry on Climate Change Report' (6 May 2022) <<https://chr.gov.ph/wp-content/uploads/2022/05/CHRP-NICC-Report-2022.pdf>>

Setzer J and Byrnes R, *Global Trends in Climate Change Litigation: 2020 snapshot* (London School of Economics and Political Science 2020) <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/07/Global-trends-in-climate-change-litigation_2020-snapshot.pdf> accessed 30 June 2022

Nachmany M and Setzer J, *Global Trends in Climate Change Legislation and Litigation: 2018 Snapshot* (London School of Economics and Political Science 2018) <<https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-change-legislation-and-litigation-2018-snapshot/>> accessed 30 June 2022

Newspaper articles

DeCOALonize, 'The Impacts on the Community of the Proposed Coal Plant in Lamu: Who, if Anyone, Benefits from Burning Fossil Fuels?' *Perspectives* <https://wedocs.unep.org/bitstream/handle/20.500.11822/25363/Perspectives31_ImpactCoalPlantLamu_28032018_WEB.pdf?sequence=1&isAllowed=y> accessed 30 June 2022

Watts J, 'Dutch officials reveal measures to cut emissions after court ruling' *The Guardian* (24 April 2020) <https://www.theguardian.com/world/2020/apr/24/dutch-officials-reveal-measures-to-cut-emissions-after-court-ruling?CMP=tw_t_a-environment_b-gdneco> accessed 30 June 2022

Murphy K, 'Torres Strait Islanders take climate change complaint to the United Nations' *The Guardian* (13 May 2019) <<https://www.theguardian.com/australia-news/2019/may/13/torres-strait-islanders-take-climate-change-complaint-to-the-united-nations>> accessed 30 June 2022

Waruru M, 'Campaigners Take Tanzanian and Ugandan Governments to Court to Stop Total's Oil Pipeline' *DeSmog* (13 November 2020) <<https://www.desmog.com/2020/11/13/campaigners-take-tanzanian-and-ugandan-governments-court-stop-total-s-oil-pipeline>> accessed 30 June 2022

McGrath M, 'Climate change: US formally withdraws from Paris agreement' *BBC* (4 November 2020) <<https://www.bbc.co.uk/news/science-environment-54797743>> accessed 30 June 2022

Blatner RA, 'The Amazon Rainforest: The World's Largest Rainforest' *Mongabay* (4 June 2020) <<https://rainforests.mongabay.com/amazon/>> accessed 30 June 2022

Websites

Center for Climate and Energy Solutions, State Climate Policy Maps <<https://www.c2es.org/content/state-climate-policy/>> accessed 30 June 2022

Climate Accountability Institute <<https://climateaccountability.org/index.html>> accessed 30 June 2022

Centre for Environmental Rights, 'Comments on South Africa's Draft Updated under the Paris Agreement' (30 April 2021) <https://cer.org.za/wp-content/uploads/2021/05/CER-Comments_Draft-Updated-NDC_30-April-2021.docx.pdf> accessed 30 June 2022

Climate Action Tracker <<https://climateactiontracker.org/>> accessed 30 June 2022

Climate Action Tracker, EU <<https://climateactiontracker.org/countries/eu/>> accessed 30 June 2022

Dejusticia, 'The Colombian government has failed to fulfill the Supreme Court's landmark order to protect the Amazon' (5 April 2019) <<https://www.dejusticia.org/en/the-colombian-government-has-failed-to-fulfill-the-supreme-courts-landmark-order-to-protect-the-amazon/>> accessed 30 June 2022

Earthlife Africa Johannesburg v Chief Director <<https://cer.org.za/wp-content/uploads/2014/06/Annexure-A-Appeal-Submissions-Thabametsi-IPP.pdf>> accessed 30 June 2022

Earthlife Africa NPC v Minister of Environmental Affairs (High Court, 26 March 2018) <<https://cer.org.za/wp-content/uploads/2018/03/Signed-Founding-Affidavit-PL-26-3-18.pdf>> accessed 30 June 2022

European Commission, 'European Green Deal' <https://ec.europa.eu/clima/eu-action/european-green-deal_en> accessed 30 June 2022

European Court of Human Rights, Communication of 13 November 2020 <[https://hudoc.echr.coe.int/eng#{%22languageisocode%22:\[%22FRE%22\],%22appno%22:\[%2239371/20%22\],%22itemid%22:\[%22001-206535%22\]}](https://hudoc.echr.coe.int/eng#{%22languageisocode%22:[%22FRE%22],%22appno%22:[%2239371/20%22],%22itemid%22:[%22001-206535%22]})> accessed 30 June 2022

European Court of Human Rights, Communication of 17 March 2021 <[https://hudoc.echr.coe.int/eng#{%22appno%22:\[%2253600/20%22\],%22itemid%22:\[%22001-209313%22\]}](https://hudoc.echr.coe.int/eng#{%22appno%22:[%2253600/20%22],%22itemid%22:[%22001-209313%22]})> accessed 30 June 2022

European Court of Human Rights, 'Grand Chamber to examine case concerning complaint by association that climate change is having an impact on their living conditions and health' (29 April 2022) <<https://hudoc.echr.coe.int/app/conversion/pdf/?library=ECHR&id=003-7322460->

9989782&filename=Relinquishment%20in%20favor%20of%20the%20Grand%20Chamber%20of%20the%20case%20Verein%20KlimaSeniorinnen%20Schweiz%20and%20Others%20v.%20Switzerland.pdf> accessed 30 June 2022

European Court of Human Rights, 'Grand Chamber to examine case concerning global warming' (30 June 2022)

<<https://hudoc.echr.coe.int/app/conversion/pdf/?library=ECHR&id=003-7322460-9989782&filename=Relinquishment%20in%20favor%20of%20the%20Grand%20Chamber%20of%20the%20case%20Verein%20KlimaSeniorinnen%20Schweiz%20and%20Others%20v.%20Switzerland.pdf>> accessed 30 June 2022

European Court of Human Rights Statistics 2019
<https://www.echr.coe.int/Documents/Stats_annual_2019_ENG.pdf> accessed 30 June 2022

European Court of Human Rights, Rules of Court
<https://www.echr.coe.int/documents/rules_court_eng.pdf> accessed 30 June 2022

Global Carbon Atlas, CO₂ emissions <<http://www.globalcarbonatlas.org/en/CO2-emissions>> accessed 30 June 2022

Global Monitoring Laboratory, Trends in Atmospheric Carbon Dioxide
<<https://gml.noaa.gov/ccgg/trends/>> accessed 30 June 2022

Government of the Netherlands, Climate policy
<<https://www.government.nl/topics/climate-change/climate-policy>> accessed 30 June 2022

Grantham Research Institute on Climate Change and the Environment, Climate Change Laws of the World <<https://climate-laws.org/>> accessed 30 June 2022

International Energy Agency, 'Global Energy Review: CO₂ Emissions in 2021' (March 2022) <www.iea.org/reports/global-energy-review-co2-emissions-in-2021-2> accessed 30 June 2022

Natural Justice, 'Ground-breaking litigation sees organisations challenge new power plant in Richards Bay' (6 May 2021) <<https://naturaljustice.org/ground-breaking-litigation-sees-organisations-challenge-new-power-plant-in-richards-bay/>> accessed 30 June 2022

Our Children’s Trust, <<https://www.ourchildrenstrust.org/>> accessed 30 June 2022

Re: East Africa Crude Oil Pipeline – letter to Mr. Akinwumi Adesina, President of the African Development Bank (19 March 2020) <https://www.inclusivedevelopment.net/wp-content/uploads/2020/12/EACOP_letter_to_AfDB_March-19-2020_Final.pdf> accessed 30 June 2022

Reuters, ‘Germany to raise 2030 CO2 emissions reduction target to 65% - Spiegel’ (5 May 2021) <<https://news.trust.org/item/20210505064815-fqr08/>> accessed 30 June 2022

Sabin Center for Climate Change Law, Climate Change Litigation Databases <<http://climatecasechart.com/>> accessed 30 June 2022

The Comparative Constitutions Project <<https://www.constituteproject.org/?lang=en>> accessed 30 June 2022

UN Finance Center for South-South Cooperation, Global South Countries (Group of 77 and China) <http://www.fc-ssc.org/en/partnership_program/south_south_countries> accessed 30 June 2022

US Department of State, ‘The United States Officially Rejoins the Paris Agreement’ (19 February 2021) <<https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/>> accessed 30 June 2022

US Environmental Protection Agency, ‘Global Greenhouse Gas Emissions Data’ <<https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>> accessed 30 June 2022

World Bank Data, Population, total – Sub-Saharan Africa <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ZG&name_desc=false> accessed 30 June 2022

Friends of the Earth, ‘Mozambique gas project: Friends of the Earth asks for oral court hearing over government support’ <<https://friendsoftheearth.uk/climate/mozambique-gas-project-friends-earth-asks-oral-court-hearing-over-government-support>> accessed 30 June 2022

