Model Statute for Proceedings Challenging Government Failure to Act on Climate Change

An International Bar Association
Climate Change Justice and Human Rights Task Force Report

the global voice of
the legal profession®

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February 2020

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Download a PDF version of the Model Statute

A PDF version of the Model Statute can be downloaded without charge from the International Bar Association website: **www.ibanet.org**.

A direct link to the *Model Statute for Proceedings Challenging Government Failure to Act on Climate Change*, as well as other related materials and perspectives, including an Opposing View, is available at **www.ibanet.org/Climate-Change-Model-Statute.aspx**. There are no restrictions on making copies of the Model Statute provided copies do not alter the PDF version.

Check the Model Statute web link for periodic updates

Following the February 2020 release of the Model Statute, it is intended that periodic updates will be made to its Commentary and endnotes in response to future cases and rulings, so readers may want to refer back to this web link for updates. If possible, new developments will also be listed by jurisdiction so readers can reference the latest changes from their country. (The endnotes include references to pertinent decisions of courts and tribunals as well as rules of court and commentaries relevant to climate litigation and climate-related human rights claims.)

Help keep the Model Statute updated

If you have information about any new cases, changes in court or tribunal procedures where climate issues are involved, or anything else you think may be relevant for readers of the Model Statute to be aware of, please send a link to the document or a scanned copy electronically to the current Co-Chairs of the Expert Working Group that guided development of the Model Statute:

- David Estrin: **davidestrin@rogers.com / destrin@osgoode.yorku.ca**
- Roger Martella: **roger.martella@verizon.net**

Implementing the Model Statute in your jurisdiction

If you would like additional assistance in implementing the Model Statute in your jurisdiction, contact the Model Statute Expert Working Group Co-Chairs Roger Martella or David Estrin at the email addresses listed above.

Related material

To view the 2014 IBA Task Force on Climate Change Justice and Human Rights report, *Achieving Justice and Human Rights in an Era of Climate Disruption*, visit **www.ibanet.org/PresidentialTaskForceClimateChangeJustice2014Report.aspx**.

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Preface

Addressing global climate change requires many solutions. Citizen climate litigation can provide a critically important means for people and vulnerable communities to ask courts to require governments to reduce greenhouse gas (GHG) emissions and other measures to reduce climate-related impacts.

These types of claims are increasing, particularly in the wake of the Paris Agreement in December 2015. Recent citizen climate litigation has led to judges in some countries requiring governments to assess and take action to address climate change. On the other hand, in many other countries, legal obstacles might prevent citizens even getting through the courthouse door or judges from adapting existing judicial procedures to remedy government climate inaction.

The legal hurdles often raised in an attempt to defeat citizen climate claims for governments to act were identified by the International Bar Association's (IBA) Task Force on Climate Change Justice and Human Rights in its 2014 landmark report, *Achieving Justice and Human Rights in an Era of Climate Disruption*. A large part of the problem was associated with procedural requirements and concepts that had been developed in legal contexts that were mainly intended for different types of disputes between two parties and that did not have to deal with worldwide diffuse sources of climate change and climate harms.

The Task Force recommended a model climate remedies statute be considered to overcome these hurdles and an Expert Working Group be formed to draft a model statute to 'outline legal rights and remedies in respect of climate change, including injunctive relief to mitigate or prevent current or future threats, declaratory relief, and judicial review'. One important focus was to identify judicial precedents and rationales that if applied to climate claims would allow those threatened by climate change impacts to effectively access their domestic courts. Another primary focus was to identify measures already in use by judges in environmental matters in some countries or in other types of cases that could be useful or adaptable by judges hearing climate claims in other countries.

The Model Statute is intended to lower the identified legal hurdles. It builds on recent successes and judicial reasoning in highlighting the role of courts in setting remedies that can require governments to protect the public. The Model Statute provides detailed rationales, precedents and 23 specific Articles for reforms. The adoption of some or all of the Model Statute by judges, rules of court or legislation will help ensure timely critical GHG emission cutbacks and achieve climate justice.

The Model Statute is based upon a proposal originally drafted by the Expert Working Group, which was then subject to consultation within the IBA. The final Model Statute reflects the outcome of that process and does not reflect the individual views of any member of the Expert Working Group nor the views of every member of the IBA.

Message from the IBA Climate Change Justice and Human Rights Task Force Co-Chairs

David Estrin and Baroness Helena Kennedy, QC

As the global voice of the legal profession, the IBA recognises the importance of being at the vanguard of the legal and institutional reform needed to reduce the impacts of climate change and deal with its consequences. With this in mind, in November 2012, Michael Reynolds, then incoming IBA President, launched the Task Force on Climate Change Justice and Human Rights (the 'Task Force') with the objective of supporting the IBA in assessing the challenges to the current national and international legal regimes on climate change, with a focus on their justice implications and deficiencies, and to make recommendations accordingly.

In July 2014 the IBA published the Task Force report, *Achieving Justice and Human Rights in an Era of Climate Disruption*, a 'ground-breaking' critical comprehensive survey of existing international, regional and domestic legal frameworks relevant to climate change, and identified, using a justice-centred perspective, opportunities for legal, regulatory and institutional reforms at multilateral, state, corporate and individual levels to enhance mitigation and adaptation to climate change.

By adopting a justice and human rights-centred approach, the IBA intended to shift the focus of much-needed reform from purely economic and scientific considerations to the human rights and equity consequences of climate change. In doing so, the IBA hoped to advance equity and justice by listening to the human rights concerns of the communities most vulnerable to climate change. The report reminded its audience that failure to address the challenges posed by climate change will have devastating consequences for hundreds of millions around the globe, in both the industrialised and developing world, and that, in the drive to confront this potentially existential threat to our civilisation, not a moment should be lost.

Although prior to 2014 climate litigation strategies had been previously proposed, and in some cases attempted, none had particular success due to procedural issues and legal concepts developed in contexts far different than globally diffuse sources of climate change and widespread climate harms. In that context, an important area of future work identified by the Task Force report was to undertake work to enhance litigation rights and remedies for individuals and communities threatened by climate change impacts. To follow up on the report, the IBA invited diverse experts to form an Expert Working Group to guide and provide leadership in the drafting of a model statute.

As the Co-Chairs of the IBA Climate Change Justice and Human Rights Task Force, we are pleased that the Model Statute for Proceedings Challenging Government Failure to Act on Climate Change has been completed, and that the IBA is providing free public access to it online, in a format that will allow for periodic updating of the Model Statute text and endnotes to incorporate evolving key future developments in climate litigation.

Acknowledgments

Model Statute Expert Working Group Co-Chairs: *David Estrin, Hon Justice Brian J Preston (2015–2017) and Roger Martella*

David Estrin LSM

David Estrin's four-decade environmental law career has combined litigation, teaching, research and writing, as well as being an expert witness in international environmental arbitration and human rights tribunal proceedings. The founding editor of the *Canadian Environmental Law Reports*, for many years he headed the Environment Law Group at one of Canada's largest law firms. As Distinguished Adjunct Professor at Osgoode Hall Law School, York University, Toronto, he co-founded the Environmental Justice and Sustainability Clinical Program, and lectures in International Environmental Law. He chaired the IBA Environment, Health and Safety Law Committee and co-chairs the IBA President's Task Force on Climate Change Justice and Human Rights that produced the ground-breaking 2014 report, *Achieving Justice and Human Rights in an Era of Climate Disruption*. He has been an accredited observer at United Nations Framework Convention on Climate Change (UNFCCC) Conferences of the Parties (COPs) and participated in initial Executive Committee meetings of the Warsaw International Mechanism for Climate Change Loss and Damage. He is active as pro bono senior counsel in climate litigation matters and speaks frequently to law schools and bar associations, as well as to community and citizen groups, about climate-related human rights impacts and the critical role of domestic litigation in holding governments at all levels to implement measures necessary to achieve their Paris climate commitments.

Hon Brian J Preston, FRSN SC FAAL

Justice Brian J Preston is Chief Judge of the Land and Environment Court, New South Wales, Australia. Prior to his November 2005 judicial appointment, he was a senior counsel practising primarily in New South Wales in environmental, planning, administrative and property law. He has lectured in postgraduate environmental law for over 27 years. He is the author of Australia's first book on environmental litigation and 130 articles, book chapters and reviews on environmental law, administrative and criminal law. He holds numerous editorial positions in environmental law publications, and has been involved in a number of international environmental consultancies and capacity-building programmes, including for judiciaries throughout Asia. He is a member of various international environmental law committees and advisory boards, and was a founding member, and on the editorial committee, of the expert group that produced the Principles on Climate Obligations of Enterprises (2018). He is also an Adjunct Professor at the University of Sydney, Western Sydney University and Southern Cross University.

Roger Martella

Roger Martella has been at the forefront of global climate change law since serving as the General Counsel of the United States Protection Agency when the Supreme Court issued the 2007 landmark decision *Massachusetts v EPA*. He served as Vice-Chair of the IBA Climate Change Justice and Human Rights Task Force and Vice-Chair of the American Bar Association's Sustainable Development Task Force. He is a council member of the IBA Section on Energy, Environment, Natural Resources and Infrastructure Law (SEERIL), an executive member of the ABA's Section on Environment, Energy and Resources, and a member of the Board of Directors of the Environmental Law Institute. In 2015 and 2019, he was recognised as the top environmental and energy lawyer globally and nationally, respectively. He is Director and General Counsel of General Electric's Environment, Health and Safety operations worldwide and formerly an international environmental attorney with Sidley Austin in Washington, DC, focusing on assisting multinational corporations with environmental compliance, sustainable development and litigation across the globe. He participated in the Working Group in his personal capacity, and the views expressed herein are his own, not necessarily those of current or former employers or clients.

Working Group Secretary (2015–2018): *Nicola Swan*

The Co-Chairs are grateful to Nicola Swan for her legal and administrative talent, dedication, time and energy in coordinating researchers and contributors to the Model Statute, working with the Co-Chairs and editing various drafts of the Model Statute in her voluntary role as Working Group Secretary. In the initial stages of the project, Ms Swan was Associate and International Counsel in the International Disputes Group at Debevoise & Plimpton in London. She has since returned to New Zealand, where she is specialising in international arbitration, commercial litigation and climate change law.

Working Group Members: *Antonio A Oposa Jr, Hari M Osofsky, Jacqueline Peel, Lavanya Rajamani, Anne Ramberg, Peter J Rees QC, Nicole Smith and Jaap Spier*

Antonio A Oposa Jr

Antonio A Oposa Jr is a leading advocate and innovator in the global arena of environmental law. President of The Law of Nature Foundation, he pioneered environmental law practice in The Philippines, and is recognised internationally for initiating a claim in which The Philippines Supreme Court* recognised the principle of intergenerational responsibility – that current generations have the obligation to protect the environment for future generations. He continues to write about and teach environmental law, policy, governance and litigation, and to inspire new generations to use the law to combat climate change chaos. He has been honoured with the UN Environment Programme (UNEP) Roll of Honour (1997), Center for International Environmental Law Award (2008) and Ramon Magsaysay Award (2009).

* see endnote 40

Hari M Osofsky

Dean, Penn State Law and School of International Affairs, Distinguished Professor of Law, Professor of International Affairs and Geography, The Pennsylvania State University

Dean Hari M Osofsky's over 50 publications focus on improving governance and addressing injustice in energy and climate change regulation. Her scholarship includes books published by Cambridge University Press on climate change litigation, textbooks on both energy and climate change law, and articles in leading law and geography journals. Dean Osofsky's *Emory Law Journal* article, 'Energy Partisanship', was awarded the 2018 Morrison Prize, which recognises the most impactful sustainability-related legal academic article published in North America during the previous year. Her professional leadership roles have included, among others, serving as President of the Association for Law, Property and Society; Chair of the American Association of Law School's Section on Property; and a member of the Executive Council of the American Society of International Law, the International Law Association's Committee on the Legal Principles of Climate Change, the Board of Governors of the Society of American Law Teachers and the editorial board of *Climate Law*.

Jacqueline Peel

Professor, Melbourne Law School, University of Melbourne

Professor Jacqueline Peel is a leading, internationally recognised expert in the field of environmental and climate change law. Professor Peel is the author or co-author of several books and numerous articles on these topics, which include *The Role of International Environmental Law in Disaster Risk Reduction* (ed with D Fisher, Brill 2016); *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (with H Osofsky, Cambridge University Press 2015); *Australian Climate Law in a Global Context* (with A Zahar and L Godden, Cambridge University Press 2013); and *Principles of International Environmental Law* (3rd edn, Cambridge University Press 2012, and with P Sands, 4th edn, Cambridge University Press 2018). She has been active with the International Law Association's Committee on Legal Principles Relating to Climate Change and the Australian Panel of Experts in Environmental Law. From 2019 to 2021, Professor Peel will serve as a Lead Author in Working Group III of the Intergovernmental Panel on Climate Change for its Sixth Assessment Report.

Lavanya Rajamani

Professor of International Environmental Law, Faculty of Law, University of Oxford and Yamani Fellow in Public International Law at St Peter's College, Oxford

Professor Lavanya Rajamani writes, teaches and advises on international environmental law, in particular international climate change law and policy. Her recent book with Daniel Bodansky and Jutta Brunnée, *International Climate Change Law* (Oxford University Press 2017), won the 2018 American Society of International Law Certificate of Merit in a Specialized Area of International Law. Her other books include *Promoting Compliance in*

the Emerging Climate Regime (co-editor, Cambridge University Press 2011), *Implementation of International Environmental Law* (co-editor, Hague Academy of International Law 2011), *Climate Change Liability: Transnational Law and Practice* (co-editor, Cambridge University Press 2011), *Differential Treatment in International Environmental Law* (Oxford University Press 2006) and numerous peer-reviewed articles in law journals. She also serves as Coordinating Lead Author of the chapter on 'International Cooperation' in the Sixth Assessment Report of the Intergovernmental Panel on Climate Change and has served as Rapporteur for the International Law Association's Committee on Legal Principles Relating to Climate Change.

Anne Ramberg

Advocate, Jur dr hc, Co-Chair of the IBA's Human Rights Institute (IBAHRI), immediate past Secretary-General of the Swedish Bar Association, ad hoc judge at the European Court of Human Rights, conciliator to the Court of Conciliation and Arbitration within the Organization for Security and Co-operation in Europe (OSCE), Chair of the Stockholm Centre for the Rights of the Child, member of the board of Civil Right Defenders, the Raoul Wallenberg Institute Southern Africa Litigation Centre, the Judicial Appointments Council, the Swedish section of the Nordic Conference of Jurists and Vice-Chair of Stiftelsen Skogssällskapet.

Peter J Rees QC

39 Essex Street Chambers, London

Peter J Rees QC specialises in international commercial arbitration and is widely recognised as one of the leading practitioners in this area in the world. He has been recommended as a leading expert in international commercial arbitration, commercial litigation, construction and energy by various directories including Chambers UK, Chambers Europe, the Euromoney Guides to the World's Leading Litigation Lawyers and Experts in Commercial Arbitration, Legal 500 UK, Legal 500 Asia Pacific, Who's Who Legal and Chambers Global. Rees was Legal Director and a Member of the Executive Committee of Royal Dutch Shell plc from 1 January 2011 until he stepped down at the beginning of 2014. In that role, he had ultimate responsibility for the Shell global legal function and for advising the Shell Group management on all legal matters of group-wide importance. Prior to joining Shell, Mr Rees spent 27 years at Norton Rose, including eight years as Head of Global Dispute Resolution, and five years as a litigation and arbitration partner at Debevoise & Plimpton.

Nicole Smith

Nicole Smith is a New Zealand-based dispute resolution lawyer specialising in international arbitration and related proceedings for clients in numerous jurisdictions around the world. She is also a solicitor (admitted in England and Wales) acting as a consultant to Keystone Law (UK). Ms Smith regularly sits as an arbitrator and adjudicator in international and domestic disputes. She has been advising a wide range of clients on dispute resolution matters for over 20 years, having set up her boutique dispute resolution and arbitration

practice in 2006. Previously, she worked in the international arbitration group of Clifford Chance in London and in the litigation group at Simpson Grierson in New Zealand. She has appeared as advocate in numerous arbitration proceedings, both ad hoc and before many of the leading international institutions. Her clients have included commodity exporters, developers, tourism operators, investors, technology entrepreneurs and construction companies based in numerous jurisdictions, including the Middle East, Russia, Asia Pacific, Africa, Europe and New Zealand. Ms Smith is currently representing the Mataatua District Maori Council in a claim before the Waitangi Tribunal in New Zealand in relation to climate change issues. She is a member of the Arbitrators' and Mediators' Institute of New Zealand (AMINZ) Council, a Fellow of AMINZ and also of the Chartered Institute of Arbitrators.

Jaap Spier

Jaap Spier is Retired Advocate-General in the Supreme Court of The Netherlands (1997–2016), and currently Senior Associate at the University of Cambridge Institute for Sustainability Leadership, Extraordinary Professor of Global Challenges at Stellenbosch University and Senior Global Justice Fellow at Yale University. He held an honorary chair at Maastricht University (1999–2016; currently emeritus) and an honorary chair at the University of Amsterdam (2016–2019). He is founder and Honorary President of the European Group on Tort Law and co-founder of an expert international group that produced the Oslo Principles on Global Obligations to Reduce Climate Change. He is also co-founder of the expert group that in 2018 issued the Principles on Climate Obligations of Enterprises (reporter and author of the commentary). He is (co-)author or editor of 29 books and hundreds of articles and case notes on tort law and legal aspects of climate change. He obtained his PhD (Doctor iuris) from Leiden University in 1981.

Model Statute Working Group Researchers

The Co-Chairs thank and gratefully acknowledge the following individuals who, as lawyers or law students, contributed to key research and components of the early draft manuscript:

- IBA Researchers**:** Claire Seaborne (Canada), Ceri Warnock (New Zealand) and Gayatri Parthasarathy (Australia); and
- Stuart Bruce (Australia/UK) (Wilmer Hale).

Editorial and Legal Assistants to the Working Group Co-Chairs

Maha Mansoor and *Isabel Dávila Pereira* voluntarily provided invaluable legal editorial assistance in the pre-publication stage of the Model Statute, including identifying updates and developments to mid-2019 regarding key cases and principles contained in an earlier draft of the manuscript, and validating, correcting and formatting endnote references and cross references in accordance with the Oxford Standard for Citation of Legal Authorities (OSCOLA) style guide.

Ms Mansoor is currently an articling student in the environmental law group of a major Canadian and international law firm. She recently completed her JD at Osgoode Hall Law School, York University, and also holds a Masters in Environmental Studies (MES) from York.

Ms Dávila Pereira is in her graduating year at Osgoode Hall Law School. She previously studied in Ecuador towards a law degree with a minor in human rights. In the Osgoode Environmental Justice and Sustainability Clinical Program she researched the Rights of Nature framework and, as a result, co-founded the Osgoode Earth Law Club.

Graham Reeder and *Sue Tan* also assisted the Co-Chairs in finalising the pre-publication manuscript. Mr Reeder is in his graduating year at Osgoode Hall Law School and holds a Masters in Environmental Studies degree from York University. Ms Tan, LLM, is a member of the Ontario Bar, practising environmental and administrative law.

Part A: Background and Commentary

I. Introduction: Model Statute Objectives

As the science has become increasingly clear regarding the threats posed by climate change, the fundamental question that has perplexed actors around the world is a complex one: What can we best do about it?

The most direct approach to risks posed by climate change may be to address those risks head on, through statutes and regulations, but litigation against governments is another avenue. In the past ten years, a diverse group of individuals and organisations have increasingly turned to the courts to prompt governments to take action. These litigants have faced various preliminary and procedural hurdles, but there have also been high-profile successes.

Recognising the growing and critical importance of the use of legal systems to address climate change, in 2014, the International Bar Association (IBA) published a landmark report on climate change justice and human rights.[1] The thorough report wove an important thematic conclusion: legal systems and remedies are an indispensable element in realising actions that address climate change and reduce greenhouse gas (GHG) emissions. In other words, as climate change policy becomes increasingly important, the emergence of climate change legal frameworks, including those related to litigation, have been, and will continue to be, a driver in promoting government action regarding climate change.

An important question then becomes how to facilitate appropriate access to courts necessary to challenge governments to act, particularly among those vulnerable populations most impacted by climate change – for example, poor communities, children, mothers with infants and the elderly. While climate change is a global issue, legal systems around the world differ dramatically in who can bring claims, the types of remedies individuals may pursue against the government, the legal thresholds in bringing such cases, and the costs and complexities of navigating the systems. The lack of significant legal frameworks to address climate change only further complicates these formidable issues.

The purpose of this Model Statute is to suggest a path forward for individuals and communities to access their courts to challenge government action or inaction on climate change. The Model Statute, if adopted in part or in whole, would assist those impacted by climate change to ask their courts to examine the efforts by their government to address climate change, and, if deemed appropriate by the courts under the relevant national or subnational law, to require the government to initiate or take further action.

Focused principally on process, the Model Statute does not prejudge the outcome of any such potential cases or speak to their merits under the laws that control in a specific jurisdiction. The Model Statute also does not speak to or promote any actions or remedies against corporations or private parties. Instead, the focus here is on process against governments that may be lying dormant or failing to enforce climate change laws that have been enacted. The Model Statute seeks to provide a pathway for judicial intervention to assess government response to climate change under applicable laws and, if legally mandated, compel governments to take appropriate action.

II. The Important Role of Climate Change Litigation Against Governments

As the threats posed by changes to the climate caused by human activity become more manifest, climate change litigation is playing an increasingly important role in providing opportunities for those concerned about climate change to do something about it.[2] Individuals and public interest groups around the world have sought recourse in the courts, asking judges to require governments to take action that had been promised or left undone. Additionally, regarding specific cases brought against dormant governments, these groups have occasionally succeeded in obtaining various orders from courts resulting in government action to reduce GHGs or plan for climate change that otherwise would not have happened.[3] Despite these initial successes, there remain many procedural and evidentiary barriers to dealing with climate change in court that have their roots in historical litigation approaches focused on issues far different than the existential global crisis being caused by climate change.

The use of climate change litigation has markedly increased since the almost universal adoption by nations of commitments in the Paris Agreement following historic negotiations in December 2015.

The term 'climate change litigation' is increasingly used to refer to a broad range of disputes before domestic or international courts and tribunals, where a party's claim is based on harms allegedly being caused by environmental factors.[4] In turn, litigants often seek one of three types of remedies: (1) mitigation of climate change (ie, reducing GHG emissions); (2) adaptation to climate change (ie, curbing the negative effects of climate change on ecosystems, communities or infrastructure); and/or (3) compensation for the alleged harms caused by climate change.[5] The first two categories of cases to date largely have targeted government actors, while cases in the third category have generally been brought against private actors and are not the subject of this Model Statute.

This Model Statute is focused exclusively on the first and second categories: actions against government actors to pursue climate change mitigation and adaptation efforts, such as regulations to reduce GHG emissions and/or promote adaptation to climate change effects. Mitigation, and to a lesser extent adaptation, are the categories that are the most advanced in case law around the world and that have led some parties to obtain remedies that, in turn, have resulted in governmental action related to climate change. Thus, when access to courts is available, these types of cases have the potential to enable those impacted by climate change to seek real and actual relief from dormant governments.

A. The Backdrop of Existing Challenges Against Governments

The Model Statute centres on the following fact pattern:

- a government is perceived to have failed to take any action or sufficient action to address climate change;
- an individual or group concerned about the impacts of climate change petitions the government to do something and is denied;
- that group then goes to court and asks the court to intervene.

While the filing of the case in the particular nation may be novel, controversial and time-consuming, the court has granted the request and ordered the government to consider and, in some instances under applicable laws, implement new or more stringent climate change policies and/or regulations.

The court's decision is typically a directive – to start to take action to address climate change, such as through new laws or regulations – but in most cases (with some exceptions, discussed below), refrains from giving specifics or second-guessing the government in how to proceed.

The pattern described above, of parties turning to domestic court litigation to achieve climate change remedies against governments that are not taking action, has manifested in various jurisdictions. Three decisions in particular have set the foundation for such litigation.

First, in *Massachusetts v EPA,* environmental groups and several states petitioned the United States Environmental Protection Agency (EPA) to regulate GHGs under the Clean Air Act.[6] The EPA denied the request, arguing that Congress had not authorised any regulation of GHGs and would need to pass a new law specifically targeting climate change. The US Supreme Court in 2007 overruled the EPA's determination, finding that Congress's general authority for the EPA to regulate 'air pollution' in the Clean Air Act could encompass GHGs. Importantly, however, the court did not decide that the EPA *must* regulate GHGs, only that it had to consider whether to do so and justify its decision.[7] Ultimately, the Obama administration relied upon the *Massachusetts* decision to propose and finalise a broad suite of GHG regulations involving cars and trucks, power plants, and the oil and gas industry.[8]

Second, in 2015, the District Court of The Hague ruled that the Dutch Government had failed to fulfil its duty of care due to its failure to implement internationally agreed climate change targets.[9] In *Urgenda Foundation v The Netherlands,* Urgenda, an environmental non-governmental organisation (NGO), argued that the Dutch Government's inadequate emissions reduction targets breached the Constitution of The Netherlands (duty to protect and improve the environment) and a provision on the duty of care in the Dutch Civil Code (ie, negligence). While the court found that Urgenda could not raise for itself the constitutional argument or arguments based on the right to life contained in the European Convention on Human Rights (ECHR), the court found that the right to life could 'serve as a source of interpretation' when determining the standard of care owed by the Dutch Government to its citizens under the Dutch Civil Code.[10] It found that the Dutch Government's existing emissions regime was inadequate to meet this standard and ordered that the government reduce carbon dioxide (CO_2) emissions by a minimum of 25 per cent (compared to 1990 levels) by 2020 per European Union targets. The court rejected arguments that the Dutch Government should not be held liable for its so-called '*de minimis*' contribution to global GHG, as well as arguments regarding lack of causation. The Dutch Government appealed the first instance decision in 2016.[11] In 2018, the Court of Appeal for The Hague dismissed the government's appeal. It upheld the District Court's decision that The Netherlands is breaching its tort duty of care, but importantly, the Hague Court of Appeal rejected the District Court's determination that the rights provided in the ECHR could not be enforced

in Dutch courts by public interest actions. The Appeal Court found that Urgenda could invoke Articles 2 and 8 of the ECHR (articles referring to the 'right to life' and the 'right to family life') as Dutch law allows class actions by interest groups in domestic courts and therefore, Urgenda should have been permitted to directly invoke the ECHR on behalf of its members. Compellingly, the Appeal Court concluded:

> 'In short, the 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'.

The Appeal Court's reasoning on these issues was approved by The Netherlands Supreme Court's December 2019 decision dismissing the Dutch government's challenge to the Court of Appeal decision.[12]

Third, in Pakistan, a farmer successfully brought public interest litigation against the federal and state governments, challenging their lack of action in addressing the challenges associated with climate change. The claimant successfully argued that climate change is a serious threat to food, water, energy and security, and therefore breaches the fundamental right to life under Article 9 of Pakistan's Constitution.[13] As a result, the Lahore High Court ordered the creation of a Climate Change Commission to oversee the implementation of the state's national climate change framework.[14]

In each of these cases, there was no specific law addressing or mentioning climate change at issue. However, despite the lack of a specific climate change law, the domestic courts identified a legal duty under an existing cause of action or 'legal instrument' that required the government to reduce carbon emissions or to take other measures to mitigate climate change and its impacts on human and civil rights, and ordered the government to take such action. These cases demonstrate that individuals and groups can invoke courts to require governments to act, even where no specific climate change laws or regulations exist.

It is important to note, however, that not all courts have agreed with this framework. For example, in a Washington State court, 12 minors sued to compel the state to develop and implement an enforceable programme to reduce and mitigate the impacts of climate change – and that case was dismissed on political question grounds. The decision is under appeal and was to be argued before the Washington State Court of Appeal in late 2019.[15]

B. Ongoing Efforts to Promote Government Climate Change Action

Following successful actions such as those discussed above, individuals and groups are looking to build on these precedents by pursuing new cases and legal theories in courts to drive climate change action.

In Belgium, Klimaatzaak, an NGO, and 9,000 Belgian citizens brought a case against the Belgian Government for failing to take sufficient climate change measures and demanded

that the government curb emissions by at least 25 per cent at the end of 2020 compared to 1990 levels.[16]

In New Zealand, a citizen commenced judicial review proceedings against the Minister of Climate Change Issues for failing to review emissions reduction targets in advance of the Paris negotiations.[17]

In September 2016, a group of Swedish youths sued the Swedish Government for its decision to sell significant coal assets.[18]

In October 2016, a group of young people filed a constitutional claim against the Norwegian Government challenging licences issued to oil companies over the risks of oil drilling in the Arctic.[19]

In November 2016, a Swiss association of Senior Women for Climate Protection filed a legal request (petition) with the Swiss Federal Department of the Environment and other federal authorities calling for greater climate ambition in order to protect their fundamental rights to life and health. After this request was rejected, the group filed an appeal with the Federal Administrative Court, which denied the appeal on the basis that as everyone is equally impacted by climate change, the Senior Women had no right, or standing, to have their case heard. An appeal to the Switzerland Supreme Court has been filed.[20]

In the US, a group of 21 minors were granted standing to sue the Federal Government, as well as a number of US states, for violating the youths' constitutional rights by promoting the development and use of fossil fuels.[21] In this case, *Juliana v United States*, the Oregon District Court held in November 2016 that 'air, running water, the sea, and consequently the seashore' are public trust assets imposing upon the trustee (the state) a fiduciary duty to 'protect the trust property against damage or destruction', thus permitting federal litigation asserting state failures to mitigate climate change to proceed. In January 2020, the majority of a three-judge panel of the US Ninth Circuit Court of Appeals found that the action could not proceed on the basis that the climate change relief sought by the children could not be an issue for the courts. 'Reluctantly, we conclude that such relief is beyond our constitutional power. Rather, the plaintiffs' impressive case for redress must be presented to the political branches of government.' The appeal panel instructed the District Court to dismiss the case for lack of standing. Counsel for the plaintiffs have indicated they will seek a review of that decision which, if granted, would allow for a full *en banc* review by a new panel of 11 Ninth Circuit Court judges and could lead to new decisions replacing those issued by the three judges.[22]

In addition to these claims against governments for failing to take action to mitigate climate change, other groups are pursuing different claims against private parties. These types of claims and actions against private parties are not the subject of the Model Statute.[23]

III. Lowering Hurdles for Parties Challenging Government Climate Inaction – Recent Developments and Solutions

Although legal systems vary greatly around the world, the ability to successfully invoke courts to assess the adequacy of state actions to address climate change requires, at its core, three essential elements. First, appropriate court access (or 'standing') should be provided

to individuals and groups who claim harm from climate change to challenge the scope of government action or inaction on climate change. Second, courts should be provided with the framework to adjudicate such actions, tailored to some of the unique circumstances surrounding climate change litigation. Third, if appropriate, the court must have the clear ability to issue necessary remedies where further action is warranted.

This report discusses each of these issues below under the following sections: (A) access to courts; (B) the framework for adjudication of climate change litigation against governments; and (C) remedies against government defendants.

A. Access to Courts

This section discusses the types of hurdles to access the courts that a party may confront in climate change litigation involving governments in the following areas: (1) jurisdiction; (2) standing; (3) sovereign immunity and the right to sue the state; (4) redressability; and (5) costs.

1. JURISDICTION

The jurisdiction of a court refers to its power to hear and determine disputes between particular parties. In common law systems, a court must generally have both jurisdiction over the subject matter of the claim and personal jurisdiction over the relevant defendant in order to hear the case. In order to bring a claim against a government in respect of its alleged action/inaction on climate change, the courts must accept they have jurisdiction over the claim, including the power to make orders binding the state.

Governments have sometimes argued that climate change is a policy issue and thus non-justiciable – a matter to be decided by the government alone.[24] However, increasingly, some courts recognise that state action or inaction on climate change is a justiciable matter that the courts are competent to rule upon, even though the courts may be more comfortable permitting governments more latitude in determining how best to implement the court's decision.[25]

2. STANDING

Standing or *locus standi* is the requirement that a litigant demonstrates that it has a sufficient connection between a particular law or the defendant's conduct and the claimant's participation in the case.[26] In other words, standing typically requires a party to show that it is being harmed by the action or inaction being challenged in court. Standing, therefore, depends on 'the identity of the person, the type and subject matter of the proceedings, and the relationship the person has to those proceedings'.[27] A litigant may be granted standing on the basis of a statutory provision, procedural rule or common law doctrine, and the test to establish standing will vary based on jurisdiction and cause of action or claim.[28] For example, in the US, many federal environmental statutes contain specific provisions allowing for 'citizen suits' by 'any person', such as the Clean Air Act,[29] Clean Water Act,[30] Resource Conservation and Recovery Act[31] and Endangered Species Act.[32] However, there are constitutional and prudential prerequisites that also must be satisfied to confer standing in the US (discussed below).[33]

In the context of climate change litigation, standing can present a heightened challenge for claimants because of a difficulty in demonstrating a sufficient connection to the harms caused. For example, under the US constitutional requirements, federal courts assess standing using a three-pronged test: (1) the claimant must have suffered an 'injury in fact', that is, an invasion of a legally protected interest; (2) there must be a connection that is 'fairly traceable' between the injury and the conduct complained of ('causation' test); and (3) it must be likely that the injury will be 'redressed' by a favourable decision ('redressability').[34] Climate change is caused by emissions originating in different parts of the world, and its harms are widely disbursed across the planet. These facts are often raised by defendants in climate claims and they can create heightened challenges for litigants to establish standing in the conventional sense.

Claimants in the US have experienced mixed success in demonstrating standing in climate change proceedings. In *Washington Environment Council v Bellon,*[35] the court refused to grant standing to public interest litigants that sought to compel the state council to regulate GHG emissions from state oil refineries because the litigants failed to satisfy the causation and redressability tests.[36]

In other instances, however, courts and tribunals have interpreted the tests to establish standing flexibly and take into account the unique aspects of climate change. For example, in *Massachusetts v EPA*, the US Supreme Court, in confronting the standing question, held that the plaintiff states were entitled to the 'special solicitude' of a lower bar in establishing the requisite standing requirements because of their representation of broad populations in interests.[37] In *Urgenda Foundation v The Netherlands*, the Hague District Court granted the Urgenda Foundation standing based on the organisation's aims,[38] including sustainability, and additionally granted Urgenda standing to defend the rights of future generations. In its December 2019 *Urgenda* decision, The Netherlands Supreme Court affirmed that the Urgenda Foundation, as an interest group representing the interests of the residents of the Netherlands who asserted rights under Articles 2 and 8 of the European Convention on Human Rights, had standing to invoke these obligations in a Dutch court in accordance with Article 3:305a of the Dutch Civil Code. The Supreme Court's reasoning on standing could go well beyond this case:

> '**After all, the interests of these residents are sufficiently similar and therefore lend themselves to being pooled, so as to promote efficient and effective legal protection for their benefit. Especially in cases involving environmental interests, such as the present case, legal protection through such pooling of interests is highly efficient and effective. This is also in line with Article 9(3) in conjunction with Article 2(5) of the Aarhus Convention, which guarantees interest groups access to justice in order to challenge violations of environmental law, and in line with Article 13 ECHR**.'[39]

The Supreme Court of The Philippines has also recognised intergenerational standing.[40] Other jurisdictions have endorsed so-called 'open standing' provisions, allowing any person to seek a remedy for a breach of legislation, regardless of whether that particular litigant can show harm from such a breach. For example, in New South Wales, Australia, 'any person' may bring proceedings in the Land and Environment Court to enforce environmental legislation,

even if that person's rights have not been directly infringed.[41] Open standing provisions are also available in other jurisdictions including, for example, Canada,[42] Michigan,[43] The Philippines,[44] Ecuador[45] and Uganda.[46]

In certain jurisdictions, *parens patriae* (meaning 'parent of the nation') standing refers to the power of governments, commonly through the office of the Attorney-General, to intervene against wrongful conduct directed towards its citizens.[47] In US litigation, *parens patriae* standing can be invoked to allow a government to commence litigation on behalf of its people and was referenced in *Massachusetts v EPA* when states sought remedies from the Federal Government.[48] An equivalent to *parens patriae* standing could also be developed under European law where EU directives grant Member States authority to commence litigation on behalf of their citizens.[49]

Finally, intervener and *amicus curiae* (meaning 'friend of the court') standing are special types of standing that allow non-parties to provide information to the court that the parties do not provide. Interveners and *amicus curiae* may either be organisations or individual persons, and must seek the court or tribunal's permission to join the proceedings.[50] An intervener is a party that usually has a direct interest in the outcome of the proceedings, participates in all aspects of the proceedings and will be bound by the court's decision. An *amicus curiae* may provide submissions on a particular aspect of the case on which it has expertise to assist the court (eg, an environmental NGO), but is not usually directly affected by the particular decision.[51] In the US, a specific type of *amicus* brief has developed called a 'Brandeis brief', which introduces social science or other empirical data relevant to the case.[52]

In climate change litigation, allowing standing in government-related climate change proceedings for non-parties, such as interveners and *amicus curiae*, can allow a variety of organisations and interested experts to participate in the litigation without the necessity to be granted full party status. These and other alternative forms of standing may encourage the public's engagement with climate change litigation against governments and provide courts with helpful information for resolving climate-related disputes. See **Appendix B** for examples of provisions on interveners and *amicus curiae* from various jurisdictions.

For model articles on standing for parties, interveners and *amicus curiae* in government-related climate change proceedings, see **Articles 4 and 5** below.

3. SOVEREIGN IMMUNITY AND THE RIGHT TO SUE THE STATE

Although some legal systems traditionally made it more difficult for citizens to sue their own governments for civil wrongs, it is now the case that some states (referred to as the Crown in the United Kingdom and various Commonwealth, common law countries) are *not* generally immune from suit from domestic parties, and domestic civil proceedings may be brought against the state in the same way as against any other defendant.

For example, in New South Wales, the New South Wales Crown Proceedings Act 1988 provides that the Crown is able to be sued in the same manner as any private person.[53] This has been enforced in environmental proceedings against state entities.[54] There are no limitations on the types of civil proceedings that may be brought or the remedies that the

court can order against the Crown.[55] Similarly, in the UK, the Crown Proceedings Act 1947 provides for the right to sue the Crown, and for the liability of the Crown in tort. However, the courts are restricted from granting injunctions or specific performance against the Crown and from ordering the recovery of land or delivery of property.[56] Similar provisions are also found in Canada.[57]

For a model article on the ability to sue the state in government-related climate change proceedings, see **Article 17** below.

4. REDRESSABILITY

A further challenge of climate change litigation is that damage is diffuse and likely to be caused in part by GHG emissions from outside the jurisdiction in which proceedings are brought. Defendants regularly argue that any remedy granted in the particular case is unlikely to remedy the underlying problem given its nature and scale, that is, the damage cannot realistically be redressed by issuing a remedy against only a specific group of parties. Similar to technical objections on jurisdiction and standing (discussed above), courts hearing claims against governments may not be persuaded by such arguments in actions against government actors. Redressability is likely to be a more pertinent defence in cases against private parties, which is not addressed in this Model Statute.

For example, in *Urgenda,* the Hague District Court emphasised that 'when [the Dutch State] became a signatory to the United Nations Climate Change Convention and the Kyoto Protocol, the State expressly accepted its responsibility for the national emission level and in this context accepted the obligation to reduce its emission level as much as needed to prevent dangerous climate change'.[58] The court held that the state had to do more to avert the imminent danger caused by climate change in view of its duty of care to protect and improve the living environment. The court also stated, 'the possibility – and in this case, even certainty – that the issue is also and mainly the subject of political decision-making is no reason for curbing the judge in his task and authority to settle disputes. Whether or not there is a "political support base" for the outcome is not relevant in the court's decision-making process'.[59]

The Netherlands Supreme Court 2019 decision in *Urgenda* also rejected the Dutch Government's arguments that the court order made by the District Court and upheld by the Court of Appeal was an inappropriate intervention in the political decision-making process. The Supreme Court's summary of its reasoning on the topic of 'the courts and the political domain' is as follows:

> 'The State has asserted that it is not for the courts to undertake the political considerations necessary for a decision on the reduction of greenhouse gas emissions.
>
> In the Dutch system of government, the decision-making on greenhouse gas emissions belongs to the government and parliament. They have a large degree of discretion to make the political considerations that are necessary in this regard. **It is up to the courts to decide whether, in taking their decisions, the government and parliament have remained within the limits of the law by which they are bound.** Those limits ensue

> from the ECHR, among other things. The Dutch Constitution requires the Dutch courts to apply the provisions of this convention, and they must do so in accordance with the ECtHR's interpretation of these provisions. **This mandate to the courts to offer legal protection, even against the government, is an essential component of a democratic state under the rule of law.**
>
> The Court of Appeal's judgment is consistent with the foregoing, as the Court of Appeal held that the State's policy regarding greenhouse gas reduction is obviously not meeting the requirements pursuant to Articles 2 and 8 ECHR to take suitable measures to protect the residents of the Netherlands from dangerous climate change. Furthermore, the order which the Court of Appeal issued to the State was limited to the lower limit (25%) of the internationally endorsed, minimum necessary reduction of 25-40% in 2020.
>
> The order that was issued leaves it up to the State to determine which specific measures it will take to comply with that order. If legislative measures are required to achieve such compliance, it is up to the State to determine which specific legislation is desirable and necessary.'

The Supreme Court found that given the rights provided to citizens by Articles 2 and 8 of the ECHR:

> 'the State's obligation to take "suitable measures" includes "preventative measures against the danger", even if it is not certain that the danger will materialise... **The judge may examine whether the measures taken by a State are reasonable and appropriate. The policy of a state in taking action must be consistent and the state must take action in a timely manner. A state must observe due diligence in its policy. The court can verify whether the policy pursued meets these requirements.**'[60]

In *Asghar Leghari v Federation of Pakistan,* the Lahore High Court stated that 'the delay and lethargy of the State in implementing the [Government's climate change adaptation] Framework offends the fundamental rights of the citizens'.[61] Similarly, in *Massachusetts v EPA*, the US Supreme Court considered a number of defences, including that the EPA, and not the court, should have the final policy decision on when climate change should be regulated, but ultimately proceeded to consider the merits of the decision: 'In short, EPA has offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change. Its action was therefore "arbitrary, capricious… or otherwise not in accordance with law"'.[62]

For a model article on restrictions on defences available in government-related climate change proceedings, see **Article 16** below.

5. COSTS

Litigation costs can also be a significant hurdle to access courts, particularly for vulnerable populations impacted by climate change. Litigation costs include the lawyers' fees, court fees, disbursements and other expenses borne by the parties. Climate change litigation

can be particularly expensive due to expert evidence, complex legal issues, multiple party involvement, specialist legal advice and unfavourable procedural rules.[63] In addition to their own costs, in certain jurisdictions parties are at risk of being ordered to pay the opposing parties' costs if they are unsuccessful (referred to as 'adverse cost orders').

For decades lawyers have recognised that the uncertainty and threat associated with adverse costs orders is one of the largest barriers in environmental litigation.[64] At the LAWASIA/National Environmental Law Association (NELA) International Conference on Environmental Law in 1989, Justice Toohey of the High Court of Australia stated:

> 'There is little point in opening the doors to the courts if litigants cannot afford to come in. The general rule in litigation that "costs follow the event" is in point. The fear, if unsuccessful, of having to pay the costs of the other side (often a Government instrumentality or wealthy private corporation), with devastating consequences to the individual or environmental group bringing the action, must inhibit the taking of cases to court. In any event, it will be a factor that looms large in any consideration to initiate litigation.'[65]

Courts have various tools available to them to address these concerns, including permitting *waiver or deferral of court fees*, or making *protective or maximum costs orders* (see the examples in **Appendix A**).

In many jurisdictions, defendants are permitted to seek an order that the plaintiff provide an amount of money or guarantee as security to meet some or all of the defendant's costs at the conclusion of the proceedings. In cases where the plaintiff is a poorly funded public interest litigant, *orders for security for costs* may have the effect of deterring or even terminating the litigation.[66] Of course, courts have the option of only ordering security for costs against public interest litigants in exceptional circumstances, such as where the plaintiff brought a frivolous or vexatious claim (see the examples in **Appendix A**).

Advance cost orders are a new development in common law jurisdictions that permit, in rare circumstances, public interest litigants to collect costs from the opposing party before the litigation is resolved in order to allow the litigation to continue.[67]

One further option in cases involving governments is for courts with discretion on the allocation of costs to make specific *'cost-shifting' orders*, including one-way cost-shifting orders (ie, where public interest litigants can benefit from an adverse costs award if they are successful but will not be burdened by an adverse costs award if they are unsuccessful) or no-way cost-shifting orders (ie, no award on costs is made, thus protecting an unsuccessful public interest litigant).

For model articles on approaches to costs in government-related climate change proceedings, including waiver of court fees, maximum and protective costs orders, restrictions on orders for security for costs, advance costs orders and cost-shifting in final costs orders, see **Articles 19–23** below. Also see **Appendix A** for commentary and examples of reforms made regarding these matters from a number of countries

B. The Framework for Adjudicating Climate Change Litigation Against Governments

Once a party can successfully establish access to the courts, they may proceed to litigate their cause of action. As with the access and jurisdictional issues described above, climate change litigation against governments concerns highly complex, scientific and technical issues, and can require consideration of how existing causes of action might be applied in a climate change context and whether causation is established, as well as procedural questions as to evidence and access to information. Precedent from decisions to date demonstrates how courts have adapted these principles to the unique context of climate change. In the following, this report discusses issues arising in respect of: (1) cause of action; (2) causation; (3) evidence; and (4) access to information.

1. CAUSE OF ACTION

In addition to establishing jurisdiction, any plaintiff must invoke a proper legal cause of action for the court to entertain its claim. There are various causes of action that arise in climate change litigation against governments, including: (1) judicial review of government action allegedly in breach of a domestic constitutional right, statute or other legal obligation; (2) claims challenging the government's failure to implement a legislative or statutory mandate; (3) claims asserting the government's breaches of principles of common or civil law; (4) claims based on the government's alleged failure to implement international climate change commitments, including the Paris Agreement; and (5) human rights claims pursuant to domestic (including constitutional) or international law.

(i) Judicial Review and Statutory Claims for Failure to Act

The first sources groups typically look to, in bringing such actions, are the constitution and statutes of their country. Even where there is no law specifically referencing climate change, many nations have constitutional provisions guaranteeing the right to a clean environment, laws that promote clean air or a healthy environment, and regulations that provide the foundation for limiting emissions.

Judicial review and statutory claims are two of the legal actions that have been successful in climate change litigation against government actors. A judicial review claim is a request that a court review the legality of a decision made by a public body, such as a government department or an administrative tribunal, whereas a statutory (or regulatory) claim relates to the application and enforcement of environmental or climate change-specific statutes, such as natural resources management or emissions trading legislation.

Sometimes a plaintiff can bring an action challenging a government's decision on climate change and argue that the government did not go far enough. But more frequently, these cases are built upon a theory of *failure to act*. For example, a plaintiff might argue that the government has an obligation to regulate air pollution but has not taken action to control GHGs. A court can then review whether the government has an obligation to take action or to look harder at the issue, and issue an order to the government to take some action.

One of the most well-known climate change cases, *Massachusetts v EPA*, discussed above, involved a judicial review of the decision of the US EPA not to regulate GHGs for the purpose of preventing climate change.[68] The US Supreme Court found that CO_2 and other GHGs were 'air pollutants' within the meaning of the Clean Air Act and remanded the case back to the EPA, which led to the EPA's determination that the GHGs could endanger public health and welfare,[69] which then allowed the EPA to initiate a broad set of regulations regulating GHGs from mobile sources in the US.

In Australia, the courts have upheld challenges to regulatory and planning approvals arising from a failure to take into account sufficiently the future effects of climate change, including by granting standing to a number of applicants.[70] In one of the most well-known Australian decisions, *Gray v Minister for Planning,* the Land and Environment Court of New South Wales found the environmental assessment of a proposed coal mine should have taken into account the GHG impacts of burning coal.[71] In 2017, the High Court in South Africa upheld a challenge to the environmental authorisation for a new coal-fired power station on the basis that climate change impacts had not properly been considered. The court cited several reasons, including South Africa's commitments under the Paris Agreement, for its conclusion that climate change was indeed a relevant consideration for the environmental review of the Thabametsi Project. Because the review approved by the minister effectively ignored climate change, the court held it to be legally invalid.[72]

(ii) Claims Challenging the Government's Failure to Implement a Legislative Mandate

In jurisdictions that have adopted specific legislation or enforceable government policy relating to climate change, claimants may be able to bring legal proceedings to remedy or restrain actions that violate the legislation or to enforce public duties to address climate change. By May 2018, over 1,500 climate change laws and policies had been adopted worldwide.[73] Mechanisms for enforcement and compliance provide an avenue for claimants aiming to address climate change through litigation.

For example, claimants have on several occasions used litigation to seek access to, or to evaluate, climate change-related information held by governments. In countries with access to information laws, public interest groups frequently take advantage of them to access climate change-related information. Litigation can arise when public interest groups are refused access to information, or they wish to challenge the accuracy of information provided to the public.

By way of further example, in several cases in the US and Canada, non-profit organisations have filed petitions, or sought judicial review, where the government has failed to adopt the necessary measures provided for under legislation to protect species threatened by climate change or has failed to consider climate change when listing threatened species.[74]

(iii) Claims Asserting Government Breaches of Principles of Common or Civil Law

One example of claims asserting government breaches of principles of common law are claims based on the public trust doctrine. This doctrine reflects the idea that the state holds natural resources on trust for the benefit of its citizens.[75] While the doctrine has traditionally been

applied to resources such as forests, water and land, a broader understanding may include the atmosphere and climate.[76] The public trust doctrine originally developed in Roman law and became part of common law but is now increasingly recognised in statute and even in constitutions in various jurisdictions around the world. For example, the *Juliana* litigation in the US discussed above is, in part, based on a claim against the US Federal Government and numerous states under the public trust doctrine, arguing that the atmosphere should be regulated pursuant to the greater interests of the public at large.[77] In 2018, a federal district court judge in Oregon agreed the case should proceed to trial on these claims, although as a result of a further appeal decision in January 2020 a panel of the Ninth Circuit Court of Appeals found that as the relief being sought was a matter for the 'political' branches of government and not the courts, the case should be dismissed.[78] A Washington State court dismissed a similar case on political question grounds.[79] Plaintiffs were asking the court to require the Federal Government to take additional action to address climate change and reduce GHG emissions.

Another case brought by children in the State of Washington invoked the public trust doctrine to have it applied to the atmosphere although reference to the principle in the state's constitution referenced only natural resources and navigable waters.[80] Judge Hollis Hill held that the Washington State Ecology Department had a constitutional duty to diligently exercise its regulatory authority to 'protect the public's interest in natural resources held in trust for the common benefit of the people'.[81]

Courts outside the US have also applied the public trust doctrine to protect natural resources other than the atmosphere, including in Kenya,[82] India[83] and South Africa.[84]

(iv) Claims Asserting Government Failures to Implement International Climate Change Commitments, including under the Paris Agreement

Beyond domestic sources of authority, climate change litigation is also frequently pursued against the backdrop of states' international obligations under the 1994 UN Framework Convention on Climate Change (UNFCCC) and the 2015 Paris Agreement on Climate Change, adopted in December 2015 by the 21st Conference of the Parties to the UNFCCC and entered into force on 4 November 2016 (the 'Paris Agreement'). The Paris Agreement focuses on a number of action areas, including the mitigation of climate change effects, adaptation to climate change, finance and technology transfer, and minimising the loss and damage resulting from climate change. In particular, under the Paris Agreement, states have made commitments to mitigate GHG emissions, including the requirement to 'prepare, communicate and maintain successive nationally determined contributions [NDCs] that it intends to achieve' in respect of such commitments.[85] In the same article (Article 4.2), the parties commit that they 'shall pursue Parties domestic mitigation measures, with the aim of achieving the objectives of such contributions'.

The Paris Agreement builds on the UNFCCC obligations of prevention and precaution[86] and requires states at five-year intervals to set out 'nationally determined contributions' (NDCs) and to take domestic measures to realise those contributions.[87] Should states fail to comply with their commitments under the Paris Agreement, there may be avenues available

to climate change litigants depending on the jurisdiction, such as, for example, where states implement their NDCs through domestic legislation; where, as a matter of domestic law, international law has direct application in the domestic legal order; or where there is a domestic requirement to implement international standards in order to protect rights enshrined in national constitutions, as was the case in *Leghari v Pakistan,* referred to above.

State commitments in the UNFCCC and Paris Agreement have already been referenced in domestic climate litigation cases, and it can be anticipated that future domestic court or tribunal proceedings may well continue to focus on ensuring that states comply with their commitments and NDCs.[88]

(v) Claims Asserting Government Breaches of Constitutional or Human Rights

Parties around the world have also advanced climate change litigation by invoking fundamental or constitutional rights, or human rights recognised in statute or international conventions.

Express or implied constitutional rights to a healthy environment are now recognised in many countries.[89] For example, Kenya's Constitution provides for the right to a 'clean and healthy environment', which has been used to challenge government-approved farming projects.[90] In Argentina, native communities have brought constitutional or *amparo* claims to fight deforestation, relying on the constitutional right 'to a healthy and balanced environment'.[91] Turkey's Constitution imposes a duty on the state and citizens 'to improve the natural environment, to protect the environmental health and to prevent environmental pollution'.[92] Ecuador's Constitution grants rights to nature itself, declaring that nature ('Panchamama') has the right to maintain and regenerate its life cycles, structures, functions and evolutionary processes.[93] The Philippines specifically references its constitutional right to 'a balanced and healthful ecology' in the objectives of its newly adopted Rules of Procedure for Environmental Cases Act, which contains procedural rules aimed to facilitate environmental litigation.[94] France has adopted a separate Charter for the Environment with ten articles that create specific environmental rights and duties.[95] The African Charter on Human and Peoples' Rights states that '[a]ll peoples shall have the right to a general satisfactory environment favourable to their development'.[96]

Where the right to a healthy environment is not written into the constitution, some courts have identified the existence of inherent or 'unenumerated' constitutional rights to environmental and healthy lives. The Supreme Court of India has established and affirmed that the constitutional right to life and liberty includes the 'right of enjoyment of pollution-free water and air'.[97] India's National Green Tribunal has confirmed that citizens 'have a fundamental right to a wholesome, clean and decent environment' and that the 'State is under a Constitutional obligation to protect and improve the environment'.[98] Environmental rights have also been recognised in a number of cases by the Supreme Court of Pakistan.[99]

The 2015 *Urgenda* Hague District Court decision was based on the finding that the Dutch Government owed a tort duty of care in negligence to citizens to reduce emissions. Although it found Urgenda could not directly invoke the provision of the ECHR that provides a 'right

to life', that court took into account the human rights infringements that would result from the state's inaction as part of its interpretation and implementation of 'open private-law standards'. In October 2018, the Court of Appeal for The Hague decision dismissed the Dutch Government's appeal seeking to negate any duty on the part of the Dutch Government to reduce GHG emissions. The Court of Appeal based such a duty on the Dutch state by referencing the 'right to life' and 'right to family life' set out in Articles 2 and 8 of the ECHR:

> 'Urgenda and the State both agree that the emission of greenhouse gases, such as CO2, entails serious risks for life on earth. Urgenda therefore wants the State to take action to achieve lower emissions sooner than within the time frame currently envisaged by the State…
>
> The Hague Court of Appeal shares Urgenda's view on this matter. Considering the great dangers that are likely to occur, more ambitious measures have to be taken in the short term to reduce greenhouse gas emissions in order to protect the life and family life of citizens in the Netherlands. The Court of Appeal has based its ruling on the State's legal duty to ensure the protection of the life and family life of citizens, also in the long term. This legal duty is enshrined in the European Convention of Human Rights (ECHR)… In short, the 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. In light of this, the Court shall assess the asserted (imminent) climate dangers.'

Importantly, in its December 2019 *Urgenda* decision The Netherlands Supreme Court agreed with the Court of Appeal's finding as to the why threats to human rights caused by GHG emissions impose a duty on the state to protect its citizens from such threats. The following is the Supreme Court's summary of its findings on this issue:

> *'Protection of human rights based on the ECHR*
>
> The European Convention on the Protection of Human Rights and Fundamental Freedoms (ECHR) requires the states which are parties to the convention to protect the rights and freedoms established in the convention for their inhabitants. Article 2 ECHR protects the right to life, and Article 8 ECHR protects the right to respect for private and family life. According to the case law of the European Court of Human Rights (ECtHR), a contracting state is obliged by these provisions to take suitable measures if a real and immediate risk to people's lives or welfare exists and the state is aware of that risk.
>
> **The obligation to take suitable measures also applies when it comes to environmental hazards that threaten large groups or the population as a whole, even if the hazards**

> **will only materialise over the long term.** While Articles 2 and 8 ECHR are not permitted to result in an impossible or disproportionate burden being imposed on a state, those provisions do oblige the state to take measures that are actually suitable to avert the imminent hazard as much as reasonably possible. Pursuant to Article 13 ECHR, national law must offer an effective legal remedy against a violation or imminent violation of the rights that are safeguarded by the ECHR. This means that the national courts must be able to provide effective legal protection.'[100]

While the US federal Constitution does not contain a constitutional right to a healthy environment, it has been recognised as a constitutional right at the state level in six states.[101] As detailed above, the *Juliana* litigation concerns alleged breaches of constitutional rights.[102]

Claimants have sought to invoke human rights instruments in support of climate change litigation against governments, arguing that the state's contribution to climate change has resulted in a breach of their human rights (beyond a breach of the right to the environment, whether one exists at a domestic level or not). These claims invoke violations of the rights to life, health, dignity, work and adequate housing, among others.[103] Indeed, the preamble to the Paris Agreement states that State Parties should, when taking action to prevent climate change, 'respect, promote and consider their respective obligations on human rights'.[104]

The human rights impacts of climate change have also been raised as a relevant factor or consideration where courts are called on to interpret other rules or causes of action. For example, in *Urgenda v The Netherlands*, although the first level case was decided based on the finding that the Dutch Government owed a tort duty of care in negligence to citizens to reduce emissions, the court also took into account the human rights infringements that would result from the state's inaction as part of its interpretation and implementation of 'open private-law standards'.[105]

At the international level, claimants have used other international conventions in climate change proceedings. NGOs have petitioned the World Heritage Committee to list certain sites as being 'in danger' because of climate change threats,[106] by reference to the duty of State Parties under the UN Educational, Scientific and Cultural Organization (UNESCO) World Heritage Convention to protect and transmit World Heritage Sites to future generations.[107] Since 2004, organisations and individuals have drawn attention to this legal duty as it relates to mountain areas and coral reefs facing climate change threats, such as Mount Everest, the Peruvian Andes, the Blue Mountains (New South Wales), US and Canadian glaciers, the Great Barrier Reef and the Belize Barrier Reefs.[108]

2. CAUSATION

As discussed above, an issue that has often been raised by defendants in climate change litigation is that the causes and effects of harm are global in nature, making it difficult to establish that a particular act of the defendant has 'caused' the claimant's loss. The classic objection is that it is difficult to show that carbon emissions from any source or even any country are the material cause for environmental damage suffered by a particular claimant.

Causation issues have often arisen in public law cases dealing with environmental claims, and in such cases, courts have considered different arguments regarding the elements of causation. In such public law cases, particularly judicial review matters, the questions posed include whether climate change is sufficiently threatening that it should be taken into account in assessing or approving a particular project, which necessarily includes the consideration of whether climate change is causing, or may cause, environmental or other damage.

Due to the multiple difficulties of establishing causation in cases that rely upon scientific data, English courts have in some cases taken a 'flexible approach' to the 'but for' test, preferring determinations of fairness (towards the most vulnerable) and legal policy over rigid applications of 'but for' causation.[109] French courts have presumed causation in circumstances where the precise cause of harm cannot be identified.[110] In Germany there is a presumption of cause provision regarding certain environmental damage, which reduces the otherwise strict standard of proof of causation requiring the claimant to provide evidence that is sufficient to eliminate any reasonable doubt.[111] Similarly, in India courts have relaxed the 'but for'/material contribution test in tort law in certain circumstances.[112]

In *Urgenda v The Netherlands,* the Hague District Court held that 'a sufficient causal link could be assumed to exist between the Dutch greenhouse gas emissions, global climate change and the effects (now and in the future) on the Dutch living climate'. The Netherlands Supreme Court *Urgenda* decision noted that even though GHG emissions occur worldwide, 'The consequences of those emissions are also experienced around the world.' It found that under the United Nations Framework Convention on Climate Change:

> 'all member countries must take measures to prevent climate change, in accordance with each country's specific responsibilities and capabilities. **Each country is thus responsible for its own share. That means that a country cannot escape its own share of the responsibility to take measures by arguing that compared to the rest of the world, its own emissions are relatively limited in scope and that a reduction of its own emissions would have very little impact on a global scale. The State is therefore obliged to reduce greenhouse gas emissions from its territory in proportion to its share of the responsibility.** This obligation of the State to do "its part" is based on Articles 2 and 8 ECHR, because there is a grave risk that dangerous climate change will occur that will endanger the lives and welfare of many people in the Netherlands.'[113]

In Australia, the New South Wales Land and Environment Court has accepted that there was a 'sufficiently proximate link' between the mining of coal and GHG emissions to require such emissions to be considered when conducting the environmental impact assessment (EIA) permitting the construction of a coal mine.[114] In the US, the courts have held that causation can be established where the plaintiff showed that the injury was causally linked or 'fairly traceable' to the defendant's alleged misconduct and not the result of misconduct of some third party not before the court, and that causation need not be established with 'scientific certainty'.[115]

Further, in some of the early climate change claims seeking court orders that governments do more to mitigate GHG emissions, certain courts, including the US Supreme Court in 2007 and the Hague District Court in 2015, rejected government attempts to raise '*de minimis*' defences, that is, that the state in question only contributes to climate change to a small extent.[116] In *Massachusetts v EPA*, the US Supreme Court specifically rejected the EPA argument that the court should not determine if there was a legal duty on the EPA to regulate vehicle emissions because they were *de minimis* compared to those from other countries: '[a] reduction in domestic emissions would slow the pace of global emission increases no matter what happens elsewhere'.[117] In 2018 The Court of Appeal for The Hague also affirmatively rejected the state's '*de minimis*' defence and in 2019 it was also rejected by the Netherlands Supreme Court (see p 19 above).[118]

3. EVIDENCE

Rules of evidence have historically been developed to ensure the credibility and relevance of information presented to the court so as to facilitate natural justice and fairness between the parties. As such, it is recognised that they 'should be adapted to the purpose of the proceedings and to their circumstances'.[119] This is particularly relevant in government-related climate change proceedings, where it may be appropriate to adapt rules of evidence for the specific demands of such proceedings. This is recognised by the Oslo Principles on Global Climate Change Obligations, which require that 'States must participate in these proceedings in good faith and ensure that such proceedings are fair and efficient'.[120]

Specific rules of evidence are already adapted by different jurisdictions for different situations where appropriate. For example, the Supreme Court of Pakistan has noted that it may be inappropriate to apply procedural hurdles developed in traditional forms of *ex post facto* compensatory litigation when determining environmental disputes, particularly within human rights and/or public interest litigation.[121] In New Zealand the Family Court may receive 'any evidence' that the court considers may assist it, regardless of whether this would fall within standard evidence rules, given the particular subject matter at issue in a family court matter.[122] In France, where the burden of proof is on the victim, there are no rules of evidence.[123] The IBA's Rules on the Taking of Evidence in International Arbitration permit tribunals to decide on the 'admissibility, relevance, materiality and weight of evidence' in the particular case.[124] Under the International Convention on the Settlement of Investment Disputes, arbitral tribunals have the discretion to consider the relevance, weight and credibility of the evidence submitted by the parties, and to decide any disagreement about the admissibility of the evidence, allowing a certain degree of flexibility.[125]

The Model Statute offers several options for tailoring the rules of evidence to government-related climate change proceedings: (i) judicial notice and rebuttable presumptions (see **Article 6**); (ii) admissible evidence (see **Article 7**); (iii) assessment of risk and standards of proof (see **Article 8**); (iv) burden of proof and the precautionary principle (see **Article 9**); (v) EIA (see **Article 10**); and (vi) court-appointed experts (see **Article 15**).

(i) Judicial Notice and Rebuttable Presumptions

Despite the almost universal adoption by states in the UNFCCC and Paris Agreement of statements recognising the dangers of climate change and recognising scientific principles as to the need for urgent action to limit GHG emissions, claimants in climate change litigation are often required to affirmatively prove that climate change is occurring or that anthropogenic factors are the main cause of climate change.

Although there are already administrative and judicial decisions around the world that have found that anthropogenically induced climate change is occurring[126] or that the associated harms are 'serious and well-recognised',[127] being required to prove such scientific matters in every climate claim may be otherwise unduly burdensome on individual claimants and should be unnecessary in government-related proceedings when the position has been recorded in, for example, the Paris Agreement or Reports of the Intergovernmental Panel on Climate Change (IPCC). In this regard, the IPCC assessment reports[128] have been recognised as 'the most authoritative sources available for information on climate change'.[129]

It would be open for courts to apply a rebuttable presumption and accept the findings of the IPCC, unless the defendant government successfully challenges those findings, or to take judicial notice of a fact without having to adduce specific evidence on the point in the particular case.[130] In the *Juliana* litigation, the US Government accepted a number of specific climate change-related factual matters that were then noted by the Magistrate Judge, including, for example, that human activity is likely to have been the dominant cause of global warming since the 1990s.[131]

The IPCC has produced assessment reports on climate change. For a model article on the use of IPCC findings and conclusions in government-related climate change proceedings, see **Article 6** below.

(ii) Admissible Evidence

The challenges in presenting adequate factual proof in support of a claim arise 'across the spectrum of climate change litigation'.[132] In government-related climate change litigation, courts should be cognisant that various types of evidence may be necessary to resolve the factual issues in the case, and that a wide range of evidence may be both relevant and credible. However, courts are well equipped to consider specific scientific evidence that a particular physical phenomenon arose or is more likely to arise as a result of anthropogenic climate change, and that that phenomenon has already or is likely in the future to harm the claimant or a particular community.[133] For a model article on admissible evidence in government-related climate change proceedings, see **Article 7** below.

(iii) Assessment of Risk and Standards of Proof

Demonstrating the occurrence of climate change or the probability of particular damage can also create difficulties for claimants. In general, civil litigation requires proof on the balance of probabilities, sometimes described as by a preponderance of the evidence. However, there is precedent where, in determining the probability of an event occurring,

courts have found that a standard of proof premised upon the balance of probabilities is inappropriate;[134] rather, the evaluation is a 'matter of judgment'.[135] Further, the gravity of the potential harm can be relevant to the approach taken to evidence and standards of proof.[136] For example, the New Zealand Resource Management Act of 1991 requires the Environment Court to take into account 'any potential effect of low probability which has a high potential impact' when determining permit applications for activities or developments.[137] In Australia, the Supreme Court of Victoria found that with regards to environmental damage, '[a] risk which is not farfetched or fanciful is real and therefore foreseeable'.[138] For a model article on the assessment of risk and standards of proof in government-related climate change proceedings, see **Article 8** below.

(iv) Burden of Proof and the Precautionary Principle

One way in which the evidential burden on a claimant could be tailored for government-related climate change proceedings is through the use of the precautionary principle. Courts may be willing to accept that the evidential burden of proving a particular fact would fall upon the government defendant to demonstrate that its approach (eg, in not taking action to reduce GHG emissions) will *not* cause harm. Once a plausible risk of serious or irreversible harm has been shown, the evidential burden would shift to the government defendant 'to demonstrate that the threat does not exist or is negligible'.[139] This approach is already used in criminal and civil contexts,[140] and in public decision-making concerning the environment.[141] It is also provided for in certain legislation and national constitutions in relation to environmental decision-making[142] and where some harm has already occurred.[143] For a model article on the burden of proof and the precautionary principle in government-related climate change proceedings, see **Article 9** below.

(v) Environmental Impact Assessment

EIA is a widely applied planning and risk management process used to identify and evaluate the likely environmental consequences of initiatives such as proposed government policies, programmes and projects before a final decision is made to proceed with these. EIA is not only integral to the principle of transparency, but also to the environmental principles of prevention and precaution, by enabling decision-makers to anticipate and consider the environmental consequences, benefits and risks of such proposed initiatives in advance, and to help make wise decisions as to whether these initiatives should be modified or otherwise dealt with before they are implemented.

Various multilateral environmental agreements incorporate EIA obligations,[144] and the International Court of Justice has held that it is a requirement under international law to undertake EIA where there is a risk that a proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource.[145] The ILA Draft Principles relating to Climate Change[146] and the Oslo Principles on Global Climate Change Obligations[147] both endorse the use of EIA. The IBA recommended in its 2014 report that all states incorporate obligations to conduct EIA and or strategic

impact assessment into national (and, where appropriate, provincial, state and regional) legislation for significant projects with potential climate change or transboundary impact, and that states be encouraged to include a detailed discussion of GHG emissions in all EIAs of public projects.[148]

Notably, almost all nations with solid environmental regulatory frameworks contain some type of EIA at the national and/or state levels. In these instances, there is unlikely to be a need for new legislation, but since the Paris Agreement and the 2018 report of John Knox, the UN Special Rapporteur on Human Rights and the Environment, titled *Framework Principles On Human Rights and the Environment*[149] prepared for the UN Human Rights Council (UNHRC), it may be appropriate for national and subnational governments to consider making specific references in EIA legislation and policies to ensure climate change considerations are incorporated into EIA analysis, including possible human rights impacts and the ways in which these can be avoided or mitigated. The commentary on *Framework Principle* 8 of that report is of particular relevance:

> '21. To protect against interference with the full enjoyment of human rights, the assessment of environmental impacts should also examine the possible effects of the environmental impacts of proposed projects and policies on the enjoyment of all relevant rights, including the rights to life, health, food, water, housing and culture. As part of that assessment, the procedure should examine whether the proposal will comply with obligations of non-discrimination (framework principle 3), applicable domestic laws and international agreements (framework principles 11 and 13) and the obligations owed to those who are particularly vulnerable to environmental harm (framework principles 14 and 15). The assessment procedure itself must comply with human rights obligations, including by providing public information about the assessment and making the assessment and the final decision publicly available (framework principle 7), facilitating public participation by those who may be affected by the proposed action (framework principle 9), and providing for effective legal remedies (framework principle 10).'[150]

For a model article providing guidance on principles that governments may include in enhanced EIA evaluations consistent with their relevant laws to achieve more proactive policies and programmes to avoid serious effects of GHG emissions and human rights impacts associated with climate change, see **Article 10** below.

(vi) Court-Appointed Experts

Public interest claimants may struggle to access and pay for the expert evidence required in government-related climate change litigation, and one solution may be for the court to appoint an expert itself. This allows the court to constrain the scope of the expert evidence, as well as to direct the course of his/her enquiry. The court is also able to direct which party/parties are to be liable for the expert's costs.[151] In Australia, the New South Wales Civil Procedure Rules specifically provide for court-appointed experts, and this is commonly used in proceedings before the New South Wales Land and Environment Court.[152]

For a model article on court-appointed experts in government-related climate change proceedings, see **Article 15** below.

4. ACCESS TO INFORMATION

(i) Right to Environmental Information from Government Defendants

Finally, comprehensive information is critical in facilitating responsible decision-making, and in climate change litigation against government defendants, it is important to ensure that comprehensive and cogent evidence is before the court. The Universal Declaration on Human Rights and the International Covenant on Civil and Political Rights both establish positive rights to seek and to receive information.[153] Access to information may be facilitated through constitutional rights, Freedom of Information legislation, Environmental Impact Statements or Ombudsmen.[154]

Certain states already provide a specific constitutional right to information, including South Africa,[155] France[156] and India.[157] In other states, Freedom of Information Acts or specific Environmental Information Regulations[158] enable members of the public to obtain information from public bodies.[159] The 2018 report, *Framework Principles on Human Rights and the Environment*, prepared for the UN Human Rights Council by Professor John Knox, UN Special Rapporteur on Human Rights and the Environment, emphasised that 'States should provide public access to environmental information by collecting and disseminating information and by providing affordable, effective and timely access to information to any person upon request'.[160] In particular, he found that the right to seek and to receive information includes the following:

> '17 The human right of all persons to seek, receive and impart information includes information on environmental matters. Public access to environmental information enables individuals to understand how environmental harm may undermine their rights, including the rights to life and health, and supports their exercise of other rights, including the rights to expression, association, participation and remedy.
>
> 18 Access to environmental information has two dimensions. First, States should regularly collect, update and disseminate environmental information, including information about: the quality of the environment, including air and water; pollution, waste, chemicals and other potentially harmful substances introduced into the environment; threatened and actual environmental impacts on human health and well-being; and relevant laws and policies. In particular, in situations involving imminent threat of harm to human health or the environment, States must ensure that all information that would enable the public to take protective measures is disseminated immediately to all affected persons, regardless of whether the threats have natural or human causes.
>
> 19 Second, States should provide affordable, effective and timely access to environmental information held by public authorities, upon the request of any person or association, without the need to show a legal or other interest. Grounds for refusal

> of a request should be set out clearly and construed narrowly, in light of the public interest in favour of disclosure. States should also provide guidance to the public on how to obtain environmental information.'[161]

A national or subnational Ombudsperson may be able to request environmental information and/or investigate climate change-related issues as they pertain to the government.[162]

For a model article on the right to environmental information in government-related climate change proceedings, see **Article 11** below.

(ii) Discovery/Disclosure

The importance of public access to information held by governments in environmental decision-making is increasingly recognised. As noted above, a number of states provide a specific constitutional or statutory right to environmental information.[163] It may, therefore, be appropriate in climate change proceedings against governments for individuals, particularly public interest litigants, to be able to seek disclosure of information from the government relevant to the dispute through a formal discovery or disclosure phase in the proceedings. This could be permitted through pre-litigation disclosure (including disclosure that would inform the decision whether to litigate) specified in court rules[164] or developed through jurisprudence.[165]

Once litigation has commenced in common law jurisdictions, there is a presumption that, subject to certain exceptions, all relevant documents should be disclosed (including England and Wales, the US, Australia, New Zealand and most Canadian common law provinces). There is an obligation on defendants in these jurisdictions to search for and disclose all relevant documents currently or formerly in a party's control.

For model articles on pre-litigation disclosure and disclosure in government-related climate change proceedings, see **Articles 12 and 13** below. It should be noted that any suggested procedural modifications in these articles are not intended to create a new right to discovery or disclosure where one does not currently exist.

(iii) Right to Obtain Reasons for Decision

Administrative decision-makers are not always required to give reasons for their decisions,[166] and a failure to do so may hinder prospective claimants and complicate litigation. Certain jurisdictions provide that in proceedings in which a public authority's decision is challenged, the court may direct it to make available to any other party its reasons for its decision.[167] For a model article on the right to obtain reasons for a decision in government-related climate change proceedings, see **Article 14** below.

C. Remedies Against Government Defendants

For climate change litigation against government defendants to be an effective process for individuals and communities, potential judicial remedies may need to be adapted to the particular factual circumstances. For example, in order to mitigate a source of climate change or require a state to implement environmental legislation, forward-looking injunctive relief

may often be more effective than an *ex post facto* remedy. In some cases, a declaration of rights might also be appropriate: courts may find that certain factual scenarios permitted or acquiesced in by the state are a violation of domestic laws and rights. In other cases, the most effective remedy might be subsequent judicial review of executive action (eg, the state's failure to implement environmental legislation).[168]

Climate change legislation could provide the flexibility for a court to award such relief against government defendants as is warranted by the circumstances of the dispute, including: (1) injunctive relief to mitigate or prevent current or future threats to the environment; (2) remedies that can review and set aside decisions of or omission to act by public authorities or direct the behaviour of public authorities; (3) declaratory relief stating the legal position or rights of the parties; and/or (4) effective court supervision of court ordered measures to be taken.

A combination of these remedies may also be available to a court. For example, in the Canadian Province of Ontario, the 1993 Environmental Bill of Rights provides the court with broad discretion to grant many non-monetary remedies, including injunctions and other forms of equitable relief in performance, such as the implementation of restoration plans.[169] Similarly, India's Supreme Court and National Green Tribunal have long interpreted their power to grant remedies broadly where constitutional fundamental rights have been breached.[170]

In some of the key climate change cases identified above, a range of remedies has been granted against governments. In *Asghar Leghari v Pakistan*, the court directed several government ministries each to nominate 'a climate change focal person' to help to ensure the implementation of the relevant framework, and to present a list of action points by a specified date; and created a Climate Change Commission composed of representatives of key ministries, NGOs and technical experts to monitor the government's progress.[171] In *Urgenda*, by contrast, the Hague District Court adopted a more conservative approach, concluding that the government would 'retain full freedom… to determine how to comply with [the court's] order'.[172]

For a model article on potential legal remedies available in government-related climate change proceedings, see **Article 18** below.

Part B: The Approach and Articles of the Model Statute for Proceedings Challenging Government Failure to Act on Climate Change

The Model Statute is one avenue for individuals and communities impacted by climate change to spur their government to take action or do more to address climate change. Of course, individuals and communities can also seek legislative and regulatory change. If adopted by national or subnational governments (eg, a Canadian province or US state), the Model Statute should provide a path forward.

Although there have been some significant successes to date in prosecuting climate change litigation against governments who fail to act, climate change litigants face substantial, and in many ways unique, barriers to their claims. These obstacles were identified by the IBA's Task Force on Climate Change Justice and Human Rights in its report *Achieving Justice and Human Rights in an Era of Climate Disruption,* referenced above. That Task Force noted that climate change litigation strategies faced numerous difficulties relating to the 'types of diffuse, non-specific, unpredictable and non-causative harms caused by climate change',[173] which in turn resulted in difficulties establishing, for example, claimants' standing or a causal link between harms and GHG emissions. The Task Force report noted that these legal barriers have significant negative implications for the achievement of climate change justice for individuals and communities.[174] The Task Force therefore recommended that a Working Group be formed to draft a Model Statute, to 'outline legal rights and remedies in respect of climate change, including injunctive relief to mitigate or prevent current or future threats, declaratory relief, and judicial review'.[175]

The Model Statute is therefore intended to: (1) assist individuals and communities to better access domestic courts to challenge government action or inaction on climate change; (2) assist domestic courts to evaluate such claims in respect of existing statutory or other obligations, whether brought against the state itself or state-instrumentalities; and (3) to provide appropriate relief against government entities to take action to address climate change. In that regard, the Model Statute focuses on issues of claimants' standing, evidence, permissible defences, and available remedies and costs.

Accordingly, the Model Statute does not set out new stand-alone causes of action to promote climate change mitigation or adaptation.[176] In addition, although the Model Statute considers a range of remedies, it specifically does not consider historical damages claims; in that regard, it takes note of the Task Force's expressed preference for litigation that 'secures declaratory or interim relief against states, whereby individuals can hold governments to account for their domestic regulation of GHGs'[177] over 'ad hoc litigation against individual emitters that does not address broader climate concerns'.[178] Accordingly, the Model Statute does not provide for claims or remedies against private parties. Because the Model Statute is specifically drafted with government actors in mind, it does not address and is not intended to be applicable to actions against private parties, which can raise different types of issues regarding jurisdiction, standing, causation, redressability and, if applicable, remedies.

Finally, the Model Statute is presented in a modular way so that nations can adopt portions of it to fit their judicial, regulatory and government systems. Thus, the draft articles below are intended to serve as a resource for legislatures, government departments, judiciaries and litigants considering the complex issues that emerge when pursuing climate change

litigation before courts and other tribunals.[179] The articles might be incorporated wholesale or individually into domestic rules of court and procedural rules, or into environmental or climate change legal instruments. Alternatively, they may be referred to by judges or arbitrators as an interpretive or reference tool, thereby contributing to the development of best practices to prevent future climate change and allow greater access to justice.

The Model Statute is, therefore, best described as a 'menu' of options as opposed to a complete code. Moreover, it is not intended to restrict states that already have advanced environmental legislation or open access to the courts, but instead to highlight examples for other states to follow as appropriate in their particular judicial and legal context. Finally, nothing in this Model Statute or commentary is intended to override or supersede existing laws and frameworks, or to influence pending legal actions (although this could be the stated choice of any jurisdiction choosing to accept it). The Model Statute is in essence a template that, if adopted in whole or in part, can clarify certain jurisprudence issues in the context of climate change actions against governments on a going-forward basis.

Model Statute Articles for Proceedings Challenging Government Failure to Act on Climate Change

Article 1 Definitions

In this Model Statute:

(a) 'Adverse effects of climate change' means changes in the physical environment or biota resulting from climate change that have or may likely have or contribute to significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on socio-economic systems or on human health and welfare.[180]

(b) 'Climate change' means a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and is in addition to natural climate variability observed over comparable time periods (as defined in the United Nations Framework Convention on Climate Change (UNFCCC), Article 1(2)). As per the UNFCCC, this human activity may relate to both sources (any process or activity that results in the release of a greenhouse gas (GHG), an aerosol or a precursor of a GHG into the atmosphere) and sinks (any process, activity or mechanism that removes a GHG, an aerosol or a precursor of a GHG from the atmosphere).

(c) 'Government-related climate change proceedings' means any matter brought against a State or State body or before a domestic or international court or tribunal in which a party makes a legal, constitutional or human rights claim, or seeks a declaration, judicial interpretation, order or other form of non-monetary relief in respect of climate change or the likely adverse effects of climate change, including:

  (i) the need, function, power, duty or obligation to assess or further consider Government projects or policies, laws and regulations that may contribute to or increase the risk of climate change or the adverse effects of climate change; be affected by climate change; or contribute to the mitigation or prevention of climate change or the adverse effects of climate change;

  (ii) legal instruments, and the enforcement of legal instruments, that may contribute to mitigation or prevention of, or adaptation to climate change or to the adverse effects of climate change; or

  (iii) non-monetary remedies or measures for Government actors to prevent and redress the adverse effects of climate change or to restore or rehabilitate the composition, resilience or productivity of natural and managed ecosystems or the operation of socio-economic systems or human health and welfare.

(d) 'Costs' means lawyers' fees, court fees, disbursements and other expenses related to litigation.

(e) 'Information' means any information in written, visual, aural, electronic or any other material form.[181]

(f) 'Legal instrument' includes constitutional provisions, legislation, common law, civil codes, Indigenous law and principles of international environmental law, executive orders and subordinate legislation including, but not limited to, regulations, rules, policies or administrative procedures or practices authorised or adopted under a legal instrument or that are used to implement Governmental policies.

(g) 'Paris Agreement' means the Paris Agreement adopted by the Parties to the United Nations Framework Convention on Climate Change on 12 December 2015, *opened for signature* 22 April 2016, UNTS 54113 [FCCC/CP/2015/10/Add.1], and entered into force on 4 November 2016 (30 days after the date on which at least 55 parties to the Convention accounting in total for at least an estimated 55 per cent of the total global GHG emissions have deposited their instruments of ratification, acceptance, approval or accession with the depositary).

(h) 'Public interest litigation' refers to any Government-related climate change proceeding (as defined above) that is pursued against the Government or public agencies by or on behalf of individuals, climate change, environmental or community organisations, or any other entity, association or organisation with the objective to protect the public interest through mitigation of, adaptation to or otherwise responding to the likely adverse effects of climate change.

(i) 'Sustainable development principles' include the precautionary principle and the principles of sustainable use, integration, intergenerational equity, conservation of biological diversity and ecological integrity, and internalisation of external environmental costs, including the polluter pays principle and the user pays principle, as these are understood under international environmental law.

Article 2 Applicability and Interpretation

[2.1] This Act and its principles are intended to facilitate access to justice in Government-related climate change proceedings, and are not intended to apply to climate change proceedings against private parties.

[2.2] For greater clarity, this Act and its principles apply to Government-related climate change proceedings although a private actor is found by the court or tribunal to be a necessary party for the effective adjudication of the Government-related claim or a private actor seeks leave to intervene.

[2.3] In cases of doubt as to the interpretation of any Act or legal instrument, the Court or tribunal shall prefer the interpretation most favourable to protecting the environment from any likely adverse effects and adverse effects of climate change.

[2.4] In interpreting any legal instrument in Government-related climate change proceedings, the Court or tribunal shall consider the relevance of fundamental human rights, such as but not limited to the right to life, security of the person and the protection of public health and the natural environment, from the adverse effects of climate change.[182]

Article 3 Rules of Procedure

In Government-related climate change proceedings, the Court may, by order, on such notice as the Court determines in the circumstances is appropriate under laws, regulations and procedures, interpret any requirement of rules of procedure and give such directions as it thinks fit to achieve the interests of justice.[183]

Article 4 Standing

[4.1] Any person may bring proceedings to enforce rights, duties or obligations under, restrain a breach or threatened or apprehended breach of, or remedy a breach of a legal instrument in Government-related climate change proceedings, whether or not any right of that person has been or may be infringed by or as a consequence of that breach.

[4.2] Government-related climate change proceedings may be brought under Article 4.1 by a person on their own behalf or on behalf of another person (with their consent).

[4.3] Any person is entitled to contribute to or provide for the payment of the legal costs and expenses incurred by the person bringing the Government-related climate change proceedings, provided that the plaintiffs or applicants themselves retain control of the proceedings, and subject to applicable ethical standards for counsel, as well as any local rules and laws related to anti-corruption.

[4.4] Any person may bring Government-related climate change proceedings if the person can establish: (a) a serious issue is raised in the proceedings; and (b) a genuine interest in the issue and, in the case of an organisation, an objective or mandate to protect the public interest.

[4.5] Any person meeting the qualifications in Article 4.4 may bring Government-related climate change proceedings on behalf of minors or future generations.

[4.6] The State (through the Attorney-General or other representative of the State) may bring climate change proceedings on behalf of its people.

[4.7] In federal states, the State/Province (through its Attorney-General or other representative of the State) may bring Government-related climate change proceedings against the (federal) State on behalf of the State/Province's people, and vice versa.

Article 5 Standing for Interveners and Amicus Curiae

[5.1] On appropriate notice to the parties, the Court may grant standing to intervene to any person who demonstrates a genuine interest in an issue raised in a Government-related climate change proceeding and, in the case of an organisation, the objective or mandate to protect the public interest (the 'Intervening Party'). The Court may permit the Intervening Party, consistent with applicable procedural rules and guidelines, to:

(a) make submissions on interlocutory and case management issues;

(b) file submissions and evidence in the substantive proceedings; and/or

(c) call and cross-examine witnesses.

[5.2] On appropriate notice to the parties, the Court may grant standing to any person to participate as *amicus curiae* in Government-related climate change proceedings and, if granted, that person may participate to the extent and on the terms and conditions granted by the Court.

Article 6 Judicial Notice, Rebuttable Presumptions and Reports of the Intergovernmental Panel on Climate Change (IPCC)

[6.1] Unless evidence is permitted to be given to the contrary in accordance with Article 6.3 below, a Court shall, in Government-related climate change proceedings, take judicial notice of the findings and conclusions reached by the Intergovernmental Panel on Climate Change (IPCC) in its Assessment Reports or Special Reports.

[6.2] A Court shall in such proceedings accept the findings and conclusions contained in the IPCC Assessment or Special reports as prima facie proof of the findings.

[6.3] Any party wishing to challenge any statement contained in reports of the IPCC shall require leave of the Court. In such event:

(a) leave shall not be granted unless the challenging party can demonstrate a reasonable prospect of success;

(b) that challenge shall not unduly delay the disposition of the substantive claim or otherwise cause injustice to the plaintiff;

(c) the challenging party bears the evidential burden of proof; and

(d) before leave is granted the court may require the challenging party to provide in advance sufficient funds for the responding parties to retain experts to respond to such challenges and conclusions.

Article 7 Admissible Evidence

[7.1] In Government-related climate change proceedings, the following are admissible as evidence:

(a) records and other material prepared for and by Government bodies that report on:

(i) operations or activities that may result in GHG emissions, whether or not made in response to Government reporting requirements;

(ii) the measurement, modelling or estimation of GHG emissions; or

(iii) any other information involving GHG emissions and the potential risks such emissions may pose to the environment, health or human rights;

(iv) peer-reviewed scientific studies;

(v) statistical information or information derived from sampling;

(vi) information derived from the use of climate models (including global, coupled or regional models); and

(vii) epidemiological, sociological and economic studies.

[7.2] In Government-related climate change proceedings, the evidence referred to in Article 7.1 may, in the discretion of the Court, be regarded as sufficient to satisfy relevant evidentiary standards for the court to adjudicate relief sought, including the quantification of any mitigation or adaptation required.[184]

Article 8 Assessment of Risk and Standards of Proof

[8.1] In determining the appropriate relief to be granted in Government-related climate change proceedings, the Court shall undertake a risk assessment with regard to:

(a) the likelihood of a threat being realised;

(b) the severity of the consequences if the threat is realised; and

(c) the time at which the threat may be realised.

[8.2] In particular, the Court shall take into account any potential effect with a low probability but a significant potential impact.

[8.3] In making evaluations concerning the matters in Article 8.1(a)–(c) above, the Court shall not require proof that the matter is more probable than not.

Article 9 Burden of Proof and the Precautionary Principle

[9.1] In Government-related climate change proceedings, the Court shall apply the precautionary principle except where the Court finds and articulates why its application is unnecessary or inappropriate in the particular claim.

[9.2] The precautionary principle means that where there are threats of serious or irreversible environmental damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent, mitigate or adapt to climate change or the likely adverse effects of climate change or to remedy any likely or resulting damage.

[9.3] Where the precautionary principle applies, the party challenging the application of the precautionary principle bears the evidential burden of proving that:

(a) the threat of serious and irreversible damage is not a real risk or is negligible; and

(b) regardless of the finding in Article 9(3)(a), whether any measures the challenging party proposes to prevent, mitigate or adapt to climate change or remedy any resulting damage will be effective.

Article 10 Environmental Impact Assessment Review

[10.1] In this Article, 'initiative' means a public policy, programme, law, regulation or Government-owned or controlled project, but does not include a private sector project, even if that project requires a Governmental or statutory approval, licence or financial support.

[10.2] Any person may petition the Court to assess the availability and adequacy of mechanisms under current laws whereby members of the public may participate in and seek review of an environmental impact assessment (EIA) or equivalent public process in respect of a Government initiative.

[10.3] In considering the availability and adequacy of such EIA mechanisms, the Court may consider the following principles:

(a) whether the EIA is carried out at early planning stages of the initiative before irreversible commitments or decisions by Government, using a process that facilitates public and Indigenous community involvement and incorporates due regard for and response to their views and concerns; and

(b) whether the EIA:

(i) identifies and considers the implications of the initiative having regard to applicable law and principles of international environmental law pertaining to climate change mitigation and adaptation such as those contained in the UNFCCC and Paris Agreement; commitments made by the State or subnational State entities with respect to mitigation of carbon and other sources of GHG emissions under such agreements and sustainable development principles;

(ii) identifies, describes and assesses the likely direct, indirect and cumulative effects of the initiative with respect to climate change, the environment and on human rights, including effects on the right to life, health, food, water, housing and culture; as well as Indigenous effects, and of measures necessary to prevent such effects including modifications of or alternatives to the initiative, including not proceeding with the initiative;

(iii) evaluates the significance of impacts likely to be generated as a consequence of predicted changes in the climate based on a combination of:

1. scenarios: an impact's likelihood under a range of climate scenarios;
2. vulnerability of receptors: the vulnerability of people, communities and ecosystems to existing climatic variations; and
3. resilience: a receptor's ability to absorb such disturbance and continue to function; and

(iv) evaluates the costs of adapting to a range of climate scenarios, mitigation alternatives and the costs of not adapting to such scenarios.

[10.4] In the context of considering an application under this Article for an Order to Government to establish or revise an EIA process, without prejudice to all available remedies, the Court may, as appropriate and consistent with the Court's authority to issue remedies, issue an order directed at relevant Government entities to consider whether EIA processes in respect of Government initiatives should be established or revised having regard to the factors above and whether a proposed initiative should be deferred in the interim.

Article 11 Access to Environmental Information

[11.1] Subject to the Court's discretion, every person should have affordable, effective and timely access to Government-held information related to climate change and the potential adverse impacts of climate change, including access to reproduce and retain such information held by:

(a) a State (including Government departments, agencies and officials) or a public authority that it appears to be likely to have or to have had in its possession, custody; or

(b) a private entity that receives public funds or engages in public functions or the provision of public service (provided that in respect of private entities, the information shall relate to the public funds, benefit, functions or service).[185]

[11.2] The Court may, on its own motion or on application by a Government-related climate proceeding claimant or plaintiff, require production from the State, a public authority or private entity referred to in Article 11.1 of all information that may be relevant to the Government-related climate change proceedings without cost and within a reasonable time, subject to Article 11.3.

[11.3] In determining the issuance of an order under this Article and providing access to such documents to the claimant or plaintiff, the Court shall consider any assertions of privilege that may be raised and may, after considering the validity of such assertions under applicable laws, guidance and case law, require production of such documents and provide access to them to the claimant or plaintiff on such terms and conditions as the Court determines appropriate.

Article 12 Pre-litigation Disclosure

[12.1] In advance of the commencement of a formal Government-related climate change proceeding, the Court may order in respect of a Government defendant:

(a) inspection or photographing of any property that may be relevant to climate change litigation;

(b) preservation, custody and/or detention of such evidence; and/or

(c) the taking of samples of any such evidence.

[12.2] The Court may also order a Government defendant in advance of the commencement of a Government-related climate change proceeding (including Government departments, agencies and officials) that appears to be likely to have or to have had in its possession, custody or power any documents that are relevant to an issue arising or likely to arise out of that litigation to:

(a) disclose whether those documents are in their possession, custody or power; and

(b) produce such of those documents as are in their possession, custody or power to the applicant; the applicant's legal advisers; and/or the applicant's expert or other professional adviser, on such terms and conditions as the Court may find appropriate having regard to an asserted privilege claim or other protections recognised by law.[186]

[12.3] In deciding whether to make an order under Article 12.1 or 12.2, the Court shall consider:

(a) the benefits of making the order;

(b) the cost consequences of making the order; and

(c) whether it is in the interests of justice for the order to be made.

[12.4] The suggested procedural modifications in this Article are not intended to create a new right to discovery or disclosure where one does not currently exist.

Article 13 Disclosure of Documents

[13.1] Upon the application of any party in a Government-related climate change proceeding, the Court may order any Government agency or the Government, in respect of any documents which are or are likely to be relevant to an issue arising or likely to arise in Government-related climate change proceedings, to:

(a) disclose whether such documents are in its possession, custody or power; and

(b) produce such of those documents as are in its possession, custody or power to the applicant, the applicant's legal advisers and/or the applicant's expert or other professional adviser, on such terms and conditions as the Court considers appropriate in respect of any asserted privilege or other protections recognised by law.[187]

[13.2] Upon application of any party in a Government-related climate change proceeding in a foreign or international tribunal, and upon showing of good cause, the Court may order any officer of the State to give their testimony or statement or to produce a document or other thing for use in that Government-related climate change proceeding in a foreign or international tribunal.[188]

[13.3] In deciding whether to make an order under Article 13.1 or 13.2, the Court shall consider:

(a) the benefits of making the order;

(b) the cost consequences of the order; and

(c) whether it is in the interests of justice for the orders to be made

[13.4] The suggested procedural modifications in this Article are not intended to create a new right to discovery or disclosure where one does not currently exist.

Article 14 Right to Obtain Reasons for a Decision

[14.1] In any Government-related climate change proceeding in which a public authority's decision (including a policy determination or refusal or omission to act) is challenged, the Court may:

(a) order the public authority to make available to any other party any document that records matters relevant to the decision;

(b) order the public authority to make available to any other party a written statement setting out the public authority's reasons for the decision, being a statement that includes:

(i) the public authority's findings on any material questions of fact;

(ii) the evidence on which any such findings were based;

(iii) the public authority's consideration of the applicable law;

(iv) the reasoning process that led to the decision; and

(v) order particulars, discovery or interrogatories.[189]

[14.2] Nothing in Article 14.1 shall be construed to require the Government to create documentation that does not already exist as part of its normal decision-making process.

Article 15 Court-Appointed Experts

[15.1] In Government-related climate change proceedings, the Court may, at any stage of the proceedings:

(a) appoint a duly-qualified expert to inquire into and report on an issue;

(b) authorise the expert to inquire into and report on any facts relevant to the inquiry; and

(c) give such directions (including instructions concerning any examination, inspection, experiment or test) as the court thinks fit.

[15.2] The remuneration of a Court-appointed expert is to be fixed by agreement between the parties affected and the expert or, failing agreement, by, or in accordance with the directions of, the Court.

[15.3] Subject to Article 15.4, the parties affected are jointly and severally liable to a Court-appointed expert for his or her remuneration.

[15.4] The Court may direct when and by whom a Court-appointed expert is to be paid.

[15.5] Article 15.3 and 15.4 do not affect the powers of the Court as to costs.[190]

Article 16 Restrictions on Defences Available in Government-Related Climate Change Proceedings

[16.1] In Government-related climate change proceedings, it is not a defence for the Government to show that it is not the sole or substantial contributor to GHG emissions, whether by allowing or increasing a source of or reducing a sink for GHGs.[191]

[16.2] In Government-related climate change proceedings, it is not a defence for the Government to show that it has only allowed or emitted a small quantity or volume of GHGs, has caused or permitted only a minor degree of harm, or is responsible for a small proportionate share of the GHG emissions.

[16.3] In Government-related climate change proceedings, it is not a defence to assert that Government regulation of climate change is non-justiciable as a political, policy, executive or legislative function.

Article 17 Ability to Sue the State

[17.1] Any person, having or asserting a claim or demand against the State (not being a claim or demand against a statutory corporation representing the State) may bring climate change proceedings against the State, any Government agency or State-owned enterprise in any competent Court, subject to the standing provisions of Article 4.[192]

[17.2] Climate change proceedings against the State shall be commenced in the same way, and the proceedings and rights of the parties in the case shall as nearly as possible be the same, and judgment and costs shall follow or may be awarded on either side, as in an ordinary case between subject and subject, subject to such variation as may be found appropriate by application of the principles and provisions of this Statute by the Court or tribunal hearing the proceeding including, but not limited to, any order or direction as to fees or costs made by the Court as provided in Articles 19–23 below or as to remedies in Article 18.[193]

Article 18 Legal Remedies Available in Government-Related Climate Change Proceedings

[18.1] In addition to its pre-existing powers to grant remedies and relief, and consistent with applicable laws, when determining Government-related climate change proceedings, the Court may, in respect of a Government defendant:

(a) set aside, quash or overturn any decision of a public body or overturn any decision of a public body;

(b) order any Government defendant to take such steps as are specified in the order within such time as is so specified:

(i) to cease, modify or establish GHG emissions-related processes, programmes, operations, policies or procedures;

(ii) to prevent, control, abate or mitigate any likely adverse effects of climate change caused or contributed to by the conduct, regulation or omissions of the Government defendant;

(iii) to remedy any likely adverse effects of climate change caused, regulated or contributed to by the conduct or omission of the Government defendant;

(iv) to prevent the continuance or reoccurrence of the conduct or omission of the Government defendant;

(v) enforce any right, obligation or duty conferred or imposed by a legal instrument relating to climate change, the environment or related human rights;

(vi) review the exercise of any function or privilege conferred;

(vii) grant any declaratory relief, including making declarations in relation to any right, obligation or duty or the exercise of any function conferred; or

(viii) make any other order as the Court thinks fit to restrain or remedy the conduct of the Government defendant.

[18.2] If the Court makes a mandatory order under Article 18(1) in respect of a Government defendant, the Court may monitor the execution of its order. In such circumstances, the Court may:

(a) order a public authority to monitor the execution of the order on its behalf;

(b) order the production of written reports to the court at appropriate intervals; and

(c) order that any report be supported by affidavit as to the accuracy and completeness of the report.

[18.3] If the Court finds that a breach, or a threatened or apprehended breach, of an Act, a legal instrument, or any other law or any legal right, duty or obligation has been, will be or is likely to be committed by a Government defendant, it may make such order as it thinks fit to remedy or restrain the breach.[194]

[18.4] Without limiting the powers of the court under Article 18.3 above, an order made under that Article may require a Government defendant to take such steps, within such time as is so specified, including to:

(a) prevent the continuance or recurrence of the breach;

(b) prevent, control, abate or mitigate any harm to the environment caused by the commission of the breach; or

(c) remedy to the extent reasonably practical any harm to the environment caused by the commission of the breach.

[18.5] The Court may, at any stage of Government-related climate change proceedings, on terms, grant an interim or an interlocutory injunction or stay where it appears to the Court to be just and convenient to do so.

[18.6] In any Government-related climate change proceedings on an application for an interim or interlocutory injunction or interlocutory order, and if it is satisfied that the proceedings have been brought in the public interest, the Court may decide not to require the applicant to give any undertaking as to damages in relation to: [195]

(a) the injunction or order sought by the applicant; or

(b) an undertaking offered by the respondent in response to the application.

Article 19 Waiver of Court Fees

[19.1] The payment of Court fees by plaintiffs or applicants in Government-related climate change proceedings may, at the Court's discretion, be waived.

[19.2] The payment of Court fees by plaintiffs in Government-related climate change proceedings shall, unless the court determines otherwise, be deferred until after judgment.

Article 20 Maximum and Protective Cost Orders

[20.1] In Government-related climate change proceedings, the Court may grant and review a maximum costs order specifying the maximum amount of costs that any party in public interest litigation may recover from any other party.

[20.2] The Court may grant and review a protective costs order specifying the maximum amount of costs that the plaintiff or applicant in public interest litigation may be liable to pay.

Article 21 Orders for Security for Costs

[21.1] The Court is not to require a plaintiff or applicant in Government-related climate change proceedings to give security for any other parties' costs unless the Court concludes there are unique and exceptional circumstances in which such an order is clearly required.

Article 22 Advance Cost Orders

[22.1] At any stage in Government-related climate change proceedings, the Court has discretion to order a party to public interest litigation to pay advance costs where:

(a) the advance costs would be paid to the plaintiff in the public interest litigation;

(b) the claim is prima facie meritorious;

(c) the matters raised are of public importance; and

(d) it is just and convenient to make such orders.

[22.2] At any stage in the proceeding, the Court has discretion to review and amend advance cost orders.

Article 23 Cost-Shifting in Final Costs Orders

[23.1] In Government-related climate change proceedings, except in exceptional circumstances, the Court is:

(a) to order an unsuccessful Government defendant to pay the costs of the successful plaintiff or applicant;

(b) not to order the unsuccessful plaintiff or applicant to pay the costs of any successful Government defendant; and

(c) to consider whether the unsuccessful plaintiff should be awarded costs against the Government defendant for upholding or advancing an important public interest issue or the law relating to climate change, the environment or human rights.

Appendix A

Examples of Provisions on Costs

Waiver or Deferral of Court Fees

Although court fees are usually only a fraction of total litigation costs, some jurisdictions require courts to waive or defer court fees in certain circumstances. In most jurisdictions, the court at least has discretion to waive, postpone or remit court fees.[196] For example, in Indonesia, no fees are levied to lodge a claim before the Constitutional Court.[197] In The Philippines, the Rules of Procedure for Environmental Cases allow plaintiffs to defer payment of 'filing and other legal fees' until after judgment and constitutes those court fees as 'a first lien on the judgement award'.[198] In the EU, the Aarhus Convention, which provides rights regarding environmental decision-making by public authorities, simply states that the court procedures shall not be 'prohibitively expensive'.

Example – The Philippines

Rule 2, Section 12 of the Rules of Procedure for Environmental Cases Act allows for deferred payment of filing and other legal fees:

> *Section 12. Payment of filing and other legal fees. The payment of filing and other legal fees by the plaintiff shall be deferred until after judgment unless the plaintiff is allowed to litigate as an indigent. It shall constitute a first lien on the judgment award.*
>
> *For a citizen suit, the court shall defer the payment of filing and other legal fees that shall serve as first lien on the judgment award.*[199]

Example – Kenya

Article 22(3) of the Constitution of Kenya enables a prospective plaintiff to apply to the court to be exempt from paying a court fee before filing the substantive documents to initiate the legal action:

> *(3) The Chief Justice shall make rules providing for the court proceedings referred to in this Article, which shall satisfy the criteria that—*
>
> *(a) the rights of standing provided for in clause (2) are fully facilitated;*
>
> *(b) formalities relating to the proceedings, including commencement of the proceedings, are kept to the minimum, and in particular that the court shall, if necessary, entertain proceedings on the basis of informal documentation;*
>
> *(c) no fee may be charged for commencing the proceedings;*
>
> *(d) the court, while observing the rules of natural justice, shall not be unreasonably restricted by procedural technicalities; and*
>
> *(e) an organisation or individual with particular expertise may, with the leave of the court, appear as a friend of the court.*[200]

The High Court of Kenya has exempted a prospective plaintiff from paying a filing fee or any further fee where the petition relates to public interest litigation, is brought to advance legitimate public interest, will contribute to a proper understanding of the law, and is not aimed at giving the plaintiff a personal gain.[201]

Example – EU

Article 9(4) of the Aarhus Convention, which provides rights regarding environmental decision-making by public authorities, states that the court procedures shall not be 'prohibitively expensive':

> *4. In addition and without prejudice to paragraph 1 above, the procedures referred to in paragraphs 1, 2 and 3 above shall provide adequate and effective remedies, including injunctive relief as appropriate, and be fair, equitable, timely and not prohibitively expensive. Decisions under this article shall be given or recorded in writing. Decisions of courts, and whenever possible of other bodies, shall be publicly accessible.*[202]

Maximum and Protective Cost Orders

In several common law jurisdictions, parties can seek an order limiting the amount that they can be ordered to pay to the opposing party at the conclusion of the litigation. A 'maximum costs order' refers to an order capping the amount that all parties will be liable to pay, whereas a 'protective costs order' refers to an order capping (or eliminating entirely) the amount that the party acting in the public interest will be liable to pay.[203] While these orders provide the certainty that poorly funded plaintiffs often require in climate change litigation, they may not be as relevant in civil law jurisdictions where costs schedules already provide certainty on what the adverse costs awards will be.[204]

In jurisdictions where maximum and protective costs orders do exist, challenges in their implementation remain. First, public interest litigants may find the motion seeking the costs order itself to be prohibitively expensive.[205] Second, if the motion is brought, courts can be reluctant to grant such orders.[206] Finally, courts may need to be cautious not to grant maximum costs orders that inadvertently benefit defendants by limiting their exposure to costs while reducing the amount that the public interest litigant can collect if successful. The commentary below provides examples of the common law factors and procedural rules that allow for maximum and protective cost orders.

Example – Canada

The Supreme Court of Canada has developed numerous factors for judges to consider when determining whether to award protective costs orders, such as whether the party *'genuinely cannot afford to pay for the litigation'*, whether the issues *'are of public importance, and have not been resolved in previous cases'* and whether *'no other realistic option exists for bringing the issues to trial'*.[207]

Example – Australia

Rule 42.4 of the Uniform Civil Procedure Rules 2005 allow New South Wales courts to make an order limiting the amount of costs that a party can recover from another, whether requested by a party or on its own motion:

(1) The court may by order, of its own motion or on the application of a party, specify the maximum costs that may be recovered by one party from another.

(2) A maximum amount specified in an order under subrule (1) may not include an amount that a party is ordered to pay because the party:

(a) has failed to comply with an order or with any of these rules, or

(b) has sought leave to amend its pleadings or particulars, or

(c) has sought an extension of time for complying with an order or with any of these rules, or

(d) has otherwise caused another party to incur costs that were not necessary for the just, quick and cheap:

(i) progress of the proceedings to trial or hearing, or

(ii) trial or hearing of the proceedings.

(3) An order under subrule (1) may include such directions as the court considers necessary to effect the just, quick and cheap:

(a) progress of the proceedings to trial or hearing, or

(b) trial or hearing of the proceedings.

(4) If, in the court's opinion, there are special reasons, and it is in the interests of justice to do so, the court may vary the specification of maximum recoverable costs ordered under subrule (1).[208]

These orders may apply to one party or multiple parties in the litigation, and can be made at any time in the litigation process.[209]

Rule 40.51(1) of the Australian Federal Court Rules allows federal courts to make an order limiting costs:

(1) A party may apply to the Court for an order specifying the maximum costs as between party and party that may be recovered for the proceeding.

Orders for Security for Costs

In many jurisdictions, defendants are permitted to seek an order that the plaintiff provide an amount of money or guarantee as security to meet some or all of the defendant's costs at the conclusion of the proceedings. In cases where the plaintiff is a poorly funded public interest litigant, orders for security for costs may have the effect of deterring or even terminating the litigation.[210] The examples below illustrate how some jurisdictions have recognised this concern in their rules of court.

Example – Australia

Rule 59.11 of the New South Wales Uniform Civil Procedure Rules 2005 State that a plaintiff is not required to provide security for costs in respect of judicial review proceedings except in exceptional circumstances:

(1) A plaintiff is not to be required to provide security for costs in respect of judicial review proceedings except in exceptional circumstances.

(2) Where a plaintiff:

(a) invokes an open standing provision, or

(b) commences representative proceedings,

the court is not to treat the plaintiff as bringing proceedings for the benefit of a third party for the purposes of considering whether exceptional circumstances exist.

Rule 4.2(2) of the New South Wales Land and Environment Court Rules give the Court discretion not to make an order for security for costs where the proceedings are brought in the public interest.

(2) The Court may decide not to make an order requiring an applicant in any proceedings to give security for the respondent's costs if it is satisfied that the proceedings have been brought in the public interest.[211]

Advance Cost Orders

Advance cost orders are a new development in common law jurisdictions that permit, in rare circumstances, public interest litigants to collect costs from the opposing party *before* the litigation is resolved in order to allow the litigation to continue.[212]

Example – Canada

In *Little Sisters Book and Art Emporium v Canada*, the Supreme Court of Canada restated the factors a judge should consider when determining whether to grant an advance costs order.[213] The court emphasised that they 'must be granted with caution, as a last resort, in circumstances where their necessity is clearly established' and provided that three requirements must be met:

1. *The party seeking interim costs genuinely cannot afford to pay for the litigation, and no other realistic option exists for bringing the issues to trial — in short, the litigation would be unable to proceed if the order were not made.*
2. *The claim to be adjudicated is prima facie meritorious; that is, the claim is at least of sufficient merit that it is contrary to the interests of justice for the opportunity to pursue the case to be forfeited just because the litigant lacks financial means.*
3. *The issues raised transcend the individual interests of the particular litigant, are of public importance, and have not been resolved in previous cases.*[214]

The Court ultimately found that the plaintiff's claim was insufficient to warrant an advance costs order because the issues raised were not of sufficient public importance and were already considered in various cases.[215]

Cost-Shifting in Final Costs Orders

Courts with discretion on the allocation of costs will provide final costs orders at the conclusion of an interlocutory motion or a trial. The allocation of costs between the parties is often referred to as 'cost-shifting'. Three alternative approaches to cost-shifting can be applied to climate litigation: one-way cost-shifting, no-way cost-shifting and cost-shifting to the losing party.

One-way cost-shifting presumes that public interest litigants can benefit from an adverse costs award if they are successful but will not be burdened by an adverse costs award if they are unsuccessful. For example, The Philippines Rules of Procedure for Environmental Cases allow the court to order the 'violator' to pay the 'attorney's fees, costs of suit, and other litigation expenses' of a public interest plaintiff.[216] In the US, where adverse costs are not normally awarded, some environmental legislation allows costs to be granted to successful petitions in 'citizen suits' where 'appropriate'.[217]

No-way cost-shifting eliminates adverse costs awards in cases that were brought in the public interest. For example, the New South Wales Land and Environment Court Rules eliminate cost awards in environmental planning and protection cases where it is 'satisfied that the proceedings have been brought in the public interest'.[218] In The Netherlands, no-way cost-shifting is presumed, but judges maintain discretion to order the losing party to bear the winning parties' costs.[219]

One-way and no-way cost-shifting are being contemplated in other jurisdictions. In 2015, three Canadian non-profit environmental organisations proposed that the Federal Court of Canada adopt a presumption in favour of one-way or, alternatively, no-way cost-shifting in all judicial reviews.[220]

Cost-shifting to the losing party is a progressive step taken in only a few jurisdictions whereby a court can award costs to public interest litigants, even when they are unsuccessful. In Taiwan, the Air Pollution Control Act allows administrative courts to make a cost award in favour of 'plaintiffs that have made specific contributions to the maintenance of air quality'.[221] In Canada, unsuccessful public interest litigants advancing constitutional claims may be entitled to receive costs if the party is found to be 'fulfilling a civil responsibility' by bringing to the court's attention certain public interest matters.[222]

Appendix B

Examples of Provisions on Interveners and *Amicus Curiae*

Example – US

Coalition for Responsible Regulation v EPA was the first climate change case in which a European organisation (Client Earth) submitted an *amicus* brief to a US court.[223] The case was brought by the Coalition for Responsible Regulation, several states and industry groups in order to challenge the rules adopted by the EPA under the Clean Air Act after the US Supreme Court decision in *Massachusetts v EPA*.[224] The Court of Appeals for the District of Columbia Circuit accepted the *amicus* brief, which detailed the EU's regulations related to climate change and the negative impacts of GHGs.

Example – Argentina

Argentina's Supreme Court declared in 2004 that it will accept *amicus* briefs from 'persons that are not parties to the dispute':

> *Physical or corporate persons that are not parties to the dispute may appear before the Supreme Court of Justice of the Nation as Friend-of-the-Court in a judicial proceeding corresponding to original or appeals jurisdiction where collective or general interest issues are debated.*[225]

Since then, the Supreme Court has accepted *amicus* briefs from Human Rights Watch, the International Commission of Jurists and the World Organisation Against Torture.[226]

Example – South Africa

Rule 10 of the Rules of the Constitutional Court of South Africa allows *amicus curiae* standing based on written consent of the parties on an application to the Chief Justice:

> *(1) Subject to these rules, any person interested in any matter before the Court may, with the written consent of all of the parties in matter before the Court… be admitted therein as an amicus curiae upon such terms and conditions and with such rights and privileges as may be agreed upon in writing with all of the parties before the Court or as may be directed by the Chief Justice.*
>
> …
>
> *(4) If the written consent referred to in subrule (1) has not been secured, any person who has an interest in any matter before the Court may apply to the Chief Justice to be admitted therein as an amicus curiae, and the Chief Justice may grant such application upon such terms and conditions and with such rights and privileges as he or she may determine.*
>
> …
>
> *(7) An amicus curiae shall have the right to lodge written argument, provided that such written argument does not repeat any matter set forth in the argument of the other parties and raises new contentious which may be useful to the Court.*[227]

Example – Canada

Rules 55 to 59 of the Rules of the Supreme Court of Canada allow 'any person' to make a motion for intervention in order to be granted intervener standing:

> *55 Any person interested in an application for leave to appeal, an appeal or a reference may make a motion for intervention to a judge.*
>
> …
>
> *57 (1) The affidavit in support of a motion for intervention shall identify the person interested in the proceeding and describe that person's interest in the proceeding, including any prejudice that the person interested in the proceeding would suffer if the intervention were denied.*
>
> …
>
> *59 (1) In an order granting an intervention, the judge may*
>
> > *(a) make provisions as to additional disbursement incurred by the appellant or respondent as a result of the intervention; and*
> >
> > *(b) impose any terms and conditions and grant any rights and privileges that the judge may determine, including whether the intervener is entitled to adduce further evidence or otherwise to supplement the record.*

Example – European Court of Human Rights

Third-party interventions are governed by Articles 34 and 36(2) of the Convention and Article 44 of the Rules of the Court. Article 34 of the ECHR stipulates that the Court may receive applications from any person, NGO or group of individuals claiming to be the victim of a violation by one of the High Contracting Parties of the rights set forth in the Convention or its protocols. Acceptance of a brief is at the discretion of the President of the Court. Article 36(2) stipulates that the court may, of its own volition, invite a non-party to intervene on the proceedings.

> *34 The Court may receive applications from any person, non-governmental organisation or group of individuals claiming to be the victim of a violation by one of the High Contracting Parties of the rights set forth in the Convention or the Protocols thereto. The High Contracting Parties undertake not to hinder in any way the effective exercise of this right.*
>
> …
>
> *36 (2) The President of the Court may, in the interest of the proper administration of justice, invite any High Contracting Party which is not a party to the proceedings or any person concerned who is not the applicant to submit written comments or take part in hearings.*

Endnotes

1 IBA, *Achieving Justice and Human Rights in an Era of Climate Disruption* (IBA 2014) www.ibanet.org/PresidentialTaskForceClimateChangeJustice2014Report.aspx accessed 13 November 2019 ('IBA Climate Justice and Human Rights Report').

2 As of 2017, climate change litigation had been initiated in over 24 countries, including Argentina, Australia, Canada, the Czech Republic, France, Germany, Greece, India, Israel, Japan, The Netherlands, New Zealand, Nigeria, Poland, Spain, Ukraine, the United Kingdom, Uruguay and, most prominently, the United States. Over 650 cases had been filed in the US, and over 230 cases in other countries combined. See Jacqueline Peel and Hari Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (CUP 2015) 16. Some of the earliest examples of climate change litigation are found in court decisions from the US (1990) and Australia (1994). See *City of Los Angeles v National Highway Traffic Safety Administration* 912 F 3d 478 (DC 1990) as cited in Robert Meltz, *Report for Congress: Climate Change Litigation: A Growing Phenomenon* (Congressional Research Service 2007) 17; *Greenpeace Australia v Redbank Power Company* (1994) 86 LGERA 143 as cited in Tim Bonyhady, 'The new Australian climate law' in Tim Bonyhady and Peter Christoff (eds), *Climate Law in Australia* (Federation Press 2007) 11.

3 Extensive coverage of climate change litigation cases is maintained by Columbia Law School's Sabin Center for Climate Change Law, and a related database collected by the Grantham Research Institute at London School of Economics. See Sabin Center for Climate Change Law, 'Online Database of Climate Change Caselaw' http://climatecasechart.com accessed 13 November 2019; Sabin Center for Climate Change Law and Arnold & Porter, 'U.S. Climate Change Litigation' http://climatecasechart.com/us-climate-change-litigation accessed 13 November 2019; GRI, 'Climate Change Laws of the World' www.lse.ac.uk/GranthamInstitute/climate-change-laws-of-the-world accessed 13 November 2019. Excellent summaries of earlier climate litigation are available from the United Nations Environment Programme (UNEP). See Michael Burger and Justin Gundlach, *The Status of Climate Change Litigation: A Global Review* (Columbia Public Law Research Paper 2017). See also Michal Nachmany et al, 'Global trends in climate change legislation and litigation' (2017) www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2017/04/Global-trends-in-climate-change-legislation-and-litigation-WEB.pdf accessed 13 November 2019. In addition to earlier writings about climate litigation referenced in n 2 above and particular case commentaries referenced in later endnotes, see the following recent articles or papers summarising or commenting on climate suits and trends in climate litigation seeking governments to act: Jacqueline Peel and Hari M Osofsky, 'A Rights Turn in Climate Change Litigation?' (2018) 7 Transnational Environmental Law 37; Jacqueline Peel, Hari M Osofsky and Anita Foerster, 'A "Next Generation" of Climate Change Litigation?: An Australian perspective' (2018) Oñati Socio-legal Series https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3264173 accessed 13 November 2019; Anne Kling, 'Climate Change and human rights – Can the courts fix it?' (Heinrich-Böll-Stiftung, The Green Political Foundation 2019) www.boell.de/en/2019/03/18/climate-change-and-human-rights-can-courts-fix-it accessed 13 November 2019; Gregorio Rafael P Bueta, 'The Heat Is On: Prospects for Climate Change Litigation in the Philippines' [2018] 62 Ateneo Law Journal 760 http://ateneolawjournal.com/Media/uploads/c40d19a05de9be90fa9a48739fe3c8fd.pdf accessed 13 November 2019; Marc AR Zemel, 'The Rise of Rights-Based Climate Litigation and Germany's Susceptibility to Suit', (2018) 29 Fordham Environmental Law Review 484; Brian J Preston, 'The Impact of the Paris Agreement on Climate Change Litigation and Law' (Dundee Climate Conference, UK 27 September 2019) www.lec.justice.nsw.gov.au/Documents/Speeches%20and%20Papers/PrestonCJ/Preston%20CJ%20-%20The%20Impact%20of%20the%20Paris%20Agreement%20on%20Climate%20Change%20Litigation%20and%20Law.pdf accessed 13 November 2019; Brian J Preston, 'The Evolving Role of Environmental Rights in Climate Change Litigation' (2018) 2 Chinese Journal of Environmental Law 131; Brian J Preston, 'Mapping Climate Change Litigation' (2018) 92 Australian Law Journal 774; Joana Setzer and Rebecca Byrnes, 'Global trends in climate change litigation: 2019 snapshot' (GRI 2019) www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2019/07/GRI_Global-trends-in-climate-change-litigation-2019-snapshot-2.pdf accessed 13 November 2019; Annalisa Savaresi and Juan Auz, 'Climate Change

Litigation and Human Rights: Pushing the Boundaries' (2019) Climate Law; Joana Setzer and Lisa C Vanhala, 'Climate change litigation: A review of research on courts and litigants in climate governance' (2019) 10 Wire's Climate Change 3; Louis Kotze and Anel du Plessis, 'Putting Africa on the Stand: A Bird's Eye View of Climate Change Litigation on the Continent' (2019) University of Oregon's Journal of Environmental Law and Litigation; Yue Zhao, Shuang Lyu and Zhu Wang, 'Prospects for Climate Change Litigation in China' (2019) 8 Transnational Environmental Law 349; Jacqueline Peel and Jolene Lin, 'Transnational Climate Litigation: The Contribution of the Global South' (2019) 113 American Journal of International Law.

4 Chris J Hilson, 'Climate change litigation: an explanatory approach (or bringing grievance back in)' in Fabrizio Fracchia and Massimo Occhiena (eds), *Climate change: la riposta del diritto* (Editoriale Scientifica 2010); Christoph Schwarte and Ruth Byrne, *International Climate Change Litigation and the Negotiation Process* (2011) 8 Transnational Dispute Management l.

5 Peel and Osofsky (see n 2 above) 5. See also Sabin Center for Climate Change Law, 'Online Database of Climate Change Caselaw' (see n 3 above); University of Melbourne, 'Australian Climate Change Litigation' (University of Melbourne 2019) https://apps.law.unimelb.edu.au/lawapps/climatechange/index.php accessed 13 November 2019.

6 *Massachusetts v EPA* [2007] 127 S Ct 1438 (US Supreme Court).

7 *Ibid.*

8 The EPA's findings relied on *Massachusetts v EPA* (see n 6 above) as background. See US EPA, 'Endangerment and Cause or Contribute Findings for the Greenhouse Gases under Section 202(a) of the Clean Air Act' (EPA 7 December 2009) www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean accessed 13 November 2009.

9 *Urgenda Foundation v The State of The Netherlands (Ministry of Infrastructure and the Environment)* [2015] Case C/09/456689/HA_ZA 13-1396 (District Court of The Hague, Chamber for Commercial Affairs) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2015/20150624_2015-HAZA-C0900456689_decision-1.pdf accessed 13 November 2019 (*Urgenda Foundation v The State of The Netherlands* – Lower Court Decision). In October 2018 the Court of Appeal for The Hague affirmed the District Court decision: see [2018] Case 200.178.245/01 www.urgenda.nl/wp-content/uploads/ECLI_NL_GHDHA_2018_2610.pdf for the District Court judgement. The Netherlands Supreme Court decision of 20 December 2019 dismissed a further Government appeal, and essentially affirmed the Court of Appeal's decision while providing further elaboration as to why the arguments and defences of the State were not availing. The summary by the Supreme Court of its decision and the full text of the decision, in English, is found at https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:HR:2019:2007.

10 *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.46].

11 *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.78–4.79]; Jolene Lin, 'The First Successful Climate Negligence Case: A Comment on Urgenda Foundation v. The State of the Netherlands' (2015) University of Hong Kong Faculty of Law Research Paper No 2015/021; Roger Cox, 'A Climate Change Litigation Precedent: Urgenda Foundation v The State of The Netherlands' (2015) Centre for International Governance Innovation Paper 79) www.cigionline.org/sites/default/files/cigi_paper_79.pdf accessed 13 November 2019.

12 *Urgenda Foundation v The State of The Netherlands* – Appeal Court Decision (see n 9 above) [35–36 and 40–43]; Supreme Court Decision (see n 9 above) [5.2.1 – 5.5.3]. For case summaries online, see Environmental Law Alliance Worldwide, 'Urgenda Foundation v The State of The Netherlands' (2015) https://elaw.org/nl.urgenda.15 accessed 13 November 2019; Sabin Center for Climate Change Law, 'Urgenda Foundation v State of The Netherlands (case summary)' http://climatecasechart.com/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands accessed 13 November 2019.

13 *Ashgar Leghari v Federation of Pakistan* [2015] Case WP No 25501/2015 (Lahore High Court) [7].

14 *Ashgar Leghari v Federation of Pakistan* [2015] Supplemental Decision in Case WP No 25501/2015 (Lahore High Court) [11]; see also David Estrin, 'Limiting Dangerous Climate Change: The Critical Role of Citizen Suits and Domestic Courts—Despite the Paris Agreement', (2016) Centre for International Governance Innovation Papers No 101 14–17 www.cigionline.org/publications/limiting-dangerous-

climate-change-critical-role-citizen-suits-and-domestic-courts accessed 13 November 2019; Keely Boom, Julie-Anne Richards and Stephen Leonard, 'Climate Justice: The international momentum towards climate litigation' (2016) Heinrich Boell Foundation 31–32 www.ourchildrenstrust.org/lawlibrary accessed 13 November 2019; Emily Barritt and Boitumelo Sediti, 'The Symbolic Value of Leghari v Federation of Pakistan: Climate Change Adjudication in the Global South' (2019) 30 King's Law Journal 203.

15 See *Aji P et al v State of Washington* 2018 WL 3978310 (Superior Court of Washington). For current status of the case see Our Children's Trust www.ourchildrenstrust.org/washington accessed 13 November 2019. See also, the 'People's Climate Case', filed at the European General Court in May 2018 by a group of 37 applicants from Kenya, Fiji, Portugal, Germany, France, Italy, Romania and the Swedish Saami Youth Association. This action sought a court order to set aside several laws that comprise part of the EU's 2030 Climate and Energy Framework (and are to be implemented between 2021 and 2030), and order the implementation of more stringent GHG emission reduction measures. The applicants created a global carbon budget using Intergovernmental Panel on Climate Change (IPCC) data that sought to limit temperature increases to 1.5°C and 2°C. Based on their analysis, the EU would need to reduce emissions by greater than its 2030 target of 40 per cent below 1990 levels; and to limit warming to 1.5°C, the EU would be required to reach net-zero emissions before 2030. The applicants argued that the EU's reduction targets violate a duty not to exceed the EU equitable share of the global carbon budget, and that inadequate emissions reductions violate laws that protect fundamental human rights, including obligations to protect the environment, referencing the EU Charter of Fundamental Rights, the Treaty on the Functioning of the EU, as well as the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. In a May 2019 ruling, the court dismissed the case on procedural grounds without ruling on the merits, basically finding that the applicants lacked standing to bring the case because, since climate change affects everyone in one manner or another, the plaintiffs lacked the specific harm needed to grant them standing:

> 'It is true that every individual is likely to be affected one way or another by climate change, that issue being recognised by the European Union and the Member States who have, as a result, committed to reducing emissions. However, 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'.

In launching an appeal to the European Court of Justice in July 2019, the applicants' coordinating lawyer, Roda Verheyen, said:

> 'The European General Court denied to provide access to justice for the families and young people hit by the devastating impacts of climate change, essentially because there are many other people hit by the climate crisis. This simply disrespects the very rationale of fundamental rights which is to grant protection to every single person. We hope that the European Court of Justice will adapt its interpretation of the EU treaties on access to justice in order to protect citizens from the climate crisis.'

https://peoplesclimatecase.caneurope.org/2019/07/families-affected-by-the-climate-crisis-file-appeal-after-the-european-general-court-dismisses-their-case accessed 2 December 2019. *Armando Ferrão Carvalho and others v The European Parliament* [2019] case T-330/18 (General Court of the EU) paras 49–50 http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190515_Case-no.-T-33018_judgment.pdf accessed 2 December 2019; appeal submitted by plaintiffs, Armando Carvalho and others [2019] (Court of Justice of the EU) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190711_Case-no.-T-33018_appeal.pdf accessed 2 December 2019; Sabin Center for Climate Change Law, 'Armando Ferrão Carvalho and others v. The European Parliament (case summary)' http://climatecasechart.com/non-us-case/armando-ferrao-carvalho-and-others-v-the-european-parliament-and-the-council accessed 2 December 2019.

16 *VZW Klimaatzaak v Kingdom of Belgium* (no report currently available of case); see also Cox (see n 11 above) 14. The Belgium court first dealt with procedural matters raised by the Flemish region, which

the regional government appealed. In April 2018, that appeal was rejected and as of spring 2019, the case was proceeding on the merits. See case summary at GRI, '*VZW Klimaatzaak v. Kingdom of Belgium, et al (Court of First Instance, Brussels, 2015)*' www.lse.ac.uk/GranthamInstitute/litigation/vzw-klimaatzaak-v-kingdom-of-belgium-et-al-court-of-first-instance-brussels-2015 accessed 13 November 2019.

17 *Thomson v Minister for Climate Change Issues* [2017] NZHC 733 [133]. Of particular interest is that in the final decision in 2017, the High Court determined that 'it may be appropriate for domestic courts to play a role in Government decision making about climate change policy'.

18 *PUSH Sweden, Nature and Youth Sweden and Others v Government of Sweden*, Summons Application (15 September 2016) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2016/20160915_3649_summons.pdf accessed 13 November 2019.

19 In January 2018, the Oslo District Court found Art 112 of the Norwegian Constitution creates an enforceable right to a healthy environment. The court acknowledged that this right includes the right to a healthy climate. Although the court found that Norwegians have a right to live in a healthy environment, and that the government is obligated to take action to protect that right, the court determined that the government did not violate this right in this instance in part because the government does not need to account for GHG emissions from Norwegian oil that will be burned abroad. See *Greenpeace Nordic Ass'n and Nature & Youth v Government of Norway* [2018] 16-166674TVI-OTIR/06 (Oslo District Court), an unofficial translation is available at https://elaw.org/system/files/attachments/publicresource/OsloDistrictCt_20180104.pdf accessed 13 November 2019.

20 The petition was rejected by Switzerland's Federal Department of the Environment, Transport, Energy and Communications on 25 April 2017. See unofficial English translation of the decision of the agency at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2017/20170426_No.-A-29922017_order-1.pdf accessed 13 November 2019. The decision was appealed and denied by the Federal Administrative Court on 27 November 2018. See unofficial English translation of the decision of the Court at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2018/20181127_No.-A-29922017_decision-2.pdf accessed 13 November 2019. As of January 2019, the decision has been appealed to the Switzerland Supreme Court. Greenpeace International, 'Swiss seniors appeal climate case in Federal Supreme Court' www.greenpeace.org/international/press-release/20343/swiss-seniors-appeal-climate-case-in-federal-supreme-court accessed 13 November 2019.

21 In his 8 April 2016 order, US District Court Magistrate Judge Thomas Coffin recommended that 'Given the allegations of direct or threatened direct harm, albeit shared by most of the population or future population, the court should be loath to decline standing to persons suffering an alleged concrete injury of a constitutional magnitude'. See *Juliana v United States* [2016] Case 6:15-cv-01517-TC (US District Court, Oregon) http://ourchildrenstrust.org/sites/default/files/16.04.08.OrderDenyingMTD.pdf accessed 13 November 2019 (*Juliana v United States* – Lower Court Decision). The plaintiffs claim that government inaction on climate change amounts to a breach of their constitutional rights to life, liberty and property and the government's public trust duties, in addition to a claim that regulations relating to the export of gas are unconstitutional. US District Court Judge Ann Aiken upheld Judge Coffin's recommendation, see *Juliana v United States* [2016] 27 F Supp 3d 1224 (US District Court, District of Oregon) www.ourchildrenstrust.org/s/Order-MTDAiken.pdf accessed 13 November 2019 (*Juliana v United States* – Appeal Court Decision).

22 *Juliana v United States* – Appeal Court Decision (see n 21 above) 37. In doing so, the judge allowed petitioners' arguments that the defendant's actions and inactions have 'so profoundly damaged our home planet that they threaten plaintiffs' fundamental constitutional rights to life and liberty' to proceed (see p 52) and rejected the government's motion to dismiss (including arguments regarding lack of standing, causation and redressability). January 2020 Decision of the judge panel of the US Ninth Circuit Court of Appeals: http://cdn.ca9.uscourts.gov/datastore/opinions/2020/01/17/18-36082.pdf. The majority decision of Judges Hurwitz and Murguia 'reluctantly' found that the youths' case should not proceed to trial, primarily reasoning that the federal courts are not equipped to order or enforce a science-based climate recovery plan like that requested by the 21 youth plaintiffs in the case.

The dissenting opinion of Judge Staton, who disagreed with the majority decision, ruled that the climate recovery plan requested by the youth, while complex and involved, was absolutely manageable by the courts, and that the youths' constitutional case should proceed to trial. See also statement from Our Children's Trust: https://mailchi.mp/ourchildrenstrust/breaking-ninth-circuit-court-of-appeals-decision-for-juliana-v-united-states?e=e0119b1000. See also articles summarising recent climate suits (to about mid-2019) seeking governments to act by Justice Brian J Preston (see n 3 above).

23 In the 2014 IBA Climate Justice and Human Rights Report (see n 1 above), the Task Force provided a discussion that:

> 'highlights the work needed to enhance climate change litigation as an effective process for individuals and communities to exercise rights and seek remedies, primarily against states, to ensure climate justice. The Task Force is conscious that litigation that secures *declaratory* or *interim* relief against states, whereby individuals can hold *governments* to account for their domestic regulation of GHGs, is preferable to ad hoc litigation against individual emitters that does not address broader climate concerns' (see p 127).

While the Task Force recognised that a model statute 'should provide the flexibility for an adjudicator to award such relief as is warranted by the circumstances of the dispute', including 'damages for past or present harms' as well as injunctive relief to mitigate or prevent further current or future threats and/or declaratory relief, it noted the importance in advancing climate justice of litigation, focusing on the need and obligations for states taking preventative and possibly new policy/legislative measures:

> 'It is consistent with the Task Force's objective of advancing climate change justice in the context of human rights that a model statute not be limited to "damages", which is an after the fact or ex post facto type of remedy. Rather, in order to mitigate sources of climate change, a model statute also must contemplate an injunctive type remedy. To this end, a model statute should be seeking to enable injunctive relief in support of the rights and principles identified by the 2013 John H Knox Report (the "Knox Report"), which found, inter alia, that: (i) states have obligations to adopt legal and institutional frameworks that protect against, and respond to, environmental harm that may or does interfere with the enjoyment of human rights; (ii) to that end, States are required to adopt measures against environmental health hazards, including by formulating and implementing policies "aimed at reducing and eliminating pollution of air, water and soil"; and (iii) in addition to a general requirement of non-discrimination in the application of environmental laws, states may have additional obligations to members of groups particularly vulnerable to environmental harm. Such obligations have been developed in some detail with respect to women, children and indigenous peoples, but work remains to be done to clarify the obligations pertaining to other groups' (see page133).

24 Eg, in *Thomson v Minister for Climate Change Issues* (see n 17 above) [134], a New Zealand judge held that whether a matter falls within the jurisdiction of the court depends on the ground for review rather than the subject matter, stating that a 'subject matter may make a review ground more difficult to establish, but it should not rule [it] out… [i]f a ground of review requires the Court to weigh public policies that are more appropriately weighted by those elected by the community it may be necessary for the Court to defer to the elected officials on constitutional grounds.' For a detailed discussion on the issue of justiciability of these claims in the Canadian context, see Nathalie J Chalifour and Jessica Earle, 'Feeling the heat: Climate Litigation under the Canadian Charter's Right to Life, Liberty, and Security of the Person' (2018) 42 Vermont Law Review 689, 753 https://lawreview.vermontlaw.edu/wp-content/uploads/2018/05/04-Chalifour.pdf accessed 13 November 2019.

25 In *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.53], the court determined that while the state has discretionary power to determine how to fulfil its duty of care in developing policies to address the environment, courts may nevertheless determine the standard of care required of the government and the extent to which the government has fulfilled that standard. Similarly in *Juliana v United States* – Appeal Court Decision (see n 21 above) 52, Judge Aiken adopted a more forceful stance, stating, 'Federal courts too often have been cautious and overly deferential in the area of environmental law, and the world has suffered for it.' The court determined that while environmental issues raise politicised questions, they remain justiciable when, as in the present case,

the plaintiffs raise claims arising from alleged violations of their constitutional rights. *Ibid* 16. See also, *Environnement Jeunesse v Procureur General Du Canada*, 2019 QCCS 2885, a decision of the Superior Court in the Province of Quebec (Canada), which rejected arguments made by the Attorney-General of Canada that claims made by Quebec youth were not justiciable insofar as they sought a finding in a proposed class action that the failure of Canada to act sufficiently to regulate GHGs was a violation of their Charter rights to life, liberty and security of the person. At paras 53–60, the Superior Court stated [unofficial English translation, emphasis author's own]:

> '*Youth's claims regarding Canada's choices and decisions appear to be, at this stage, aiming at the exercise of executive power, while the order sought to stop any violation of fundamental rights, according to the respondent, seems to be linked to the legislative process. Courts generally do not interfere in the exercise of executive power.* ***But in the case of an alleged violation of the rights guaranteed by the Canadian Charter, a court should not decline jurisdiction on the basis of the doctrine of justiciability.*** *In Operation Dismantle, Chief Justice Dickson, on behalf of the majority [of the Supreme Court of Canada], said:*
>
> > *63. It is appropriate at this stage to remind ourselves of the question to be decided by the Court. It is true, of course, that the federal Parliament has exclusive legislative jurisdiction over defense under s. 91 (7) of the Constitution Act, 1867, and also that the Federal Executive has the powers conferred by s. 9 to 15 of this law. Consequently, if the Court were merely asked to express an opinion as to the wisdom of the exercise of the powers of the Executive in defense matters in this case, the Court should refuse to answer them. It can not substitute its opinion for that of the Executive, to whom the Constitution attributes decision-making power. As the effect of the appellants' action is to attack the wisdom of the government's defense policy, it is tempting to say that the Court should in the same way refuse to get mixed up in it. However, I think that would be a mistake, it would go around the issue before us.* ***The question before us is not whether the government's defense policy is sound, but rather whether it violates the appellants' rights guaranteed by s. 7 of the Canadian Charter of Rights and Freedoms. This is a totally different question. I think there is no question that this is a matter of the courts****. Moreover, s. 24 (1) of the Charter, which is also part of the Constitution, makes it clear that a "competent court" has the responsibility to rule on this matter, if the court has the right to impose the remedy "it deems appropriate and just in the light of the circumstances", I do not think it can decline its jurisdiction because the litigation would in itself not be justiciable by the courts or because it involves an alleged "political question".*
>
> In effect, the courts should not decline to adjudicate when the subject matter of the dispute remains within the limits of what is proper to them only "*because of its impact or its political context*". [59] In the case of the exercise of powers under the royal prerogative, the courts may intervene to decide whether there is a violation of the Canadian Charter because "*all government power must be exercised in accordance with the Constitution*". The Tribunal considers at this point that it speaks in favour of the justiciability of the question concerning the existence of an infringement of the rights protected by the Canadian Charter.'

26 Michael Gerrard and Jody Freeman (eds), *Global Climate Change and U.S. Law* (American Bar Association Section of Environment, Energy, and Resources 2014) 247; The Environmental Law Centre (Alberta) Society, 'Standing in Environmental Matters' (Environmental Law Centre 2014) 9.

27 *Lujan v Defenders of Wildlife*, 112 S Ct 2130 (Supreme Court of the US 1992). See also Brian J Preston, 'Environmental Public Interest Litigation: Conditions for Success' (Presentation at International Symposium, Towards an Effective Guarantee of the Green Access: Japan's Achievements and Critical Points from a Global Perspective, 31 March 2013) www.lec.justice.nsw.gov.au/Documents/preston_environmental%20public%20interest%20litigation.pdf accessed 13 November 2019.

28 James May and Erin Daly, 'Vindicating Fundamental Environmental Rights: Judicial Acceptance of Constitutionally Entrenched Environmental Rights', (2009) 11 Oregon Review of International Law 365, 415–420.

29 Clean Air Act, 42 USC 2000 § 7604.

30 Clean Water Act, 33 USC 2002 § 1365.

31 Resource Conservation and Recovery Act, 42 USC 2012 § 6962.

32 Endangered Species Act, 16 USC 2002 § 1540.

33 Eg, in *Summers v Earth Island Institute*, 555 US 488 (Supreme Court of the United States 2009) the

Supreme Court held that there was no standing on the basis that the plaintiff had failed to allege that any particular timber sale or other project claiming to be unlawfully subject to regulations would impede a specific and concrete plan of the plaintiffs to enjoy National Forests. In *Sierra Club v Morton*, 405 US 727 (Supreme Court of the United States 1972), the Supreme Court denied standing because there was no injury-in-fact; the Sierra Club failed to allege that it or its members used the site in question. This was just an ideological interest; and in *Lujan v Defenders of Wildlife* (see n 27 above), the Supreme Court denied standing on the basis that the claimants could not show a sufficient likelihood that they would be injured in the future by a destruction of the endangered species abroad.

34 Preston (see n 27 above). In its January 2020 decision in *Juliana* a panel of the US Ninth Circuit Court of Appeals found that as the relief sought by the youth was beyond the constitutional power of the judiciary and rather was one that must be presented to 'the political branches of government', the case should be dismissed for lack of standing (see n 21 and 22 above).

35 *Washington Environmental Council v Bellon*, 732 F 3d 1131 (US Court of Appeals, Ninth Circuit 2013); rehearing *en banc* denied, 741 F 3d 1075 (US Court of Appeals, Ninth Circuit 2014).

36 First, regarding causation, the court found the plaintiffs failed to trace the harm to specific actions of the defendants because the state refineries were responsible only for 5.9 per cent of GHG emissions in Washington State. Second, on the issue of redressability, the court found no evidence that an injunction sought by the litigant would make a 'meaningful contribution to global GHG levels' given the current level of the refineries emissions: *Ibid* 1135, 1145–46.

37 *Massachusetts v EPA* (see n 6 above).

38 *Urgenda Foundation v The State of the Netherlands* – Lower Court Decision (see n 9 above) [2.2].

39 Supreme Court of Netherlands decision, December 2019 (see n 9 above) [5.9.2 – 5.9.3] (emphasis author's own). The Lower Court, having determined that the Urgenda Foundation's claim would be upheld, then rejected further claims representing 886 individual claimants on the basis that those individual claimants did not have an interest distinguishable from Urgenda's own interest. Although that decision granted public interest standing for Urgenda itself, it left unanswered the question of standing for individual citizens against inadequate domestic climate change policies. Cox (see n 11 above) 5–6; *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.109]. In rejecting the Dutch government's appeal of the 2015 Urgenda decision, the Court of Appeal for The Hague affirmed that an organisation such as Urgenda has the right to bring such a suit and that Dutch citizens have standing to ask Dutch courts to adjudicate claims that the failure of the Dutch Government to reduce emissions violated citizen human rights under Articles 2 and 8 of the ECHR. Further, the Appeal Court refused to accept the government's argument that Urgenda could not also act on behalf of future generations of Dutch nationals and current and future generations of foreigners; *Urgenda Foundation v The State of The Netherlands* – Appeal Court Decision (see n 9 above) [35–38].

40 In the case initiated by the now legendary Philippines attorney Tony Oposa, the plaintiffs sought an order from the court directing the Secretary of Environment and Natural Resources to desist from processing any new timber licensing agreements. The claimants included a group of children, their parents, an environmental NGO called The Philippine Environmental Network, acting on their own behalf as well as on behalf of the interests of unborn generations to enjoy the nation's tropical rainforests. The court held:

> 'We find no difficulty in ruling that they can, for themselves, for others of their generation and for the succeeding generations, file a class suit. Their personality to sue on behalf of the succeeding generations can only be based on the concept of intergenerational responsibility insofar as the right to a balanced and healthful economy is concerned. Such a right, as hereinafter expounded, considers the "rhythm and harmony of nature".'

See *Oposa v Secretary of the Department of Environment and Natural Resources*, 33 ILM 173 (Supreme Court of Philippines 1994) 185 http://hrlibrary.umn.edu/research/Philippines/Oposa%20v%20Factoran,%20GR%20No.%20101083,%20July%2030,%201993,%20on%20the%20State's%20Responsibility%20To%20Protect%20the%20Right%20To%20Live%20in%20a%20Healthy%20Environment.pdf accessed 13 November 2019. The Chilean Supreme Court has also recognised the impact that the environmental damage could have on future generations: 'future generation[s] would

claim the lack of prevision of their predecessors if the environment would be polluted and nature destroyed'; see James May and Erin Daly (see n 28 above) 418; see also footnote 297 in the paper.

41 Part 9.45 (formerly § 123) of the New South Wales Environmental Planning and Assessment Act 1979 provides that 'Any person may bring proceedings in the Land and Environment Court to remedy or restrain a breach of this Act, whether or not any right of that person has been or may be infringed by or as a consequence of that breach'. Similarly, § 253 of the New South Wales Protection of the Environment Operations Act 1997 allows 'any person' to bring proceedings to restrain a breach (or a threatened or apprehended breach) of any other statute if the breach is 'causing or is likely to cause harm to the environment', whether or not any right of that person has been or may be infringed by or as a consequence of the breach (or the threatened or apprehended breach).

42 In Canada, § 103(1) of Ontario's Environmental Bill of Rights 1993 allows any person to bring an action for public nuisance causing environmental harm without the Attorney-General's consent and regardless of whether that person has suffered or may suffer loss or injury of the same kind as others. Also, § 84(1) of the Environmental Bill of Rights 1993 provides a right for any resident of Ontario to bring an action seeking a judicial order to prevent harm to a public resource where the harm is associated with a contravention or imminent contravention of a prescribed environmental protection statute or regulation. Also in Canada, based on long-standing principles of the common law, unless a statute otherwise provides, any person who has 'reasonable and probable cause' to believe the provisions of a federal or provincial statute, or regulation made under such a statute, has been breached by another person or corporation, is entitled to swear an 'information', that is, a complaint to that effect before a justice of the peace and to also become the 'private prosecutor' of the accused person if the justice issues a summons to the accused. While a private prosecution can be stayed by the federal or provincial Attorney-General, generally they are allowed to proceed and, although these are not regularly taken, a number of them have successfully ensured that environmental laws are enforced despite official reluctance by governments to take such steps, and they have also resulted in higher corporate awareness of the risks of non-compliance and due diligence efforts to avoid this happening. See John Swaigen, Albert Koehl and Charles Hatt, 'Private Prosecutions Revisited: The Continuing Importance of Private Prosecutions in Protecting the Environment' (2014) 26 Journal of Environmental Law and Practice 31. See also David Estrin, 'The Suncor Saga: Transforming Alberta Environmental Law Enforcement' in William A Tilleman and Alastair Lucas (eds), *Litigating Canada's Environment: Leading Canadian Environmental Cases by the Lawyers Involved* (Thomson Reuters Canada Ltd 2017). In the climate change context, it is conceivable that a private prosecution could be initiated against a provincial or the federal government on the complaint of a citizen to the effect that the government is not taking sufficient measures to control Canadian GHG emissions within their jurisdiction, and is therefore breaching §§ 180(1) and (2) of the Canadian *Criminal Code*, RSC 1985, c C-46. This section provides that 'every one' (defined to include provincial and federal governments) who commits a common nuisance and thereby endangers the lives, safety or health of the public, or causes physical injury to any person is guilty of an indictable offence. This offence can be committed not only by positive acts, such as those of emitters discharging contrary to statutory provisions, but also by governments in 'failing to discharge a legal duty', for example, sufficiently controlling GHG emissions, and thereby endangering the lives, safety, health, property or comfort of the public, or obstructing the public 'in the exercise or enjoyment of any right that is common to all subjects of Her Majesty in Canada'.

43 § 324.1701(1) of Michigan's Natural Resources and Environmental Protection Act 1994 provides an example of open standing where 'any person' may seek protection of the environment where a violation 'occurred or is likely to occur'. § 324.1701(1) reads, 'The attorney general or any person may maintain an action in the circuit court having jurisdiction where the alleged violation occurred or is likely to occur for declaratory and equitable relief against any person for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction'.

44 Rule 2, § 4 of the Rules of Procedure for Environmental Cases 2010 AM No 09-6-8 SC (Republic of The Philippines) reads '[a]ny real party in interest, including the Government and juridical entities authorized by law, may file a civil action involving the enforcement or violation of any environmental law'.

45 Article 71 of Ecuador's Constitution 2008 provides for open standing to enforce the constitutional rights granted to nature when recognised as a legal person: 'All persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature. To enforce and interpret these rights, the principles set forth in the Constitution shall be observed, as appropriate.'

46 The High Court of Uganda has implemented the broad wording of Article 50 of the Ugandan Constitution to grant standing to a research and advocacy think tank on behalf of the affected community and other citizens of Uganda. See *Advocates Coalition for Development and Environment (ACODE) v Attorney General* COU-144375 (High Court of Uganda 13 July 2005) www.elaw.org/content/uganda-advocates-coalition-development-and-environment-acode-v-attorney-general accessed 13 November 2019.

47 Eg, the Uttarakhand High Court in India in *Mohd Salim v State of Uttarakhand* held that certain state officials were 'persons *in loco parentis* as the human face to protect, conserve and preserve Rivers Ganga and Yamuna' and their tributaries. See *Mohd Salim v State of Uttarakhand*, Order in WP (PIL) No 126 of 2014 (Uttarakhand High Court 20 March 2017).

48 The most significant US climate change case, *Massachusetts v EPA* (see n 6 above) relied on *parens patriae* standing to establish that the State of Massachusetts could challenge a decision of the EPA regarding the regulation of GHGs.

49 Eg, the EU Commission or EU Member States may rely on EU Directive 2004/35/CE (on environmental liability with regard to the preventing and remedying of environmental damage) or EU Directive 2003/87/EC (establishing a scheme for GHG emission trading) to take action against another EU Member State for non-compliance with the directive. See Daniel G Hare, 'Blue Jeans, Chewing Gum and Climate Change Litigation: American Exports to Europe' (2013) 29 Utrecht Journal of International European Law 65, 75.

50 The court or tribunal may impose conditions on the participation of the intervener or *amicus curiae*, including that the intervener pays its own costs, regardless of the outcome of the proceedings; or that the intervener may not recover its costs from a public interest litigant; or even that the intervener must bear part of the costs of the public interest litigant.

51 Lise Johnson and Niranjali Amersinghe, 'Protecting the Public Interest in International Dispute Settlement: The *Amicus Curiae* Phenomenon' (2009) Centre for International Environmental Law 5 www.ciel.org/Publications/Protecting_ACP_Dec09.pdf accessed 13 November 2019; Michael Kirby, 'Deconstructing the Law's Hostility to Public Interest Litigation' (2011) 127 Law Quarterly Review 12 www.michaelkirby.com.au/images/stories/speeches/2000s/2011/2529-article-law-quarterly-review-public-interest-litigation.pdf accessed 13 November 2019.

52 'Brandeis Briefs' are named after the brief that Louis Brandeis filed in *Muller v Oregon* 208 US 412 (Supreme Court of the US 1908).

53 § 5 of the Crown Proceedings Act 1988 (New South Wales) states that:

> '(1) Any person, having or deeming himself, herself or itself to have any just claim or demand whatever against the Crown (not being a claim or demand against a statutory corporation representing the Crown) may bring civil proceedings against the Crown under the title "State of New South Wales" in any competent court.
>
> (2) Civil proceedings against the Crown shall be commenced in the same way, and the proceedings and rights of the parties in the case shall as nearly as possible be the same, and judgment and costs shall follow or may be awarded on either side, and shall bear interest, as in an ordinary case between subject and subject.'

54 The High Court of Australia in *Bropho v State of Western Australia* [1990] HCA 24 concluded that a statute applies to and binds the Crown if its provisions, including its subject matter and disclosed purpose and policy, when construed in the context of permissible extrinsic aids, disclose an intention to bind the Crown. In an environmental context, this principle was applied in litigation brought to restrain the Forestry Commission from logging old growth forests in northern New South Wales and thereby harming protected fauna. While the Forestry Commission sought to argue it was not bound by the New South Wales National Parks and Wildlife Act 1974, the New South Wales Land and Environment Court held that the Forestry Commission was for all relevant purposes the Crown in right of the State of New South Wales and that the Act binds the Crown (upheld on appeal). See *Corkill v Forestry Commission of*

NSW (No 2) [1991] 73 LGRA 126, 133 and 135–136. This decision was upheld by the New South Wales Court of Appeal: *Forestry Commission of NSW v Corkill* [1991] 73 LGRA 247, 251–253.

55 In this regard, § 3 of the Crown Proceedings Act 1988 (New South Wales) states that 'civil proceedings includes civil proceedings at law or in equity, and also includes proceedings by way of preliminary discovery, cross-claim, counterclaim, cross-action, set-off, third-party claim and interpleader'; and 'judgment includes every species of relief which a court can grant, whether interlocutory or final, and whether by way of order that anything be done or not done or otherwise, and also includes a declaration'.

56 Crown Proceedings Act 1947 (UK), § 21.

57 Eg, Ontario's Proceedings Against the Crown Act RS0 1990, c P27 § 5(1), provides that: 'the Crown is subject to all liabilities in tort to which, if it were a person of full age and capacity, it would be subject'. However, this statute also expressly prohibits the issuance of any injunction against the Crown. *Ibid*, at § 14.

58 *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.66].

59 *Ibid* [4.98].

60 *Urgenda Foundation v The State of The Netherlands – Supreme Court Decision* (see n 9 above) [Case Summary, *The courts and the political domain* 8.1–8.3.5 and 5.3.1–5.3.2] [emphasis author's own].

61 *Ashgar Leghari v Federation of Pakistan* (see n 13 above) [8].

62 *Massachusetts v EPA* (see n 6 above) 1462–63.

63 Andrew Gage and Margaretha Wewerinke-Singh, 'Taking Climate Justice into our own Hands: A Model Climate Compensation Act' (2015) Vanuatu Environmental Law Association and West Coast Environmental Law Technical Report 37.

64 Hare (see n 49 above) 72:

> 'the "loser pays" rule instituted in much of Europe can have a serious dampening effect on litigation because it forces plaintiffs to pay not only their own litigation expenses, but also those of their opponent's lawyer. Consequently, far from suits being "(financially) virtually risk free" and very advantageous to plaintiffs, as in the US, potential European plaintiffs must consider paying *both* parties' expenses in the event they lose – a risk that surely causes parties to "think twice" before bringing a suit'.

Enid Campbell, 'Public Interest Cost Orders' (1998) 20 Adelaide Law Review 245, 256 in Jona Razzaque, *Public Interest Environmental Litigation in India, Pakistan and Bangladesh* (Kluwer Law International 2004) 230: 'The fear, if unsuccessful, of having to pay the costs of the other side (often a Government instrumentality or wealthy private corporation), with devastating consequences to the individual or the environmental group bringing the action, must inhibit the taking of cases to court.'

65 This passage has been quoted many times in many places, including in Justice Stein's judgment in *Oshlack v Richmond Shire Council* [1994] 82 LGERA 236; Australian Law Reform Commission, 'Costs-shifting – Who Pays For Litigation?' (1995) Australian Law Reform Commission para 13.9; Kirby (see n 51 above) 23.

66 Preston (see n 27 above) 22–23.

67 Meinhard Doelle, Dennis Mahony and Alex Smith, 'Canada' in Richard Lord et al *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 541.

68 *Massachusetts v EPA* (see n 6 above). The petitioners were 12 states, three cities, one territory and numerous interested organisations, such as the Center for Biological Diversity, Union of Concerned Scientists and Greenpeace.

69 US EPA (see n 8 above).

70 See, eg, Brian J Preston, 'Climate Change Litigation (Part 2)' (2011) 5 Carbon & Climate Change Law Review 244, 245.

71 *Gray v Minister for Planning* [2006] 152 LGERA 258 (Australia).

72 *Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others* [2017] Case 65662/16, (High Court of South Africa, Gauteng Division, Pretoria). The court specifically directed the Minister to consider a climate change assessment report on the power station. See also a summary at Sabin Center for Climate Change Law, 'EarthLife Africa Johannesburg v. Minister of Environmental Affairs and Others' http://climatecasechart.com/non-us-case/4463 accessed 13 November 2019.

73 See GRI (see n 3 above).

74 See, eg, *Defenders of Wildlife v Jewell* [2016] 176 F Supp 3d 975, 1001–03 (US District Court of Montana) (holding that Fish & Wildlife Service's discrediting of studies analysing the impact of climate change on wolverine habitats when deciding to withdraw its proposed rule to list some populations of wolverines as threatened under the Endangered Species Act was arbitrary and capricious); *Ctr. for Biological Diversity v Salazar* [2011] 804 F Supp 2d 987, 1008–10 (US District Court of Arizona) (holding that biological opinion used by Fish & Wildlife Service did not use best available scientific and commercial data, including on climate change, when evaluating impact on Huachuca Water Umbel or Southwestern Willow Flycatcher).

75 Peter Lawrence, *Justice for Future Generations: Climate Change and International Law* (Edward Elgar Publishing 2014) 137.

76 Albert C Lin, 'Public Trust and Public Nuisance: Common Law Peas in a Pod?' (2012) 45 UC Davis Law Review 1075; Jutta Brunnée et al, 'Overview of legal issues relevant to climate change' in Richard Lord et al (eds), *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 40.

77 See n 21 and n 22 above.

78 See n 22 above. In 2018, the US Supreme Court denied without prejudice the government's application to stay this case – noting that relief for the government may be available in the Ninth Circuit. See 2 November 2018 Order, Case No 18A410 (US). See further n 21 above. A January 2020 decision of a Ninth Circuit Court of Appeals panel 'reluctantly' found that the case should not proceed to trial.

79 *Aji P et al v State of Washington* (see n 15 above). The youth plaintiffs appealed, and as of 2019, the parties had briefed the issues on appeal and the matter was pending before the Washington Court of Appeal. A number of *amicus* briefs were submitted in support of the youth by the Sauk-Suiattle Indian Tribe, the League of Women's Voters, Faith-based individuals and organisations, and environmental groups, in addition to briefs submitted in support of the youth by medical professionals, Washington businesses and a small coalition of Indian tribes (Swinomish Indian Community, Suquamish Indian Tribe and Quinault Indian Nation). Oral argument was expected to occur towards the end of 2019.

80 *Foster v Washington State Dept. of Ecology* [2015] Case 14-2-25295-1 (Superior Court of Washington State) https://static1.squarespace.com/static/571d109b04426270152febe0/t/57607fe459827eb8741a852c/1465941993492/15.11.19.Order_FosterV.Ecology.pdf accessed 13 November 2019. In September 2017, the Washington State Court of Appeals issued an unpublished opinion that reversed a May 2016 Superior Court decision granting relief from an earlier judgment that affirmed Ecology's denial of a petition for rule-making. However, the youth plaintiffs found this to be of little consequence since Ecology already did what it was required by the earlier court to do. See case summaries at: Our Children's Trust, 'Washington Chronology' www.ourchildrenstrust.org/washington-chronology accessed 13 November 2019 and Sabin Center for Climate Change Law, 'Foster v Washington Department of Ecology' http://climatecasechart.com/case/foster-v-washington-department-of-ecology accessed 13 November 2019.

81 *Ibid* 8. The court held that '[the youths'] very survival depends upon the will of their elders to act now, decisively and unequivocally, to stem the tide of global warming... before doing so becomes too costly and then too late' (5). Highlighting inextricable relationships between navigable waters and the atmosphere, and finding that separating the two is 'nonsensical', the court held that the public trust doctrine mandates that the state act through its designated agency 'to protect what it holds in trust' and that the state obligation must be implemented in a manner that '[p]reserve[s], protect[s], and enhance[s] the air quality for the current and future generations' (8). The court held that 'current scientific evidence establishes that rapidly increasing global warming causes an unprecedented risk to the earth, including land, sea, the atmosphere and all living plants and creatures' (4–5). See further Estrin (see n 14 above).

82 In *Waweru v The Republic,* the High Court of Kenya held that the government and its agencies were under a public trust to manage land resources, forests, wetlands and waterways in a way that maintains a proper balance between economic benefits and the need for a clean environment; *Waweru v The Republic of Kenya* [2006] 1 KLR (E&L) 677 in Patricia Kameri-Mbote and Collins Odote, 'Kenya' in Richard Lord et al (eds), *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 316.

83 The Supreme Court of India recognised the public trust doctrine in *M C Mehta v Kamal Nath* and

found that the doctrine placed an affirmative duty on the state to protect resources including air, water, forests and wildlife for the enjoyment of the general public; *M C Mehta v Kamal Nath* [1997] 1 SCC 288 [25]. See also *Intellectuals Forum Tirupathi v State of AP* [2006] 3 SCC 549 [59–60]; *Environment Protection Committee v Union of India* [2011] 1 EFLT 326 (High Court of Guwahati – Imphal Bench); Lavanya Rajamani and Shibani Ghosh, 'India' in Richard Lord et al (eds), *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 151; Shibani Ghosh, 'The Deconstruction – and reconstruction of the Public Trust Doctrine in India' in Shibani Ghosh (ed), *Analytical Lexicon of Principles and Rules of Indian Environmental Law* (publication in process, manuscript available on request 2015) 6–7. The Indian courts followed this approach in subsequent cases: *Common Cause, A Registered Society v Union of India* [1999] 6 SCC 667 (public trust extended to wildlife), *State of West Bengal v Keshoram Industries Pvt Ltd* [2004] 10 SCC 201; *Perumatty Grama Panchayat v State of Kerala* [2003] MANU/KE/0623/2003 (High Court of Kerala) (in respect of deep underground water); *Fomento Resorts and Hotels Limited and Another v Minguel Martins and Others* [2009] 3 SCC 571 (in respect to the seashores), and extended the interpretation of the doctrine to include the obligation of the state to distribute natural resources in the way that is 'not detrimental to public interest'. *Centre for Public Interest Litigation and Others v Union of India* [2012] 3 SCC 1 (where the Supreme Court dealt with the legality of the 2G spectrum allocation policy).

84 § 2(4)(o) of South Africa's National Environmental Management Act 1998 states that the environment 'is held in public trust for the people' and 'must be protected as the people's common heritage'. Jan Glazewski and Debbie Collier, 'South Africa' in Richard Lord et al (eds), *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 345.

85 Paris Agreement 2015, Art 4.2.

86 UN Framework Convention on Climate Change (UNFCCC) 1992, Art 3.3. See also International Law Association, 'Declaration of Legal Principles Relating to Climate Change' Committee on Legal Principles Relating to Climate Change Resolution 2/2014 (11 April 2014).

87 Annex to Draft Decision -/CP.21 (the Paris Agreement), FCCC/CP/2015/L.9, 12 December 2015, Art 4.2.

88 See, eg, *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above); Preston (2019) (see n 3 above).

89 David Richard Boyd, *The Right to a Healthy Environment: Revitalizing Canada's Constitution* (UBC Press 2012) 2. Twenty Caribbean and South American countries have a constitutional right to a healthy environment; Brunnée et al (see n 76 above) 37. African countries with a constitutional right to a healthy environment include the Congo, Kenya, Namibia, Rwanda and South Africa. Jaap Spier and Ulrich Magnus, *Climate Change Remedies: Injunctive Relief and Criminal Law Response* (Eleven International Publishing 2014) 209–16. See also James May and Erin Daly (see n 28 above) 392–93.

90 Constitution of Kenya 2010, Arts 42, 69 and 70. See also *Abdalla Rhova Hiribae v Attorney General* [2010] Civil Case No 14 (High Court of Kenya), where petitioners were unsuccessful in challenging government approval of farming projects. Note that the court found violations to the constitutional right to a healthy environment are enforceable even if the activities complained of occurred before Kenya's 2010 Constitution was adopted.

91 *Native Community of the Wichi Hokteck T'Oi People v Environment and Sustainable Development Secretariat and Salas* [2002] and *Dino et al v Province of Salta and National Government* [2009] cited in IBA Human Rights and Climate Change Report (see n 1 above) at 79.

92 Constitution of Turkey 1982, Art 56.

93 Constitution of Ecuador 2008, Arts 14, 71, 72 and 296.3.

94 Rules of Procedure for Environmental Cases 2010 (Republic of The Philippines), (see n 44 above) rule 1, § 3.

95 French Constitutional Charter for the Environment (2005); Miriam Haritz, *An Inconvenient Deliberation: The Precautionary Principle's Contribution to the Uncertainties Surrounding Climate Change Liability* (Kluwer Law International 2011) 284.

96 African Charter 1986, Art 24. The African Commission has also adopted resolutions requesting that Commission working groups undertake an in-depth study on the impact of climate change on human rights in Africa. 'Resolution on Climate Change and Human Rights and the Need to Study its Impact in

Africa', Resolution 153 (Banjul, Gambia, 25 November 2009); 'Resolution on Climate Change in Africa', Resolution 271 (Luanda, Angola, 12 May 2014).

97 *Subash Kumar v State of Bihar* [1991] 1 SCC 598 [7] (India); *M C Mehta v Union of India* (see n 83 above) [2]; *Virender Gaur v State of Haryana* [1995] 2 SCC 577 (India) [7].

98 *Re Court on its own motion v State of Himachal Pradesh and others* Application No 237 (India's National Green Tribunal 2014). The Supreme Court of India also recognised a constitutional right to a healthy environment and referenced climate change threats in *Hindustan Zinc Ltd v Rajasthan Electricity Regulatory Commission* [2015] 12 SCC 611 (India) [50].

99 The Supreme Court of Pakistan found in *Shehla Zia v WAPDA* that the constitutional right to live with human dignity, coupled with the right to life, must include the right to live in an unpolluted environment; 1994 Supreme Court 693. See also *General Secretary, West Pakistan Salt Miners Labour Union (CBA) Khewara, Jhelum v Director, Industries and Mineral Development, Punjab, Lahore* [1994] SCMR 2061 (discussing the right to clean water). In *Ashgar Leghari v Pakistan* (see n 13 above), the Lahore High Court relied on the constitutional rights to life and dignity in finding that the Pakistani Government failed to implement its climate change policy. See discussion in Boom, Richards and Leonard (see n 13 above) 31–32, 39–41. Further, in April 2016, Rabab Ali, a seven-year-old Pakistani girl, filed a case against the Federation of Pakistan alleging that the authorities' exploitation of fossil fuels amounts to a breach of the Pakistani peoples' constitutional rights to life, liberty, property, human dignity, information and equal protection of the law; GRI, 'Ali v Federation of Pakistan (Supreme Court of Pakistan 2016)' www.lse.ac.uk/GranthamInstitute/litigation/ali-v-federation-of-pakistan-supreme-court-of-pakistan-2016 accessed 13 November 2019.

100 *Urgenda Foundation v The State of the Netherlands* – Appeal Court Decision (see n 9 above) [43]; and Supreme Court Decision (see n 9 above) 'Summary of Decision': *Protection of human rights based on the ECHR*; and [5.2.1 – 5.3] [emphasis author's own].

101 These states include: Hawaii, Illinois, Massachusetts, Montana, Pennsylvania and Rhode Island. See David R Boyd, 'The Constitutional Right to a Healthy Environment' (2012) Environment Magazine: Science and Policy for Sustainable Development.

102 *Juliana v United States* – Lower Court Decision; Appeal Court Decision (see n 21 above).

103 Eg, see n 1 above; John H Knox, 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment' (2013) Human Rights Council, 25th Session A/HRC/25/53 www.ohchr.org/EN/Issues/Environment/SREnvironment/Pages/MappingReport.aspx accessed 13 November 2019.

104 Paris Agreement 2015, Art 11.

105 *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.46].

106 The World Heritage Committee was established under the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by the General Conference of UNESCO at its 17th session on 16 November 1972 https://whc.unesco.org/en/convention accessed 5 December 2019.

107 For instance, in 2007, Climate Action Network Australia, Greenpeace, the New South Wales Nature Conservation Council and Friends of the Earth filed a petition with the World Heritage Committee requesting the inscription of the Blue Mountains Area in Australia on the List of World Heritage in Danger. For decisions of the World Heritage Committee https://whc.unesco.org/en/decisions accessed 5 December 2019.

108 See, eg, World Heritage Committee Decisions of the 29th Session, WHC-05/29.COM/22 (Durban 2005).

109 William VH Rogers and Jaap Spier, *Unification of Tort Law: Causation* 40 (Kluwer 2000); *Fairchild v Glenhaven Funeral Services Ltd and others* [2002] UKHL 22 (Lord Bingham).

110 Eg, the Court of Appeal in Toulouse (Cour d'appel [CA] de Toulouse) on 24 September 2012 upheld the lower court verdict regarding a fertilizer factory that exploded due to the inadvertent mixing of two products. Where technological and scientific studies failed to ascertain the precise cause of the explosion, the court held that the factual circumstances pointed towards the defendant's wrongdoing in some form, and declared default (or presumed) causation. This element of the decision has been appealed by certain third parties before the French Supreme Court (Cour de cassation). See decision at summary of the case at: Total, 'Grand Paroisse' http://publications.total.com/registration_document_2012/financial-information/legal-and-arbitration-proceedings/grande-paroisse.html accessed 13 November 2019.

111 Zivilprozessordnung 1887, § 286 (Civil procedure code of Germany); Umwelthaftungsgesetz 1990, § 6 (Environmental Liability Act of Germany).

112 *Jaipur Golden Gas Victims v Union of India* [2009] 164 DLT 346 (High Court of Delhi). The court found that the defendant's actions, that is, the breach of the duty that exposed the victims to risks of death/injury, formed the material cause of the injury and held the defendant liable as a result.

113 *Urgenda Foundation v The State of the Netherlands* – Lower Court Decision (see n 9 above) [4.90]. Supreme Court Decision (see n 9 above) 'Summary of Decision', subhead 'Global problem and national responsibility' [emphasis author's own]; and [5.7.3 – 5.7.8].

114 *Gray v Minister for Planning* (see n 71 above) [100]. See also *Australian Conservation Foundation v Latrobe City Council* [2004] 140 LGERA 100, where the Victorian Civil and Administrative Tribunal held that a proposed amendment to a planning scheme for the development of a coal field would make it more likely that the atmosphere will receive greater GHG emissions than would otherwise be the case, thus requiring the decision-maker to consider the impact of GHG emissions in its planning decisions. See also *Thornton v Adelaide Hills Council* [2006] 151 LGERA 1; *Walker v Minister for Planning* [2007] 157 LGERA 124.

115 Amanda Masucci, 'Stand By Me: The Fourth Circuit Raises Standing Requirements in Friends of the Earth, Inc. v. Gaston Copper Recycling Corp. – Just as Long as You Stand, Stand by Me' (2001) 12 Villanova Environmental Law Journal 171.

116 *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.90]:

> ('[i]t is an established fact that climate change is a global problem and therefore requires global accountability… reduction measures have to be taken on an international level. It compels all countries, including The Netherlands, to implement the reduction measures to the fullest extent possible. The fact that the amount of the Dutch emissions is small compared to other countries does not affect the obligation to take precautionary measures in view of the State's obligation to exercise care. After all, it has been established that any anthropogenic greenhouse gas emission, no matter how minor, contributes to an increase of CO2 levels in the atmosphere and therefore to hazardous climate change').

117 *Massachusetts v EPA* (see n 6 above) 1458.

118 See *Urgenda Foundation v The State of The Netherlands* – Appeal Court Decision (see n 9 above):

> '61. The State has also put forward that the Dutch greenhouse gas emissions, in absolute terms and compared with global emissions, are minimal, that the State cannot solve the problem on its own, that the worldwide community has to cooperate, that the State cannot be deemed the party liable/causer ("primary offender") but as secondary injuring party ("secondary offender"), and this concerns complex decisions for which much depends on negotiations.
>
> 62. These arguments are not such that they warrant the absence of more ambitious, real actions. The Court, too, acknowledges that this is a global problem and that the State cannot solve this problem on its own. *However, this does not release the State from its obligation to take measures in its territory, within its capabilities, which in concert with the efforts of other states provide protection from the hazards of dangerous climate change*' [emphasis author's own].

119 Colin Tapper, *Cross & Tapper on Evidence* (12th edn, OUP 2010) 6–10, 23.

120 *Oslo Principles on Global Climate Change Obligation*, released at symposium at King's College London (30 March 2015) https://globaljustice.yale.edu/sites/default/files/files/OsloPrinciples.pdf accessed 13 November 2019.

121 See *General Secretary, West Pakistan Salt Miners Labour Union (CBA) Khewara, Jhelum v The Director, Industries and Mineral Development, Punjab, Lahore* (see n 99 above) [5].

122 Family Court Act 1980, § 12(A)(4) (New Zealand).

123 French courts only dissociate between 'legal acts' (such as the existence of a contract) and 'legal facts' (an accident causing an injury) in terms of admissibility of evidence. Where evidence of the former is regulated, parties can prove the latter by any means. Code Civil, Art 1348 (France).

124 IBA, *IBA Rules on the Taking of Evidence in International Arbitration Rules*, Art 9.

125 See International Centre for Settlement of Investment Disputes, *ICSID Rules of Procedure for Arbitration Proceedings* (2006), rule 34(1).

126 See quote from *Urgenda Foundation v The State of The Netherlands* – Appeal Court Decision (see n 9 above) at note 118; in 2019, the majority of five Justices of the Ontario Court of Appeal, in the reasons written by the Chief Justice of Ontario as to the constitutional validity of the Federal Government's Greenhouse Gas Pollution Pricing Act arising from a challenge by the Government of Ontario, observed 'There is no dispute that global climate change is taking place and that human activities are the primary cause'. *Reference re Greenhouse Gas Pollution Pricing Act* [2019] ONCA 544 [7] (Ontario Court of Appeal, Canada) www.ontariocourts.ca/decisions/2019/2019ONCA0544.htm accessed 18 November 2019. See also Environmental Law Centre, 'Do Courts Take Judicial Notice of Climate Change?' (24 April 2015) http://elc.ab.ca/do-courts-take-judicial-notice-of-climate-change accessed 13 November 2019; Brenda H Powell, 'Judicial Notice of Climate Change' in Allan E Ingelson (ed), *Environment in the Courtroom,* (1st edn, University of Calgary Press 2019) 646.

127 See, eg, *Massachusetts v EPA* (see n 6 above); Powell, *ibid* 651–52: 'There are examples of judicial notice of climate change science by the American courts dating back to the 1990s. The *City of Los Angeles v. National Highway Traffic Safety Administration Center for Auto Safety*… Ultimately, the court held that the challenge failed on its merits. However, in reaching this determination, the court clearly stated that "[no one disputes the causal link between carbon dioxide and global warming".' See also the Federal Court of Canada decision in *Syncrude v Canada* 2014 FC 776 [83], a constitutional challenge by a petrochemical company to Federal climate regulations: 'there is a real evil and a reasonable apprehension of harm in this case. The evil of global climate change and the apprehension of harm resulting from the enabling of climate change through the combustion of fossil fuels has been widely discussed and debated by leaders on the international stage. Contrary to Syncrude's submission, this is a real, measured evil, and the harm has been well documented'.

128 IPCC, 'Reports' www.ipcc.ch/reports accessed 13 November 2019.

129 The District Court of The Hague in its 2015 *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) explained why it would rely on the IPCC findings and its reports [emphasis author's own]:

> '4.12. The UN Climate Change Convention also made provisions for the establishment of the IPCC as a global knowledge institute. The IPCC reports have bundled the knowledge of hundreds of scientists and to a great extent represent the current climate science. The IPCC is also an intergovernmental organisation. The IPCC's findings serve as a starting point for the COP decisions, which are taken by the signatories to the UN Climate Change Convention during their climate conferences. Similarly, the Dutch and European decision-making processes pertaining to the climate policies to be pursued are also based on the climate science findings of the IPCC. *The court – and also the Parties – therefore consider these findings as facts.*'

See further paras 4.13–4.34. The unique evidentiary value of IPCC findings and reports had been recognised in a 2005 book by Roda Verheyen, a German legal scholar and environmental lawyer, where she wrote that the process by which the IPCC conclusions are reached gives its findings scientific legitimacy and therefore makes them legally invaluable:

> 'Taken together, these facts suggest that in the IPCC, a judge would have an official system of reference for the field of climate change science. In fact, the system of reference closely resembles an impartial court hearing of arguments with a subsequent "finding of truth," which in the case of the IPCC is the scientific truth about climate change. Thus, while these facts show at the very least that IPCC findings would be of very high evidentiary value in a court of law, the argument could be taken a step further by asserting that no court of law could possibly deviate from IPCC findings, since any expertise put before the court would never be as inclusive as that inherent in the IPCC.'

Roda Verheyen, *Climate Change Damage and International Law: Prevention Duties and State Responsibility* (Martinus Nijhoff Publishers 2005) 19–20. See also the 2018 report by the US Government scientists and other experts on impacts of climate change, which are entirely consistent with the IPCC: US Global Change Research Program, *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* (US Global Change Research Program 2018) https://nca2018.globalchange.gov/chapter/front-matter-about accessed 13 November 2019.

130 Colin Tapper (see n 119 above) 76.

131 *Juliana v United States* – Lower Court Decision (see n 21 above).

132 Jacqueline Peel, 'Issues in Climate Change Litigation' (2001) 1 Carbon and Climate Law Review 15, 19.

133 In India, the National Green Tribunal is not bound by the Indian Evidence Act and is entitled to regulate its own procedure as 'guided by the principles of natural justice'. The National Green Tribunal Act 2010, § 19(1). The Tribunal has, eg, readily admitted pictures, press articles and reports evidencing air pollution and its causes. See, eg, *Vikrant Kumar Tongad v EPA and Others (Crop Burning Case)* (2013) Application No 118.

134 *Fernandez v Government of Singapore* [1971] 2 All ER 691, 691. See also, *Commissioner of Police v The Ombudsman* [1988] 1 NZLR 385, 391 (New Zealand); *Janiak v Ippolito* [1985] 1 SCR 146 (Canada); *Malec v C Hutton Proprietary Ltd* [1990] 169 CLR 63 (Australia). See also, *Massachusetts v EPA* (see n 6 above).

135 Eg, the Privy Council has stated that a balance of probabilities is:

> 'inappropriate when applied not to ascertaining what has already happened but to prophesying what, if it happens at all, can only happen in the future. There is no general rule of English law that when a court is required, either by statute or at common law, to take account of what may happen in the future and to base legal consequences on the likelihood of its happening, it must ignore any possibility of something happening merely because the odds on its happening are fractionally less than evens.'

Fernandez v Government of Singapore, *ibid*. As the Environment Court of New Zealand opined in *Long-Bay-Okura Great Park Society v North Shore City Council* '[c]onsider a proposed activity which may endanger human lives. Assume the consent authority finds that the probability of the alleged effect is 16.67 per cent (the roll of a dice). If the authority applied a "balance of probabilities" standard of proof, that effect would be disregarded.' *Long Bay-Okura Great Park Society v North Shore City Council* [2008] Decision No 078/2008 (New Zealand Environmental Commission) 310 www.hamilton.govt.nz/our-council/council-publications/districtplans/ODP/Documents/Proposed%20District%20Plan%20Hearings/Hearing%2013%20-%20Weds%2023%20Oct%202013%20-%20Business%20Zones/Item%2008%20Tabled%20J%20Milne%20from%2016%20Oct%20Residential%20Hearing%20-%20Long%20Bay-Okura%20v%20North%20Shore.pdf accessed 18 November 2019. See also, *Commissioner of Police v Ombudsman*, *ibid*.

136 The Environment Court of New Zealand developed this proportional approach in a series of permitting decisions: *Clifford Bay Marine Farms Ltd v Director General of Conservation* [2003] unreported (New Zealand Environmental Commission); *Long Bay-Okura Great Park Society v North Shore City Council*, *ibid* 309–22. In *Shirley Primary School v Christchurch City Council* [1999] NZRMA 66, the court found that there must be some evidence adduced to demonstrate a 'real' risk – ie, some evidence to support the probability of an event occurring was necessary – '[b]ut in the case of any hypothesis about *a high impact risk, a scintilla of evidence* as to possible occurrence may be all that needs to be established in the Court's mind to justify the need for rebuttal evidence' [emphasis author's own]. In this case, the court was interpreting § 3(f) of the Resource Management Act 1991.

137 Resource Management Act 1991, § 3(f) (New Zealand).

138 *Environment East Gippsland Inc v Vic Forests* [2010] VSC 335 [191] citing *Wyong Shire Council v Shirt* [1980] 146 CLR 40 [47–48].

139 *Telstra Corporation Limited v Hornsby Shire Council* [2006] NSWLEC 133 approved in *Gray v Minister* (see n 71 above) [127].

140 In criminal law, eg, the burden of proving a defence may be placed upon the defendant (see, eg, *Woolmington v Director of Public Prosecutions* [1935] AC 462 (House of Lords, UK) – insanity; *Sheldrake v Director of Public Prosecutions* [2004] UKHL 43 – no likelihood of driving while drunk; *R v Schwartz* [1988] 55 DLR 4th 1 (Supreme Court of Canada – possession of firearms licence). In civil law, see, eg, *Australian Guarantee Corp (NZ) Ltd v McBeth* [1992] 3 NZLR 54 (New Zealand Court of Appeal) (application for summary judgment, plaintiff bears evidential burden of establishing defendant has no defence).

141 Eg, in environmental law cases, see *Vellore Citizens Welfare Forum v Union of India* AIR [1996] SC 2715 (India); *Narmada Bachao Andolan v Union of India* [2000] 10 SCC 664 (India); *Conservation Council of South Australia v Development Assessment Committee and Tuna Boat Owners Association (No 2)* [1999] SAERDC 86 (Australia); *Recurso Especial No 883656 (2006/0145139-9-28/02/2012)* [2012] (Superior Tribunal of Justice, Brazil) as cited on p 20 in Environmental Law Alliance Worldwide, 'Holding Corporations Accountable for Damaging the Climate' (2014) www.elaw.org/system/files/elaw.climate.litigation.report.pdf accessed 13 November 2019; AgRg RE No 206.748/SP [2013] (Superior Tribunal of Justice,

Brazil) as cited on p 21 in Environmental Law Alliance Worldwide, 'Holding Corporations Accountable for Damaging the Climate' (2014) www.elaw.org/system/files/elaw.climate.litigation.report.pdf accessed 13 November 2019; *Wheeler y Huddle c/ Gobierno Provincial de Loja, jucio 11121-2011-0010* [2011] (Provincial Court of Justice, Ecuador 2011) as cited on p 16 in Environmental Law Alliance Worldwide, 'Holding Corporations Accountable for Damaging the Climate' (2014) www.elaw.org/system/files/elaw.climate.litigation.report.pdf accessed 13 November 2019; *Gray v Minister of Planning and Others* (see n 71 above); *Telstra v Hornsby Shire Council* (see n 139 above) 42–43; *Shirley Primary School v Christchurch City Council* (see n 136 above); it is possible to shift the burden of proof to the defendant under the Indonesia Civil Procedure Code, see MA Santosa, J Khatarina, RS Assegaf, 'Indonesia' in Richard Lord et al (eds), *Climate Change Liability: Transnational Law and Practice* (CUP 2011) 196.

142 Eg, Art 397 of the Constitution of the Republic of Ecuador 2008 states that: '[i]n the case of environmental damages… any natural person or legal entity, human community or group… [can request] precautionary measures that would make it possible to end the threat or the environmental damage that is the object of the litigation. The burden of proof regarding the absence of potential or real danger shall lie with the operator of the activity or the defendant.' In Sweden, the Swedish Environmental Code 1999 provides at § 3 of c 2 that:

> 'Persons who pursue an activity or take a measure, or intend to do so, shall implement protective measures, comply with restrictions and take any other precautions that are necessary in order to prevent, hinder or combat damage or detriment to human health or the environment as a result of the activity or measure. For the same reason, the best possible technology shall be used in connection with professional activities. Such precautions shall be taken as soon as there is cause to assume that an activity or measure may cause damage or detriment to human health or the environment.'

In China, Art 66 of the Tort Law of the People's Republic of China 2009 states that: 'Where any dispute arises over an environmental pollution, the polluter shall assume the burden of proving that it should not be held liable or that its liability could be mitigated under certain circumstances as provided by law or of proving that there is no causation between its conduct and the harm'.

143 In The Philippines, rule 38 of the Rules of Procedure for Environmental Cases 2010 (see n 44 above) incorporates the precautionary principle: 'When there is a lack of full scientific certainty in establishing a causal link between human activity and environmental effect, the court shall apply the precautionary principle in resolving the case before it. The constitutional right of the people to a balanced and healthful ecology shall be given the benefit of the doubt.'

144 See, eg, UN Convention on the Law of the Sea (UNCLOS) 1982, Art 206; Convention on Biological Diversity 1993, Art 14(1); Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1989, Art 4(2)(f).

145 *Pulp Mills on the River Uruguay (Argentina v Uruguay) Judgement* [2010] ICJ Reports 14 [204].

146 The International Law Association Draft Principles relating to Climate Change (see n 86 above), Art 7B(5) provides that: 'Where there is a reasonably foreseeable threat that a proposed activity may cause serious damage to the environment of other States or areas beyond national jurisdiction, including serious or irreversible damage through climate change to vulnerable States, an environmental impact assessment on the potential impacts of such activity is required.'

147 The *Oslo Principles on Global Climate Change Obligations* (see n 120 above) state that it is an essential obligation for companies to conduct EIAs before building major new facilities. Principle 29 states that the EIA 'must include an analysis of the proposed facility's carbon footprint and ways to reduce it and the potential effects of future climate change on the proposed facility'.

148 See n 1 above. In the US, programmatic or generic Environmental Impact Statements (EIS) review the environmental effects that are generic or common to a class of actions which may not be specific to any single country or area; US Code of Federal Regulations, Title 40 Protection of the Environment, 1502.1. Programmatic EIS must consider cumulative effects of multiple future activities, such as, eg, the CO_2 emissions from the coal industry as a whole rather than those of a single plant. Once a programmatic EIS is prepared it can be re-used and applied to any number of similar projects. In India, EIA Notification 2006 issued under the Environment (Protection) Act requires certain categories of projects or activities to obtain a prior environmental clearance from specified government bodies. To obtain clearance, the applicant is required to submit an EIA report, which is followed by public consultation, revisions to the EIA

report as required, and independent expert appraisal of the project proposed. See also, Lavanya Rajamani, 'The Precautionary Principle in the Indian Courts' in Shibani Ghosh (ed), *Analytical Lexicon of Principles and Rules of Indian Environmental Law* (2015) (publication in process, manuscript available on request).

149 John H Knox, 'Framework Principles on Human Rights and the Environment', Annex to the 'Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment' (2018) UN General Assembly (Human Rights Council), A/HRC/37/59 https://documents-dds-ny.un.org/doc/UNDOC/GEN/G18/017/42/PDF/G1801742.pdf?OpenElement assessed 5 December 2019.

150 *Ibid* 12 [21].

151 Eg, in India, it is usual practice for the courts in public interest cases to constitute a committee of experts tasked with submitting a report to the courts. An independent non-governmental review committee of experts was constituted and relied upon, eg, in the *Municipal Solid Waste Management* case: Lavanya Rajamani, 'Public Interest Environmental Litigation in India: Exploring issues of access, participation, equity, effectiveness and sustainability', (2007) 19 Journal of Environmental Law 3, 293 citing Order dated 5 June 2005.

152 Uniform Civil Procedure Rules 2005 (NSW), rule 31.46. In 2004, eg, the court had appointed 474 court experts in the calendar year. Commentary to rule 31.46, 'Ritchie's Uniform Civil Procedure NSW' (LexisNexis Butterworths 2005). The factors that the court will take into account in appointing a court expert are cost savings to the parties and whether the integrity of the ultimate decision will benefit from such an appointment. Although the expert is appointed by the court, it is for the parties to agree on the individual expert and the expert's fees, for which they are jointly and severally liable. Justice P D McClellan, 'Expert Witnesses – The experience of the Land and Environment Court of New South Wales' XIX Biennial LawAsia Conference (Gold Coast, 20–24 March 2005) 4–5.

153 Universal Declaration on Human Rights 1948, Art 19; International Covenant on Civil and Political Rights 1976, Art 2. See also Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the 'Aarhus Convention') 2012 and rights to information clarified in *Claude Reyes v Chile* [2006] Case ser C no 151 (Chile), see case summary at Global Freedom of Expression, Columbia University '*Claude Reyes v Chile*' https://globalfreedomofexpression.columbia.edu/cases/claude-reyes-v-chile accessed 13 November 2019; Inter-American Commission on Human Rights, 'Annual Report of the Office of the Special Rapporteur for Freedom of Expression.' (2003) OEA/Ser.L/V/II.118, Doc 70 rev 2 www.oas.org/en/iachr/expression/docs/reports/annual/2003.pdf?DocumentID=46 accessed 13 November 2019; *Társaság a Szabadságjogokért v Hungary* [2009] Case no 37374/05 (re: ECHR). For guidelines on providing access to information, see UNEP Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters, decision SS.XI/5, part A (26 February 2010) and for a comprehensive discussion and examples from numerous jurisdictions, see Stephen Stec, *Putting Rio Principle 10 Into Action: An Implementation Guide for the UNEP Bali Guidelines* (UNEP 2015) 18–56.

154 The Oslo Principles on Global Climate Change Obligations state that it is an essential obligation of each state that they 'make available information that is necessary to enable persons… to assess the risks to their lives and health that climate change poses'. *Oslo Principles on Global Climate Change* (see n 120 above), principle 26.

155 § 32 of the Constitution of South Africa 1996 states that, 'everyone has the right of access to any information held by the State; and any information that is held by another person and that is required for the exercise or protection of any right'.

156 The French Charter for the Environment contains a right to environmental information from public bodies. French Constitutional Charter for the Environment (see n 95 above), Art 7.

157 In India, § 2(h) of the Right to Information Act 2005 allows citizens extensive rights to request information from public authorities within a strict deadline. The Supreme Court of India has stated that 'the right to information and community participation necessary for the protection of the environment and human health' is an 'inalienable part of [the constitutionally protected fundamental right to life and liberty in] Article 21'. *Research Foundation for Science Technology National Resource Policy v Union of India* [2005] 10 SCC 510, 42.

158 The UK Environmental Information Regulations 2004, SI 2004 No 3991 contain broad provisions for access to information and the exceptions are narrowly drawn.

159 In Poland, eg, anyone can submit a request to a public administrative body for information on the environment and its protection 'without having to demonstrate a legal or material interest in such information'. See Bartosz Kuras et al, 'Poland' in Richard Lord et al (eds), *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 444.

160 See Framework Principle 7 in John H Knox (see n 149 above) 149, 11.

161 *Ibid*, 11 [17–19].

162 Eg, in New Zealand, § 16 of the Environment Act 1986 empowers the Parliamentary Commissioner for the Environment with a wide statutory function to investigate and publicly report on environmental matters, either through her own initiative or that are brought to her attention.

163 Eg, § 32 of the Constitution of South Africa 1996 provides that '[e]veryone has the right of access to any information held by the state; and any information that is held by another person and that is required for the exercise or protection of any rights'. Art 7 of the French Constitutional Charter for the Environment (see n 95 above) contains a right to environmental information from public bodies.

164 Rules of Court may provide for pre-litigation disclosure. Eg, in the UK under the Senior Courts Act 1981, a person 'likely to be party to subsequent proceedings' can apply for disclosure against a person 'likely to be party to those proceedings' if there is evidence to show why a pre-action order is desirable, for instance, to dispose fairly with the proceedings. See Senior Courts Act 1981, § 33; Code of Federal Regulations, Title 40: Protection of the Environment, § 31.16 (US); Tristram Hodgkinson and Mark James, *Expert Evidence: Law and Practice* (2nd edn, Sweet & Maxwell 2006). Under the Mexican Federal Rules of Procedure, the Judge may 'extend' the rules of civil procedure if 'there are valid reasons to do so' and may avail themselves of 'any person, document, or thing' if related to the factual or legal dispute. See Código Federal de Procedimientos Civiles 2012 (Federal Code of Civil Procedure), Arts 597–98. In India, § 30(a) of the Code of Civil Procedure 1908 contains a broad power to order discovery, either of its own motion or on the application of any party, at any time.

165 In *General Secretary, West Pakistan Salt Miners Labour Union (CBA) Khewara, Jhelum v Director, Industries and Mineral Development, Punjab, Lahore* (see n 99 above) [5], the Supreme Court of Pakistan stated that, in human rights and/or public interest cases in particular, the court 'has vast power… to investigate into questions of fact… independently by recording evidence, appointing commission[ers] or any other reasonable and legal manner to ascertain the correct position'.

166 See, eg, *Public Service Board of NSW v Osmond* [1986] 159 CLR 656, 665.

167 Land and Environment Court Rules 2007 (NSW), rule 4.3.

168 See n 1 above, 127.

169 In Ontario, Canada, the *Environmental Bill of Rights 1993,* § 93(1) provides:

> 'If the court finds that the plaintiff is entitled to judgment… the court may: (a) grant an injunction against the contravention; (b) order the parties to negotiate a restoration plan in respect of harm to the public resource resulting from the contravention and to report to the court on the negotiations within a fixed time; (c) grant declaratory relief; and (d) make any other order, including an order as to costs, that the court considers appropriate.'

170 In *M C Mehta v Union of India* (see n 83 above) 827 the Supreme Court declared that Art 32 of the Constitution confers broad authority to Indian courts:

> 'Article 32 does not merely confer power on this Court to issue a direction, order or writ for enforcement of the fundamental rights but it also lays a constitutional obligation on this Court to protect the fundamental rights of the people and for that purpose this Court has all incidental and ancillary powers including the power to forge new remedies and fashion new strategies designed to enforce the fundamental rights'.

India Constitution, Art 32, §1–2:

> '(1) The right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed. (2) The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari, whichever may be appropriate, for the enforcement of any of the rights conferred by this Part.'

171 *Ashgar Leghari v Federation of Pakistan* (see n 13 above) [8].

172 *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.101]. The *Urgenda* Supreme Court Decision (see n 9 above) affirmed this was the correct approach [8.1 – 8.3].

173 See n 1 above, 127.
174 *Ibid.*
175 *Ibid.*
176 For an example of a Model Statute that considers new causes of action, see Gage and Wewerinke-Singh (see n 63 above) 46–47.
177 See n 1 above, 127.
178 *Ibid.*
179 The Model Statute focuses on *domestic* climate change litigation. For more information about inter-state and other international climate change litigation, see the extensive list of articles referenced in Christoph Schwarte with Ruth Byrne, 'International Climate Change Litigation and the Negotiation Process' (2011) 8 Transnational Dispute Management 1, 3.
180 UN Framework Convention on Climate Change (UNFCCC) 1992. Art 3.3.
181 Aarhus Convention (see n 153 above), Art 2 [3].
182 This provision is pertinent and is recommended to be included by those states that recognise a right to a safe, clean and healthy environment, or a variation thereof, either directly or by implication in case law.
183 Drawing from the wording contained in India's National Green Tribunal Act 2010, § 19(1).
184 Adapted from the Tobacco Damages and Health Care Costs Recovery Act 2000 (British Columbia) cited in Rose Nathan, 'Model Legislation for Tobacco Control: A Policy Development and Legislative Drafting Manual' (2004) International Union for Health Promotion and Education, 89–93.
185 Adopted from the Freedom of Information Act 2014 § 3.2 (UK).
186 Wording based on Senior Courts Act 1981, § 33 (UK).
187 *Ibid.*
188 Wording based on 28 USC 1996 § 1782 (US).
189 Based on the Land and Environment Court Rules 2007, reg 4.3 (New South Wales).
190 Based on Uniform Civil Procedure Rules 2005, pt 31, rule 31.46(1) and 31.53 (Australia).
191 Modelled and adapted from *Bonnington Casting Ltd v Wardlaw* [1956] AC 613 (UK); *McGhee v National Coal Board* [1973] 1 WLR 1 (UK); *Urgenda Foundation v The State of The Netherlands* – Lower Court Decision (see n 9 above) [4.90]. The Hague District Court and The Hague Court of Appeal (see n 9 above) also considered and rejected the state's argument that no court order to reduce its GHG emissions should be made because, in global terms, the state's emissions were minimal. See also nn 113, 116 and 118 above. The Netherlands Supreme Court in its 2019 *Urgenda* decision (see n 9 above) provides clear rationales as to why a State *de minimis defence* should be rejected:

> 7.7 'Partly in view of the serious consequences of dangerous climate change as referred to in 4.2 above, t**he 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 cited above in 5.7.2.**" [Emphasis author's own].
>
> 5.7.8 'A**lso important in this context is that, as has been considered in 4.6 above about the carbon budget, each reduction of greenhouse gas emissions has a positive effect on combating dangerous climate change, as every reduction means that more room remains in the carbon budget. The 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 for this reason either: no reduction is negligible.**' [Emphasis author's own].

Similarly, in *Gloucester Resources Limited v Minister for Planning* [2019] NSLWEC 7 (New South Wales Land and Environment Court), Chief Justice Brian Preston, in rejecting an appeal to approve a new coal mine, further elaborated the rationale why approval of a source of new GHG emissions is problematic and that a 'de minimis' argument as to the project's GHG contributions was not a valid rationale for declining approval:

> '515. *The direct and indirect GHG emissions of the Rocky Hill Coal Project will contribute cumulatively to the global total GHG emissions… It matters not that this aggregate of the Project's GHG emissions may represent a small fraction of the global total of GHG emissions. The global problem of climate change needs to be addressed by multiple local actions to mitigate emissions by sources and remove GHGs by sinks.* As Professor Steffen pointed out, "global greenhouse gas emissions are made up of millions, and probably hundreds of millions, of individual emissions around the globe. *All emissions are important because cumulatively they constitute the global total of greenhouse gas emissions, which are destabilising the global climate system at a rapid rate. Just as many emitters are contributing to the problem, so many emission reduction activities are required to solve the problem"* (Steffen Report, 57).
>
> 525. *There is a causal link between the Project's cumulative GHG emissions and climate change and its consequences.* The Project's cumulative GHG emissions will contribute to the global total of GHG concentrations in the atmosphere. The global total of GHG concentrations will affect the climate system and cause climate change impacts. The Project's cumulative GHG emissions are therefore likely to contribute to the future changes to the climate system and the impacts of climate change. In this way, the Project is likely to have indirect impacts on the environment, including the climate system, the oceanic and terrestrial environment, and people.
>
> 526. *The approval of the Project (which will be a new source of GHG emissions) is also likely to run counter to the actions that are required to achieve peaking of global GHG emissions as soon as possible and to undertake rapid reductions thereafter in order to achieve net zero emissions…* This is the globally agreed goal of the Paris Agreement (in Article 4(1)). The NSW government has endorsed the Paris Agreement and set itself the goal of achieving net zero emissions by 2050. It is true that the Paris Agreement, Australia's NDC of reducing GHG emissions in Australia by 26 to 28% below 2005 levels by 2030 or NSW's Climate Change Policy Framework do not prescribe the mechanisms by which these reductions in GHG emissions to achieve zero net emissions by 2050 are to occur. In particular, there is no proscription on approval of new sources of GHG emissions, such as new coal mines.
>
> 527. Nevertheless, the exploitation and burning of a new fossil fuel reserve, which will increase GHG emissions, cannot assist in achieving the rapid and deep reductions in GHG emissions that are necessary in order to achieve "a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century" (Article 4(1) of the Paris Agreement) or the long term temperature goal of limiting the increase in global average temperature to between 1.5ºC and 2ºC above pre-industrial levels (Article 2 of the Paris Agreement). As Professor Steffen explained, achieving these goals implies phasing out fossil fuel use within that time frame. He contended that one of the implications of the carbon budget approach is that most fossil fuel reserves will need to be left in the ground, unburned, to remain within the carbon budget and achieve the long term temperature goal. The phase out of fossil fuel use by the second half of this century might permit a minority of fossil fuel reserves to be burned in the short term. From a scientific perspective, it matters not which fossil fuel reserves are burned or not burned, only that, in total, most of the fossil fuel reserves are not burned. Professor Steffen explained, however, *that the existing and already approved but not yet operational mines/wells will more than account for the fossil fuel reserves that can be exploited and burned and still remain within the carbon budget. This is the reason he considered that no new fossil fuel developments should be allowed*' [emphasis author's own].

192 Based on the New South Wales Crown Proceedings Act 1988, § 5(1) (Australia).

193 *Ibid*, § 5(2) (Australia).

194 Based on the New South Wales Environmental Planning and Assessment Act 1979, § 124 (Australia).

195 See, Brian J Preston, 'Injunctions in Planning and Environmental Cases' (2012) 36 Australian Bar Review 84.

196 Preston (see n 27 above) 12.
197 Santosa, Khatarina and Assegaf (see n 141 above) 203.
198 Rules of Procedure for Environmental Cases 2010 (Republic of The Philippines) (see n 44 above) rule 1, § 12. The Rules apply to civil and criminal proceedings before regional and municipal courts that involve enforcement or violations of environmental and other related laws.
199 *Ibid*, rule 2, § 12.
200 Constitution of Kenya 2010, Art 22(3).
201 Preston (see n 27 above) 13, citing *John Wekesa Khaoya v Attorney-General* [2013] EKLR (High Court of Kenya).
202 Aarhus Convention (see n 153 above), Art 9(4). For a discussion of how countries have interpreted 'prohibitively expensive' and how the convention has been implemented in different counties, see Sasha Blackmore, 'Recent Decisions by the Aarhus Convention Compliance Committee' (2012) Landmark Chambers www.landmarkchambers.co.uk/wp-content/uploads/2018/07/SAB_Recent_decisions_by_the_ACCC_Feb2013.pdf accessed 13 November 2019.
203 Peel and Osofsky (see n 2 above) 279; Nicola Pain and Sonali Seneviratne, 'Protective Costs Orders: Increasing Access to Courts by Capping Costs' (2011) Australian Environmental Review 276; Ross Abbs, Peter Cashman and Tim Stephens, 'Australia' in Richard Lord et al, *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 106.
204 In France, eg, the costs of proceedings (except for lawyer fees), the 'dépens', are fixed on the basis of a statutory tariff. See Code Civil, Art 542 (France).
205 Canadian Environmental Law Association, Ecojustice Canada and the Environmental Law Centre at the University of Victoria, 'Costs and Access to Justice in Public Interest Environmental Litigation' Submission to the Federal Court of Appeal and Federal Court Rules Committee (23 November 2015) 11–12.
206 Working Group of Access to Environmental Justice, 'Ensuring Access to Justice in England and Wales' (2008) [43] http://assets.wwf.org.uk/downloads/justice_report_08.pdf accessed 13 November 2019 (citing Justice Dyson of the Court of Appeal: 'Dyson J said that the jurisdiction to make a [protective cost order] should be exercised only in the most exceptional circumstances').
207 *British Columbia (Minister of Forests) v Okanagan Indian Band* [2003] SCC 371 [40]; *Little Sisters Book and Art Emporium v Canada (Commissioner of Customs and Revenue)* [2007] SCC 2 [86].
208 Uniform Civil Procedure Rules 2005, rule 42.4 (NSW).
209 Pain and Seneviratne (see n 203 above) 2.
210 Preston (see n 27 above) 22–23.
211 Land and Environment Court Rules 2007, rule 4.2(2) (NSW); NSW Young Lawyers Environmental Law Committee, 'A Practitioner's Guide to the Land and Environment Court of NSW' (3rd edn, Law Society 2009) www.lawsociety.com.au/sites/default/files/2019-05/YL_PracGuide_LandAndEnviroCourt_2019.pdf accessed 13 November 2019.
212 Doelle, Mahony and Smith (see n 67 above) 541.
213 *Little Sisters Book and Art Emporium v Canada (Commissioner of Customs and Revenue)* (see n 207 above).
214 *Ibid* [36–37].
215 *Ibid* [60–66].
216 Rules of Procedure for Environmental Cases 2010 (Republic of The Philippines), (see n 44 above) rule 5, § 1.
217 Michael Gerrard and Gregory Wannier, 'United States of America' in Richard Lord et al (eds), *Climate Change Liability: Transnational Law and Practice* (CUP 2012) 577 referring to the US Clean Air Act, Clean Water Act and Endangered Species Act. The National Environmental Policy Act does not have an equivalent but successful plaintiffs can claim these fees under the Equal Access to Justice Act*;* Chris Tollefson, 'Costs in Public Interest Litigation Revisited' (2012) 39 The Advocates' Quarterly 197, 199–200.
218 The test to determine if a case was brought in the public interest is Rule 4.2 of the Land and Environment Court Rules 2007 and has three parts: (1) can the litigation be characterised as having been brought in the public interest; (2) if so, is there 'something more' than the mere characterisation of the litigation as having been brought in the public interest; and (3) are there any countervailing circumstances, including conduct of the applicant, that speak against departure from the usual

costs rule. Rule 4.2 was implemented in *Gray v Macquarie Generation (No 2)* [2010] NSWLEC 82; *Delta Electricity v Blue Mountains Conservation Society Inc* [2010] NSWCA 263; *Hill Top Residents Action Group Inc v Minister for Planning (No 3)* [2010] 176 LGERA 20 [35–44]. See also *Caroona Coal Action Group Inc v Coal Mines Pty Ltd.* [2009] 170 LGERA 22

219 Hare (see n 49 above) 75.

220 Canadian Environmental Law Association, Ecojustice Canada and the Environmental Law Centre at the University of Victoria (see n 205 above) 14–16:

> 'We recommend… The Federal Courts should apply a presumptive one-way rule in favour of public interest litigants or, alternatively, a presumptive no-way costs rule in all judicial reviews. The Courts would retain discretion to award costs against an unsuccessful public interest litigant in a judicial review application if a prevailing party can demonstrate to the Courts' satisfaction that the application involved no issue of public importance or that the application was brought in a frivolous or vexatious manner.'

221 Po Jen Yap and Holning Lau, *Public Interest Litigation in Asia* (Routledge Law 2010) 50 citing Air Pollution Control Act at Art 81, § 2: 'When issuing a verdict on the lawsuit in the foregoing paragraph, the administrative court pursuant to its authority may order the defendant agency to pay the appropriate lawyer fees, detection and appraisal fees and other litigation costs to plaintiffs that have made specific contributions to the maintenance of air quality.'

222 Doelle, Mahony and Smith (see n 67 above) 541. See also *Schachter v Canada* [1992] SCR 679 (Supreme Court of Canada) [106].

223 Client Earth, 'European amicus brief submitted to US EPA case' (26 August 2011) www.documents.clientearth.org/wp-content/uploads/library/2011-08-25-european-amicus-brief-submitted-to-us-epa-case-coll-en.pdf accessed 13 November 2019.

224 *Coalition for Responsible Regulation v EPA* 684 F 3d 102 (2012); *Massachusetts v EPA* (see n 6 above).

225 Supreme Court Rulings (Argentina) No 28/204 (2004).

226 Lise Johnson and Niranjali Amersinghe, 'Protecting the Public Interest in International Dispute Settlement: The Amicus Curiae Phenomenon' (Centre for International Environmental Law 2009) 15.

227 Rules of the Constitutional Court of South Africa, rule 10; see also *Fose v Minister of Safety and Security,* 1997 SA 786 (South Africa Constitutional Court) [9].

‘Law and lawyers will have a vital role to play in securing climate justice. The Model Statute will stimulate lawyers to think about their important ethical roles in protecting this fragile world.’

Mary Robinson *Chair of the Elders; United Nations Secretary-General’s Special Envoy for Climate Change (2014–2016)*

‘The worst obstacles to effective climate action today are not technical or scientific, but political and legal. The problem is not that governments are trying but failing to reduce their greenhouse gas emissions; the problem is that most are barely trying at all. As a result, people around the world threatened by the climate crisis are asking courts to protect their human rights to life and health by closing the gap between governments’ commitments and their performance. This Model Statute provides critical lessons and templates for how these plaintiffs can successfully pursue action-forcing climate litigation.’

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