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LIMITING DANGEROUS CLIMATE CHANGE

THE CRITICAL ROLE OF CITIZEN SUITS AND DOMESTIC COURTS — DESPITE THE PARIS AGREEMENT

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**LIMITING DANGEROUS CLIMATE CHANGE:
THE CRITICAL ROLE OF CITIZEN SUITS AND DOMESTIC COURTS —
DESPITE THE PARIS AGREEMENT**

David Estrin



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Cover photos: Urgenda/Chantal Bekker. Left: Judge Hans Hofhuis and Judge I. Brand. Right: Urgenda lawyers Roger Cox (left) and Koos van den Berg are embraced by supporters.

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ABOUT THE INTERNATIONAL LAW RESEARCH PROGRAM

The International Law Research Program (ILRP) at CIGI is an integrated multidisciplinary research program that provides leading academics, government and private sector legal experts, as well as students from Canada and abroad, with the opportunity to contribute to advancements in international law.

The ILRP strives to be the world's leading international law research program, with recognized impact on how international law is brought to bear on significant global issues. The program's mission is to connect knowledge, policy and practice to build the international law framework — the globalized rule of law — to support international governance of the future. Its founding belief is that better international governance, including a strengthened international law framework, can improve the lives of people everywhere, increase prosperity, ensure global sustainability, address inequality, safeguard human rights and promote a more secure world.

The ILRP will focus on the areas of international law that are most important to global innovation, prosperity and sustainability: international economic law, international intellectual property law and international environmental law.

ABOUT THE AUTHOR



CIGI Senior Research Fellow **David Estrin** is recognized as Canada's senior environmental law specialist, as well as for his international climate justice and human rights endeavours. At CIGI he focuses on legal and institutional remedies for limiting greenhouse gas emissions and on innovative approaches to address climate change loss and damage. David recently co-chaired the International Bar Association (IBA) Task Force that produced a groundbreaking report, *Achieving Justice and Human Rights in an Era of Climate Disruption*. He now co-chairs an IBA expert working group drafting a Model Climate Change Legal Remedies Statute.

David has, for more than 40 years, exclusively practised environmental and resources law and taught widely at law and environmental studies faculties. He was first general counsel for the Canadian Environmental Law Association, is Canada's first private environmental law practitioner and founding editor of the *Canadian Environmental Law Reports*. He was a partner and initial head of the Environmental Law Group at Gowlings, a major Canadian law firm, and has appeared as counsel at all levels of court in Ontario, Alberta and at the federal level. He is also an adjunct professor at Osgoode Hall Law School, where he co-founded the Environmental Justice and Sustainability Law Clinical Program.

In 2006, to honour David's achievements, the Canadian Bar Association established the David Estrin Prize for best scholarly essay in environmental, energy or resources law by a Canadian law student. In April 2016, the Law Society of Upper Canada announced that David is to receive the Law Society Medal for outstanding career achievements and community contributions.

ACRONYMS

API	American Petroleum Institute
CCC	Climate Change Commission
COP	Conference of the Parties
EPA	Environmental Protection Agency
GCF	Green Climate Fund
GHG	greenhouse gas
IBA	International Bar Association
ILA	International Law Association
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
NAM	National Association of Manufacturers
NDCs	Nationally Determined Contributions
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WELC	Western Environmental Law Center
WRI	World Resources Institute

EXECUTIVE SUMMARY

For more than two decades, the world's nations have collectively recognized their critical responsibility to avert the catastrophic effects of climate change. Yet despite increasing scientific clarity as to the urgency of this objective, and more than 20 years of continuous negotiations to reduce carbon emissions under the United Nations Framework Convention on Climate Change (UNFCCC), states have failed to act on their acknowledged responsibility: emissions have continued to increase. Most recently, in the December 2015 Paris Climate Agreement, 195 states agreed with the need to limit the average global temperature rise to less than 2°C and preferably to less than 1.5°C, but the same states failed to include specific emission reduction requirements and deadlines necessary to meet these targets, and instead opted essentially for "best efforts."

This paper focuses on the emerging new role of citizen suits, domestic courts and human rights commissions in limiting dangerous climate change. Given the failure of states to stop the almost constant increase in global carbon emissions (and now the worrying practical and legal gaps in the Paris Agreement), frustrated citizens are increasingly looking to domestic courts to require governments to mitigate emissions and limit climate harm. This emerging role is demonstrated in three important 2015 decisions: *Urgenda* from the Netherlands; *Leghari* from Pakistan; and *Foster v Washington Department of Ecology* from the United States. These suits before domestic courts have achieved significant results in the battle against climate change. Each court found there was a legal duty on the respondent government to rein in carbon emissions or take other measures to prevent significant climate-related human and civil rights impacts. Also in 2015, the Philippines Human Rights Commission agreed to investigate and hold hearings as to the responsibility of large international fossil fuel companies for substantial impairment of human rights in the Philippines caused by extreme weather events.

What are the factors that have led, and may increasingly lead, courts to act on these citizen complaints? Some key ones are the recent availability of authoritative climate science that convincingly clarifies why carbon emissions must be urgently limited; and apparent judicial distress as judges learn that states clearly know the dangers and have committed to act, but are failing to implement measures necessary to prevent climate chaos. Where a state or subnational government is failing to act with alacrity to prevent such harm, the circumstances are ripe for domestic judges to require governments to undertake positive actions. Issuing orders to prevent harm to citizens or impairment of rights is a traditional judicial role.

As illustrated by *Urgenda* and *Leghari*, in the face of governmental inaction, domestic judges may well be induced to use and even adapt traditional domestic

legal principles and constitutional rights and to consider international law principles so as to adjudicate the right of citizens to be protected from climate change impacts. If this emerging trend continues, it would demonstrate that citizen initiatives are critical in overcoming state inaction, that at least the judicial branch of government can effectively act on this wicked problem and also remind political leaders that they have responsibility to do more than continue to spout greenhouse gas (GHG) reduction rhetoric at annual UN meetings in fashionable locales.

INTRODUCTION

Contrasting State Responsibility to Reduce Climate Harm with State Inaction: Problematic Aspects of Two Decades of UNFCCC Process

In the 1992 UNFCCC, all state parties agreed their ultimate objective was to achieve “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.”¹

Further, each of the developed country parties (and other parties included in Annex I to the UNFCCC)² specifically committed to the following individual obligation for their state: “Each of these Parties shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs.”³

Over the next two decades of UNFCCC negotiations, the primary responsibility of states to take preventive measures on this issue was not doubted. Indeed, the 2014 International Law Association’s (ILA’s) Declaration of

Legal Principles Relating to Climate Change⁴ affirmed this responsibility: “States shall exercise due diligence to avoid, minimise and reduce environmental and other damage through climate change....In exercising due diligence, States shall take all appropriate measures to anticipate, prevent or minimise the causes of climate change, especially through effective measures to reduce greenhouse gas emissions, and to minimise the adverse effects of climate change through the adoption of suitable adaptation measures.”⁵

More recently, the 2015 Oslo Principles on Global Climate Change Obligations,⁶ developed and endorsed by distinguished international lawyers, professors and judges, affirmed “the essential obligations States and enterprises have to avert the critical level of global warming.”⁷ The principles premise that “[f]ulfilling these obligations is necessary and urgent if we are to avoid an unprecedented catastrophe,” and emphasize the primary role of state responsibility (as well as a similar responsibility on “enterprises”) in fulfilling these obligations: “Avoiding severe global catastrophe is a moral and legal imperative. To the extent that human activity endangers the biosphere, particularly through the effects of human activity on the global climate, all States and enterprises have an immediate moral and legal duty to prevent the deleterious effects of climate change. While all people, individually and through all the varieties of associations that they form, share the moral duty to avert climate change, *the primary legal responsibility rests with States and enterprises.*”⁸

Climate science is clear — and states know — that carbon emissions must be reduced to turn down the heat. Almost a decade ago, in 2007, the expert scientific Intergovernmental Panel on Climate Change (IPCC) concluded that averting catastrophic climate change consequences required limiting the average global temperature increase to about 2°C above pre-industrial levels, which in turn mandated stabilizing the concentration of CO₂ equivalent gases in the atmosphere to no more than 450 ppm. The IPCC indicated that achieving this goal would require the Annex

1 United Nations Framework Convention on Climate Change, 4 June 1992, 1771 UNTS 107, 31 ILM 849 (entered into force 21 March 1994) at 4, art 2, [UNFCCC], online: <unfccc.int/resource/docs/convkp/conveng.pdf>.

2 Parties included the industrialized countries that were members of the Organisation for Economic Co-operation and Development (OECD) in 1992, plus countries with economies in transition, including the Russian Federation, the Baltic states, and several central and eastern European states. UNFCCC, “Parties and Observers,” online: <unfccc.int/parties_and_observers/items/2704.php>. For a list of Annex I parties, see: UNFCCC, “List of Annex I Parties to the Convention,” online: <unfccc.int/parties_and_observers/parties/annex_i/items/2774.php>.

3 UNFCCC, *supra* note 1 at 6, art 4(2)(a) [footnote omitted].

4 ILA, Resolution 2/2014 – Declaration of Legal Principles Relating to Climate Change (Washington: 76th Conference of the ILA, 2014), online: <www.ila-hq.org/download.cfm/docid/2FE72F08-8E2B-4D98-9259BF3060AC0B3B>.

5 *Ibid*, Annex, draft art 7A, “Obligation of Prevention.”

6 Expert Group on Global Climate Obligations, Oslo Principles on Global Climate Change Obligations (principles adopted at King’s College London, 30 March 2015), online: <globaljustice.macmillan.yale.edu/sites/default/files/files/OsloPrinciples.pdf>.

7 *Ibid* at 1.

8 *Ibid* [emphasis added].

I UNFCCC parties to collectively reduce their emissions between 25 to 40 percent by 2020.⁹

At the 2010 UNFCCC Cancun Conference of the Parties (COP), all parties agreed to the following:

- climate change represents an urgent and potentially irreversible threat to human societies and the planet, and thus requires to be urgently addressed by all parties;¹⁰
- deep cuts in global greenhouse gas emissions are required according to science, and as documented in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2° C above pre-industrial levels, and that Parties should take urgent action to meet this long-term goal.¹¹

In the so-called “Cancun Pledges,”¹² the Annex I countries agreed “achieving the lowest levels assessed by the Intergovernmental Panel on Climate Change to date and its corresponding potential damage limitation would require Annex I parties as a group to reduce emissions in a range of 25–40 per cent below 1990 levels by 2020.”¹³ Despite the recognition of the need to make specific carbon

emission reductions by 2020, there were no “deep cuts in global greenhouse gas emissions” by Annex I countries.¹⁴

At the 2011 COP 17 in Durban, the parties decided that at the 2015 Paris COP they would act on their acknowledged responsibilities by reaching another legal instrument or new outcome with “legal force.”¹⁵ At the 2013 Warsaw COP, the parties essentially abandoned linking their domestic emissions reductions to a specific IPCC-derived percentage contribution and instead decided to move to a “bottom-up” voluntary pledge approach — then called the Intended Nationally Determined Contribution (INDC). All parties were invited to communicate their INDCs to the UNFCCC Secretariat well in advance of the 2015 Paris COP 21.¹⁶ In the meantime, in 2014, the IPCC Fifth Assessment Report concluded that the Cancun Pledges were insufficient, since they were likely to only limit temperature change to below 3°C relative to pre-

9 IPCC, *Climate Change 2007: Mitigation of Climate Change. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK and New York: Cambridge University Press, 2007), online: <www.ipcc.ch/pdf/assessment-report/ar4/wg3/ar4_wg3_full_report.pdf>, Box 13.7 at 776; see also 227 and Table 3.9.

10 UNFCCC, *Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010*, UN Doc FCCC/CP/2010/7/Add.1 [UNFCCC COP 16] (15 March 2011), Dec 1/CP.16 at 2, online: <unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>.

11 *Ibid* at 3.

12 UNFCCC, *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its sixth session*, UN Doc FCCC/KP/CMP/2010/12/Add.1 (15 March 2011), Dec 1/CMP.6, online: <unfccc.int/resource/docs/2010/cmp6/eng/12a01.pdf>.

13 *Ibid*, Dec 1/CMP.6 at 3. See also UNFCCC COP 16, *supra* note 10.

14 While total GHG emissions for all Annex I parties decreased in the 1990–2012 period by 10.6 percent, global CO₂ emissions are still increasing steadily. See UNFCCC, *Compilation and synthesis of sixth national communications and first biennial reports from Parties included in Annex I to the Convention*, UN Doc FCCC/SBI/2014/INF.20/Add.1 (24 November 2014) at 12, online: <<http://unfccc.int/resource/docs/2014/sbi/eng/inf20a01.pdf>> with respect to the decrease 1990–2012. See also the Executive Summary in United Nations Environment Programme (UNEP), *The Emissions Gap Report 2015: A UNEP Synthesis Report* (Nairobi: UNEP, 2015) [2015 UNEP Emissions Gap Report], online: <uneplive.unep.org/media/docs/theme/13/EGR_2015_301115_lores.pdf>.

15 See UNFCCC, *Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011*, UN Doc FCCC/CP/2011/9/Add.1 (15 March 2012), Dec 1/CP.17 at 2, online: <unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf>: “Noting with grave concern the significant gap between the aggregate effect of Parties’ mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with having a likely chance of holding the increase in global average temperature below 2°C or 1.5°C above pre-industrial levels” and “Recognizing that fulfilling the ultimate objective of the Convention will require strengthening of the multilateral, rules-based regime under the Convention” [emphasis in original], the parties decided “to launch a process to develop a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties” (also referred to as the “2015 agreement”), to be adopted at the twenty-first session of the COP, in 2015, and for it to come into effect and be implemented from 2020.

At the 2012 Doha COP, the parties “[d]etermined to adopt a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties at its twenty-first session, due to be held from Wednesday, 2 December to Sunday, 13 December 2015, and for it to come into effect and be implemented from 2020”: UNFCCC, *Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012*, UN Doc FCCC/CP/2012/8/Add.1 (28 February 2013), Dec 2/CP.18 at 19, online: <unfccc.int/resource/docs/2012/cop18/eng/08a01.pdf>.

16 UNFCCC, *Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013*, UN Doc FCCC/CP/2013/10/Add.1, Dec 1/CP.19 at 4, para 2(b) (31 January 2014), online: <unfccc.int/resource/docs/2013/cop19/eng/10a01.pdf>.

industrial levels.¹⁷ In this context, many expected that at the 2015 Paris COP 21 the intended legally binding agreement would include stringent limits on carbon emissions to avert very significant biological and human rights impacts that would result from the average global temperature increasing to 2°C or even to 1.5°C beyond pre-industrial levels.¹⁸ However, the INDCs tabled in 2015 by major emitting countries prior to COP 21 evidenced unwillingness by many of these countries to even pledge to meet the emissions cuts required as scientifically calculated by the IPCC.¹⁹ According to the November 2015 Climate Action Tracker evaluation:

Current policies presently in place around the world are projected to reduce baseline emissions and result in about 3.6°C warming above pre-industrial levels. The unconditional pledges or promises that governments have made, including in submitted INDCs as of 1 October 2015, would limit warming to about 2.7°C above pre-industrial levels, or in probabilistic terms, likely limit warming below 3°C.

17 IPCC, *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK and New York: Cambridge University Press, 2014), *Summary for Policymakers* at 12, online: <www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_summary-for-policymakers.pdf>.

18 The substantial impacts of climate change on human rights are summarized in the United Nations Human Rights Office of the High Commissioner, Statement of the United Nations Special Procedures Mandate Holders on the occasion of the Human Rights Day Geneva, 10 December 2014: *Climate Change and Human Rights*, online: <ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15393>. See also International Bar Association (IBA), *Achieving Justice and Human Rights in an Era of Climate Disruption: International Bar Association Climate Change Justice and Human Rights Task Force Report* (London: IBA, 2014) [IBA Report], online: <www.ibanet.org/PresidentialTaskForceClimateChangeJustice2014Report.aspx>. See also Civil Society Review, *Fair Shares: A Civil Society Equity Review of INDCs – Summary* (October 2015) at 1 [Civil Society Review], online: <civilsocietyreview.org/wp-content/uploads/2015/10/CSO_summary.pdf>, a recent report supported by several civil society organizations such as Oxfam, in which clear concern was expressed that “[e]xceeding 1.5°C will entail unacceptable impacts for billions of people and risk crossing irreversible tipping points. We can only emit a finite amount of greenhouse gases — an amount known as the ‘global carbon budget’ — if we wish to keep overall increases beneath 1.5°C or even 2°C. The science indicates we are reaching this limit very quickly, and may even have exceeded it.” [footnote omitted]

19 See UNFCCC, *Synthesis Report on the aggregate effect of the intended nationally determined contributions*, UN Doc FCCC/CP/2015/7 (30 October 2015), online: <unfccc.int/resource/docs/2015/cop21/eng/07.pdf>. See also OECD, *Meeting climate goals will require stronger policies to cut emissions* (20 October 2015), online: <www.oecd.org/environment/meeting-climate-goals-will-require-stronger-policies-to-cut-emissions.htm>; and Climate Action Tracker, “INDCs lower projected warming to 2.7°C: significant progress but still above 2°C” (1 October 2015), online: <climateactiontracker.org/news/224/INDCs-lower-projected-warming-to-2.7C-significant-progress-but-still-above-2C-.html>.

*There remains a substantial gap between what governments have promised to do and the total level of actions they have undertaken to date. Furthermore, both the current policy and pledge trajectories lie well above emissions pathways consistent with a 1.5°C or 2°C world.*²⁰

In the December 2015 Paris COP 21 decision²¹ adopting the Paris Agreement,²² the world’s states continued to admit climate change was dangerous and that effective and urgent actions were required. Decision recitals include the following:

- *Recognizing* that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions,
- *Also recognizing* that deep reductions in global emissions will be required in order to achieve the ultimate objective of the Convention and *emphasizing* the need for urgency in addressing climate change, ...
- *Emphasizing* with serious concern the urgent need to address the significant gap between the aggregate effect of Parties’ mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, ...
- *Emphasizing* the enduring benefits of ambitious and early action including major reductions in the cost of future mitigation and adaptation efforts.²³

20 Climate Action Tracker, “Effect of current pledges and policies on global temperature”, online: <climateactiontracker.org/global.html> [emphasis added] [footnotes omitted].

21 UNFCCC, *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015*, UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016), Dec 1/CP.21 [Report COP 21], online: <unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>.

22 Paris Agreement, 22 April 2016 (adopted 12 December 2015), Annex to Report COP 21 (*supra* note 21) at 21–36 [Paris Agreement], online: <unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english.pdf>.

23 Report COP 21, *supra* note 21 at 2 [emphasis in original].

Similarly, in the part of the decision referencing INDCs, the COP “[n]otes with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 °C scenarios...and also notes that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2 °C.”²⁴

Despite these concerns demonstrating that the parties knew there was a “significant gap between the aggregate effect of the Parties’ [INDC] pledges” in terms of reducing the average global temperature to less than 2°C by 2020,²⁵ the parties failed to include in the Paris Agreement measures to ensure that actions are taken to close that worrisome gap and stop the clear trajectory the world is now on to a dangerous 3°C global warming. The agreement lacks specific measures and enforceable means to require countries to reduce emissions by specific amounts or by any particular deadline. Indeed, the agreement requires only that “Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking would take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases [a goal of net GHG neutrality] in the second half of this century.”²⁶ In the meantime, the Paris Agreement sets no emissions limits that any country must meet; it simply encourages best efforts. Even though all countries are to prepare further emissions mitigation commitments (and revise these every five years), and although they agreed to “pursue domestic mitigation measures, with the aim of achieving the objectives,”²⁷ these are general words that provide little assurance that the necessary steps will be taken to limit emissions and prevent climate chaos.

Where does the Paris Agreement leave citizens who want to ensure that they and future generations and the human rights of vulnerable people will not be devastated by climate change? Comments by eminent jurists who drafted the Oslo Principles²⁸ that were published in early 2015 before the Paris Agreement are, unfortunately, still apt after Paris: “Despite the laudable pledges by leading politicians around the globe and a series of urgent calls made by prestigious international organisations, political actions do not keep pace with these promises and calls;

²⁴ *Ibid* at 4 [emphasis in original].

²⁵ *Ibid* at 2.

²⁶ Paris Agreement, *supra* note 22 at 22, art 4.1 [emphasis added].

²⁷ *Ibid* at 23, art 4.2.

²⁸ *Supra* note 6.

they fall short of doing the minimum necessary to avoid that the two-degree threshold will be passed. As things stand right now, there is not much reason to believe that politicians will be able to strike compromises to the extent needed in time. This regrettable state of affairs serves as an incentive, if not imperative, to explore potentially promising avenues to stem the tide.”²⁹

Fortunately, given the worrying practical and legal gaps in the Paris Agreement, citizen suits in domestic courts appear to be one of these “promising avenues to stem the tide.” Frustrated citizens have begun to call on domestic court judges and human rights tribunals to remind their governments that they must substantively reduce carbon emissions and not just spout GHG reduction rhetoric. Decisions in 2015 from the Court of The Hague in *Urgenda Foundation v The Netherlands (Ministry of Infrastructure and the Environment)*,³⁰ from Pakistan’s Lahore High Court Green Bench in *Leghari v Pakistan*³¹ and from the Washington State Superior Court (United States) in *Foster v Washington Department of Ecology*³² illustrate that domestic tribunals can be important and sympathetic venues for limiting carbon emissions and requiring timely implementation by government of adaptation measures to lessen climate change impacts. Each court found that the respective national or state government owed citizens a legal duty to effectively act on climate change. And as important as these three decisions are, they are likely only a prelude to a new era of increasing litigation of a similar nature. For

²⁹ Commentary to the Oslo Principles at 3 [footnote omitted], online: <globaljustice.macmillan.yale.edu/sites/default/files/files/Oslo%20Principles%20Commentary.pdf>.

³⁰ (24 June 2015), C/09/456689/HA ZA 13-1396 (District Court, The Hague) [*Urgenda*], online: de Rechtspraak <uitspraken.rechtspraak.nl/inzindocument?id=ECLI:NL:RBDHA:2015:7196> (English translation).

³¹ (31 August 2015), Lahore W.P. No 25501/2015 No 1 (HC Green Bench, Pakistan) [*Leghari* (31 August 2015)], online: LahoreHighCourt <sys.lhc.gov.pk/greenBenchOrders/WP-Environment-25501-15-31-08-2015.pdf>. See also Malini Mehra, “Pakistan ordered to enforce climate law by Lahore court,” *Climate Change News* (20 September 2015) [Mehra], online: <www.climatechangenews.com/2015/09/20/pakistan-ordered-to-enforce-climate-law-by-lahore-court/>; *Leghari v Pakistan* (4 September 2015) Lahore W.P. No 25501/2015 No 2 (HC Green Bench, Pakistan) [*Leghari* (4 September 2015)], online: Lahore High Court <sys.lhc.gov.pk/greenBenchOrders/WP-Environment-25501-15-08-09-2015.pdf>, *Leghari v Pakistan* (14 September 2015) Lahore W.P. No 25501/2015 No 3 (HC Green Bench, Pakistan) [*Leghari* (14 September 2015)], online: <sys.lhc.gov.pk/greenBenchOrders/WP-Environment-25501-15-15-09-2015.pdf>, *Leghari v Pakistan* (5 October 2015) Lahore W.P. No 25501/2015 No 4 (HC Green Bench, Pakistan) [*Leghari* (5 October 2015)], online: <sys.lhc.gov.pk/greenBenchOrders/WP-Environment-25501-15-08-10-2015.pdf>.

³² No 14-2-25295-1Fo, Hill J (Wash Super Ct Nov. 19, 2015) [*Foster v Washington*], online: Our Children’s Trust <ourchildrenstrust.org/sites/default/files/15.11.19.Order_FosterV.Ecology.pdf>. On April 29, 2016, part of this order was vacated and Ecology was required to make a new rule. See text below, page 18.

example, as discussed below,³³ there have been several cases commenced in 2015 in the United States that ask American courts to find a duty on governments that would require them to take steps to cut back carbon emissions. As well, a 2015 petition filed before the Philippine Human Rights Commission,³⁴ also elaborated below, asserts that 50 of the so-called “carbon majors,” that is, investor-owned producers or manufacturers of crude oil, natural gas, petroleum products, coal and cement, wherever located, have a responsibility to respond to the environmental and human rights impacts of climate change occurring in the Philippines.

Other recent suits inspired by *Urgenda* have been commenced in Belgium and New Zealand. Citizens in Belgium were the first to follow the *Urgenda* example. Klimaatzaak, a Belgian non-governmental organization (NGO), and 9,000 Belgian citizens served a summons to the federal government and the country’s three regions in the spring of 2015, claiming the Belgian government failed to take sufficient measures to keep climate change in check and demanding that the government curb emissions by at least 25 percent at the end of 2020 compared to the 1990 level.³⁵

In New Zealand, a law student filed a statement of claim in November 2015 against the country’s minister of climate change issues, alleging that the minister was not in compliance with obligations under the Climate Change Response Act 2002 with respect to GHG emissions reduction targets. The claim asserts the minister failed to revise the country’s emissions target following the 2014 issuance of the IPCC’s Fifth Assessment Report, or failed to set new targets. The claim asks for declaratory relief as well as an order requiring the minister to set a new target that will, if adopted by other developed countries in combination with appropriate targets set by developing countries, “stabilize greenhouse gas concentrations in

the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.”³⁶

THE DEVELOPING ROLE OF DOMESTIC COURTS IN STATE CLIMATE RESPONSIBILITIES

Urgenda Foundation v The Netherlands: Key Institutional and Legal Implications

Urgenda is a unique and historic environmental legal victory — the world’s first climate change lawsuit in which a domestic court found that its national government had a duty of care to citizens requiring the state to reduce carbon emissions.³⁷ In addition to inspiring citizens in other countries to initiate legal actions to similarly require their governments to act effectively on this issue, the decision has significant legal and institutional implications. Some of these key aspects are discussed below.³⁸

From an important general perspective, *Urgenda* exemplifies and may portend a potentially significant new role for judges, and domestic courts in particular, as action-forcing mechanisms that can help achieve what 20 years of UNFCCC negotiations did not, and what the Paris Agreement fails to assure — actual, timely and sufficient reductions in carbon emissions to stop the global average temperature from increasing by more than 2°C. In contrast to the essentially weak — indeed, some may say non-existent — capacity of international law to rein in climate change, domestic courts have the authority to provide legally enforceable remedies, and provide a relatively accessible forum for this purpose to citizens. Based on the *Urgenda* approach, citizens in various other countries could ask their domestic courts to determine that their governments owe them a tort duty of care, or have a constitutional or human rights obligation, that requires government actions to protect citizens from climate change impacts. If domestic courts find such a duty or obligation, they can, for example, issue a “declaration” that national and subnational governments have a legal duty to limit

33 See heading “Other Citizen Climate Cases Pending Against Governments” below.

34 Greenpeace Southeast Asia and Philippine Rural Reconstruction Movement, *Petition to the Commission on Human Rights of the Philippines Requesting for Investigation of the Responsibility of the Carbon Majors for Human Rights Violations or Threats of Violations Resulting from the Impacts of Climate Change* (22 September 2015) [Greenpeace Philippines], online: Greenpeace <www.greenpeace.org/seasia/ph/PageFiles/105904/Climate-Change-and-Human-Rights-Complaint.pdf>.

35 Roger Cox, *A Climate Change Litigation Precedent: Urgenda Foundation v The State of the Netherlands* (2015) Centre for International Governance Innovation (CIGI) Papers No 79 at 14, online: <www.cigionline.org/sites/default/files/cigi_paper_79.pdf>.

36 *Thomson v Minister for Climate Change Issues* (10 November 2015), No CIV-2015- (HC, New Zealand) at para 91(c) (statement of claim), online: <web.law.columbia.edu/sites/default/files/microsites/climate-change/files/Resources/Non-US-Climate-Change-Litigation-Chart/nz_case_statement_of_claim.pdf>.

37 *Urgenda*, *supra* note 30. In September 2015, the Netherlands Cabinet issued a statement that it will appeal some aspects of the decision, although also stating it would comply with the court’s order to reduce emissions. See Government of the Netherlands, News Release, “Cabinet begins implementation of Urgenda ruling but will file appeal” (1 September 2015), online: <www.government.nl/latest/news/2015/09/01/cabinet-begins-implementation-of-urgenda-ruling-but-will-file-appeal>.

38 For a detailed analysis and commentary on the decision, see the paper by the Urgenda Foundation attorney Roger Cox, *supra* note 35.

carbon emissions; and, in some cases, the domestic court could go further, as illustrated by the *Urgenda* ruling, to make an order requiring governments to rein in dangerous carbon emissions.

Key factors impelling the *Urgenda* court to be judicial leaders in critically reviewing government climate policy, in particular the appropriate amount and timing for emissions reductions that are controlled by government, and to nudge forward the law for this purpose, likely include the following:

- the state of climate science, as enunciated by the IPCC, is now sufficiently certain and reliable to demonstrate the world is endangered by carbon emissions.³⁹ Global temperature increases of 2°C or even 1.5°C producing dangerous climate impacts can only be avoided by implementing a “carbon budget” under which carbon emissions must be capped and urgently reduced.⁴⁰ The carbon budget concept and “the terrifying math” allow judges to grasp the

significant dangers of climate change as well as the urgent need for carbon reduction measures;⁴¹

- the availability of scientific evaluations as to whether a country’s carbon reduction policies are stringent enough to fairly achieve required carbon emissions reductions;⁴²
- clear evidence that state parties to the UNFCCC and their governments know of these dangers, yet most states are failing to act in accordance with their knowledge; and
- despite more than 20 years of negotiations under the UNFCCC, the absence of an internationally enforceable agreement requiring specific reductions in carbon emissions (during these decades emissions actually increased).⁴³

These factors, clearly in the record before the Dutch court, have the potential to assist citizen arguments before domestic courts in other countries to also receive an empathetic hearing, where they ask the court to grant relief based on arguments that their governments have

39 See IPCC, *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Geneva: IPCC, 2015), *Summary for Policymakers* at 17–19, SPM 3.2 [IPCC 2014 AR5 Synthesis Report], online: <www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf>:

Without additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread and irreversible impacts globally (*high confidence*)...The risks associated with temperatures at or above 4°C include substantial species extinction, global and regional food insecurity, consequential constraints on common human activities and limited potential for adaptation in some cases (*high confidence*). [emphasis in original]

40 See 2015 UNEP *Emissions Gap Report*, *supra* note 14 at xvi:

The IPCC in its fifth assessment report concluded that to limit global warming to below 2°C, the remaining cumulative CO₂ emissions – the so-called carbon budget – are in the order of 1 000 GtCO₂. This remaining budget can be utilized in different ways, but given the most recent assessment of current trends, net global carbon emissions will eventually need to be reduced to zero between 2060 and 2075. For a detailed discussion of the carbon budget, see the [UNEP] 2014 Emissions Gap Report. [footnotes omitted]

According to the World Resources Institute (WRI), the world is on track to exceed the carbon budget in only about 30 years — exposing communities to increasingly dangerous forest fires, extreme weather, drought and other climate impacts: WRI, *Understanding the IPCC Reports*, online: WRI <www.wri.org/ipcc-infographics>.

41 The *Urgenda* court clearly was impressed by the clarity and significance of the IPCC science findings: see *Urgenda*, *supra* note 30 at paras 4.11–4.34. The term “terrifying new math” was introduced by Bill McKibben in his 2012 *Rolling Stone* article, “Global Warming’s Terrifying New Math” *Rolling Stone* (19 July 2012), online: <www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719>. See also trillionthtonne.org, *Explaining the need to limit cumulative emissions of carbon dioxide*, online: trillionthtonne.org <www.trillionthtonne.org/questions.html> for an explanation of the need for cumulative carbon emissions to be capped and the role for the carbon budget in doing that. See also James Hansen et al, “Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2°C global warming is highly dangerous” (2015) 15 *Atmospheric Chemistry and Physics Discussion Paper* 20059 at 20061, online: ACP <www.atmos-chem-phys-discuss.net/15/20059/2015/acpd-15-20059-2015.pdf> for a 2015 analysis of the dangers. It concludes that “2°C global warming above the preindustrial level, which would spur more ice shelf melt, is highly dangerous.”

42 The emissions reduction obligations required by the Annex I countries to protect developing and vulnerable countries (25 to 40 percent by 2020) were calculated by the IPCC in its Fourth Assessment Report and this calculation formed a key issue in *Urgenda* (see *supra* note 30 at paras 2.15 and 4.29). Fairness, or equity, is incorporated into the UNFCCC; see, for example, UNFCCC, *supra* note 1 at 4, art 3:

1. The Parties should protect the climate system for the benefit of present and future generations of humankind, *on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities*. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof. [emphasis added]

43 IPCC, *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK and New York: Cambridge University Press, 2014) at 1093, online: IPCC <www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_full.pdf>.

duties and obligations to protect citizens from climate change impacts on human and civil rights.

Authority of IPCC Science

Urgenda is significant as the first judicial decision to recognize that the IPCC science findings provide an appropriate basis for a court to determine that a domestic government owes its citizens a duty of care to reduce carbon emissions in order to avoid overshooting the 2°C limit on a global temperature rise. The confidence placed by the *Urgenda* court on IPCC science will likely be influential for courts in other countries considering whether IPCC findings should similarly be regarded with high confidence and as essentially determinative.⁴⁴

It is not surprising that, in *Urgenda*, the Netherlands did not dispute the introduction into the court record of IPCC findings nor the court's ability to rely on them; IPCC climate science conclusions are pre-eminently authoritative. The IPCC⁴⁵ is an intergovernmental scientific body under the auspices of the United Nations, established in 1988 by the United Nations Environment Programme and the World Meteorological Organization to provide "a comprehensive, impartial assessment of climate change"; it is "the leading international body for the assessment of climate change and the authoritative voice of the international scientific community on the causes, implications and potential responses to climate change."⁴⁶ It is open to all member countries of the UN and currently has 195 members. Governments participate in the review process and the plenary sessions, where the main decisions about the IPCC program are taken and where reports are accepted, adopted and approved. The IPCC "does not conduct its own research, but rather collects and reviews the most recent scientific, technical and socio-economic information from a wide variety of sources. Through a continuing, collaborative analysis of the existing science, the IPCC offers the most thorough account of climate science, while remaining cautious and retaining its independence. The IPCC's work encompasses not only the physical science, but also the evaluation of various strategies of adaptation and mitigation."⁴⁷

44 *Urgenda*, *supra* note 30, at paras 2.8–2.28; see also *Urgenda Foundation v The Netherlands (Ministry of Infrastructure and the Environment)* No C/09/456689/HA ZA 13-1396 (plaintiff summons) (English translation 25 June 2014 based on Dutch summons 20 November 2013) at 30–43, online: *Urgenda* <www.urgenda.nl/documents/FINAL-DRAFT-Translation-Summons-in-case-Urgenda-v-Dutch-State-v.25.06.10.pdf>.

45 For a synopsis of IPCC history and mandate, see IPCC, "Organization", online: <www.ipcc.ch/organization/organization.shtml>. See also IPCC, "Factsheet: What is the IPCC?", online: <www.ipcc.ch/news_and_events/docs/factsheets/FS_what_ipcc.pdf>.

46 *IBA Report*, *supra* note 18 at 38.

47 *Ibid.*

Thousands of scientists worldwide contribute to the work of the IPCC on a voluntary basis. The IPCC aims to reflect a range of views and expertise and its reports are authored by "a diverse panel of renowned scientific experts and subject to an intense process of intellectual scrutiny."⁴⁸

The IPCC's recent report, *Climate Change 2014: Mitigation of Climate Change*, "was written by 235 lead authors and 38 review editors, and was reviewed by 880 experts and 38 governments in a multistage process drawing a total of 38,315 comments. Thousands of scientific publications, with priority given to peer-reviewed literature, formed the basis of this assessment and its near 10,000 references."⁴⁹ The IPCC itself states that "[r]eview is an essential part of the IPCC process, to ensure an objective and complete assessment of current information."⁵⁰

In the opinion of Roda Verheyen, a German legal scholar and environmental lawyer, 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.⁵¹

The authority of the IPCC's science methodology together with the IPCC's recent climate science conclusions "paints a frightening picture" more than sufficient to raise concerns of domestic court judges asked to hear cases similar to *Urgenda*.⁵² For example, as of 2011, half of the world's carbon budget (based on the objective of maintaining the average global temperature increase below 2°C) had

48 *Ibid.*

49 *Ibid.*

50 IPCC, "Organization", *supra* note 45.

51 Roda Verheyen, *Climate Change Damage and International Law: Prevention Duties and State Responsibility* (Leiden: Martinus Nijhoff Publishers, 2005) at 19–20.

52 Civil Society Review, *supra* note 18 at 1.

already been exhausted,⁵³ and estimated GHG emissions in 2020 based on the Cancun Pledges are not on track with keeping temperature increases below 2°C.⁵⁴ Substantial reductions beyond 2020 are required to meet this goal. Further, according to a recent UNFCCC report referring to the IPCC Fifth Assessment Report:

[T]he observed impacts of [current] climate change at 0.85 °C of warming are consequential and wide-ranging, spanning all regions and sectors. Impacts have been observed on: food production, including constraints on the increase in wheat and maize yields, and negative impacts on marine fisheries; sea level rise and its associated impacts on low-lying coastal zones including small islands; glaciers and ice sheets, including consistent mass loss, and Arctic systems; ecosystems, including increased tree mortality, resulting in some cases in forest dieback, as well as negative impacts on Arctic, freshwater and terrestrial species and warm water coral reefs; and sustainable economic development, including impacts on livelihoods and increased economic losses from extreme weather.

...

Deliberations revealed that the current level of warming is causing certain impacts that are beyond the current adaptive capacity of many people.⁵⁵

Judicial Innovation: Ascribing Government a Duty of Care to Protect Citizens from Harmful Carbon Emissions

In *Urgenda*, the court was innovative. For the first time it extended the application of the Dutch “hazardous negligence” tort to find that the national government

owed a duty of care to limit carbon emissions.⁵⁶ While courts in common law countries have severely restricted the circumstances in which governments have a tort duty of care, at least when based on the tort of negligence, the decision of the Court of The Hague that such a duty of care applied to the Netherlands government will likely receive careful consideration by courts in other citizen climate change suits. *Urgenda* illustrates that on the climate change issue a domestic court may well be receptive to advancing the application of existing legal principles developed to protect civil society from other forms of harm, such as “hazardous negligence,” in order to make findings of government (or private sector) responsibility to limit carbon emissions and prevent or at least reduce the risk of such harm being manifested.⁵⁷ And as shown by the 2015 and 2016 *Leghari* decisions discussed below, the Dutch court was not alone in its willingness to be innovative and expand the scope of legal protection on this issue.

Could a similar “duty” be found by domestic courts in other countries to require government to protect citizens from climate harm and to reduce emissions or take other measures, taking into consideration appropriate modifications required by national jurisprudence? This issue was explored in a Canadian context at a CIGI workshop whose participants included *Urgenda* attorney Roger Cox and invited Canadian legal academics, litigators and NGOs.⁵⁸ The answer appears to be “yes,” and the following discussion outlines, on a preliminary basis, alternative approaches courts would likely use to find such a duty.

While there is jurisprudence in Canada and some other common law countries that may make difficult the finding of a government duty of care based on the common law tort of negligence, there may be other routes by which a similar duty may be established. In many countries that have a British common law tradition (including not only the United Kingdom but, for example, Canada [other than Quebec], the United States, Australia and New Zealand), the tort of nuisance imposes a duty of care not to cause a nuisance on persons who emit *or control* the emission of contaminants where such contaminants may impair health,

53 IPCC 2014 AR5 Synthesis Report, *supra* note 39 at 63: “Ensuring CO₂-induced warming remains likely less than 2°C requires cumulative CO₂ emissions from all anthropogenic sources to remain below about 3650 GtCO₂ (1000 GtC), over half of which were already emitted by 2011.”

54 *Ibid* at 85.

55 UNFCCC, Subsidiary Body for Scientific and Technological Advice, Report on the structured expert dialogue on the 2013-2015 review, UNSBSTA, 42nd Sess, UN Doc FCCC/SB/2015/INF.1 (4 May 2015) at 13-14 [emphasis in original] [footnote omitted], online: <unfccc.int/resource/docs/2015/sb/eng/inf01.pdf>. See also David Estrin, “Climate Change Negotiations and Developing Countries in Bonn” (15 June 2015), CIGI (blog), online: CIGI <www.cigionline.org/blogs/global-rule-of-law/climate-change-negotiations-and-developing-countries>.

56 *Urgenda*, *supra* note 30 at para 4.54.

57 Court orders to government to reduce emissions have been made before. While *Urgenda* is the first case in which a court has ordered a national government to reduce carbon emissions in a climate change context, the Supreme Court of the United Kingdom also issued an order in 2015 to the UK government requiring it to prepare new air quality plans in accordance with an EU directive to ensure compliance with the limits of nitrogen dioxide levels set by European law. See *R (on the application of ClientEarth) v Secretary of State for the Environment, Food and Rural Affairs*, [2015] UKSC 28, online: Supreme Court, UK <www.supremecourt.uk/cases/docs/uksc-2012-0179-judgment.pdf>.

58 CIGI workshop (16 September 2015), Osgoode Hall Courthouse, Toronto, Ontario.

the environment or significantly interfere with the use and enjoyment of property. Moreover, government liability in nuisance at common law is not constrained by “policy” considerations in the same way that government duties in negligence may be. For example, national and subnational governments in Canada have been successfully sued for causing or permitting a nuisance; Canadian courts have thus determined that public authorities have no immunity per se to nuisance liability.⁵⁹ That there is a duty on government to prevent a nuisance is also consistent with Canada’s Criminal Code provisions regarding nuisance, under which “every one” (defined to include Her Majesty) who commits a common nuisance that endangers lives, safety or health of the public or causes physical injury to any person is guilty of an offence.⁶⁰ This offence can be committed not only by positive acts, such as those of emitters who discharge contrary to regulations, but by failing “to discharge a legal duty” 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.”⁶¹

Since national and/or state governments clearly have the legislative capacity to control carbon emissions by persons or corporations operating within their jurisdiction, that is, by prohibiting or legally restricting such emissions, there is a clear rationale on which courts in common law countries could find a government duty of care arises, based on nuisance in particular. Although courts will, for the most part, be reluctant to engage in hands-on direction of government action under a tort duty of care concept, they may be comfortable in at least making a declaration that specific aspects of climate inaction (past, continuing or future) constitute a breach of the government’s duty of care, which may well be sufficient to engage politicians to take appropriate measures. Governments would understand that even though the court only “declared” the law in that instance, the court could, the next time around, become bolder and order governments to positively act where those governments are not using their powers to appropriately mitigate carbon emissions, similar to the *Urgenda* court’s reliance on the Dutch tort of “hazardous negligence” for that purpose.

Another basis on which a government (and possibly private emitters) may be found to have a duty to take steps, such as emissions reductions, to protect citizens from the impacts of climate change, are human rights covenants that provide for such rights.⁶² Some of these having already been used by the European Court of Justice.⁶³

The most recent use of human rights in a climate change context is in the recently filed petition elaborated below, which is pending before the Philippines Commission on Human Rights. The petition asserts that investor-owned carbon extractors and manufacturers, such as petrochemical companies, regardless of where they are situated in the world, have a responsibility to respond to

59 For example, in *Schenck v R* (1981), 34 OR (2d) 595, 131 DLR (3d) 310, 1981 CanLII 1797, 1981 CarswellOnt 692 at para 26 (H Ct J), additional reasons (1982), 40 OR (2d) 410, 142 DLR (3d) 261 (H Ct J), aff’d (1984), 49 OR (2d) 556, (sub nom *Schenck v. Ontario* (No 2)) 15 DLR (4th) 320 (CA), aff’d (sub nom *Schenck v. Ontario* (Minister of Transportation and Communications)) [1987] 2 SCR 289, 50 DLR (4th) 381, the Ontario government was found liable in nuisance for the harm caused to adjoining farm owners by road salt used for winter road maintenance on a major public highway. The trial court ruled that “it is well established that protection would be afforded in nuisance to a property owner who suffers actual material injury of this kind by reason of an activity conducted on adjoining property regardless of the social utility of the defendant’s conduct, the absence of negligence on his part or the inapplicability of the rule in *Rylands v. Fletcher*” [[1868] LR 3 HL 330]. Similarly, in *Sutherland v Vancouver International Airport Authority*, 2002 BCCA 416 at para 2, 215 DLR (4th) 1, additional reasons 2003 BCCA 14, leave to appeal refused, [2003] 1 SCR xi (note), the BC Court of Appeal affirmed that there was a tort duty of care in nuisance applicable to these defendants that was breached by aircraft noise associated with the Vancouver airport. However, because of the specific steps taken to approve the airport at this location, the court concluded the claim should be dismissed on the defence of statutory authority.

60 *Criminal Code*, RSC 1985, c C-46 s 180(1), (2).

Common nuisance

180. (1) Every one who commits a common nuisance and thereby

(a) endangers the lives, safety or health of the public, or

(b) causes physical injury to any person,

is guilty of an indictable offence and liable to imprisonment for a term not exceeding two years.

61 *Ibid* s 2.

Definition

(2) For the purposes of this section, *every one commits a common nuisance who* does an unlawful act or *fails to discharge a legal duty and thereby*

(a) endangers the lives, safety, health, property or comfort of the public; or

(b) obstructs the public in the exercise or enjoyment of any right that is common to all the subjects of Her Majesty in Canada. [emphasis added]

62 See *Urgenda*, *supra* note 30, discussion at paras 4.45ff; and *IBA Report*, *supra* note 18 at 66, Chapter 2.2.

63 See *IBA Report*, *supra* note 18 at 120.

the environmental and human rights impacts of climate change occurring in the Philippines.⁶⁴

Further, in those countries that have constitutional recognition and protection for environmental values (and even in those countries that have only a more general constitutional protection for the right to life or security of the person), there is now a clearer basis for domestic courts to find an analogous duty to limit carbon emissions, as was found under Dutch tort law in *Urgenda*. A multitude of national and even subnational constitutions provide such rights, and courts in many countries have already been active in using them.⁶⁵ The most direct, recent and dramatic use of constitutional rights by a domestic court to find a government duty to protect citizens from climate change is found in the 2015 (and 2016) *Leghari v Pakistan* decisions, elaborated below.⁶⁶

Given that almost 100 countries have constitutions that protect fundamental rights, more attempts to use constitutional protections in domestic climate suits can be expected. Judges in a number of countries have found that “generic” right-to-life protections can be violated by environmental harm and threat of harm analogous to those the IPCC predicts will occur due to climate change.⁶⁷ The *Leghari* case, as well as other decisions referenced in that decision, in which Pakistani courts agreed with assertions of environmental rights based on the right-to-life and analogous provisions in that country’s constitution, and similar cases from India, Bangladesh and the European Court of Human Rights, provide clear signals that a Canadian court could similarly find that ineffective or inadequate federal or provincial governmental regulation of carbon emissions constitutes an infringement or denial of the right to life and security of the person protected by

section 7 of the Canadian Charter of Rights and Freedoms.⁶⁸ If such a finding were to be made, a Canadian judge is not confined to simply issuing a declaration that past or continuing government inaction constitutes a Charter breach. Based on section 24 of the Charter, a Canadian judge likely could also make an order requiring governments to take affirmative steps,⁶⁹ including reporting to the court on measures to rectify the breach and its progress in doing so. Canada’s Supreme Court affirmed in a 2003 decision, *Doucet-Boudreau v Nova Scotia (Minister of Education)*,⁷⁰ that a remedy under section 24 of the Charter is available both where there is government action, as well as inaction, that infringes a person’s Charter rights. In this case, a judge had determined that the provincial government’s inaction had infringed French minority educational rights protected by the Charter, and had ordered the government to use “best efforts” to provide both an appropriate program and physical facilities by specific dates, as well as report to the court by filing sworn affidavits as to the actions taken — and for those preparing the affidavits to be cross-examined under oath as part of the reporting process. The Court of Appeal then overturned the part of the order under which the judge had retained his jurisdiction to hear reports. On appeal, the Supreme Court of Canada restored the reporting requirements. The Supreme Court noted that the wording of section 24 of the Charter, authorizing a judge to grant a remedy for a Charter violation “as the court considers appropriate and just in the circumstances,” conveys a wide discretion: “It is difficult to imagine language which could give the court a wider and less fettered discretion. It is impossible to reduce this wide discretion to some sort of binding formula for general application in all cases, and it is not for appellate courts to pre-empt or cut down this wide discretion.”⁷¹

Moreover, the Supreme Court observed that while a court ordering a Charter remedy must strive to respect the relationships with and separation of functions among the

64 Greenpeace Philippines, *supra* note 34.

65 See David R Boyd, *The Right to a Healthy Environment: Revitalizing Canada’s Constitution* (Vancouver: UBC Press, 2012); *IBA Report*, *supra* note 18; James R May & Erin Daly, *Global Environmental Constitutionalism* (New York: Cambridge University Press, 2014); Shyam Divan, “Through the Eye of an Elephant: An India Perspective on Human Rights and Climate Change” (Paper delivered at the 19th Commonwealth Law Conference, Glasgow, 14 April 2015) [unpublished] [Divan]. See also *infra* notes 161–68.

66 Cases pending in the United States invoking constitutional rights are also described below.

67 These cases are referenced below under the heading “Future Directions: Time for Climatizing Judicial Decisions?”

68 *Canadian Charter of Rights and Freedoms*, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11 [Charter], s 7: “Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.” See generally: Lynda Collins, “Safeguarding the Longue Durée: Environmental Rights in the Canadian Constitution”, (2015) 71 SCLR (2d) 519; Nathalie J. Chalifour, “Environmental Justice and the Charter: Do Environmental Injustices Infringe Sections 7 and 15 of the Charter?” (2015) 28:1 J Envtl L & Prac 89; Lynda Collins, “An Ecologically Literate Reading of the Canadian Charter of Rights and Freedoms” (2009) 26 Windsor Rev Legal Soc Issues 7.

69 *Charter*, *supra* note 68. Section 24(1) of the Charter provides: “Anyone whose rights or freedoms, as guaranteed by this Charter, have been infringed or denied may apply to a court of competent jurisdiction to obtain such remedy as the court considers appropriate and just in the circumstances.”

70 2003 SCC 62 at para 44, [2003] 3 SCR 3.

71 *Ibid* at para 52 [emphasis added], citing *Mills v R*, [1986] 1 SCR 863 at para 23, 29 DLR (4th) 161.

legislature, executive and judiciary, “[t]his is not to say that there is a bright line separating these functions in all cases. A remedy may be appropriate and just notwithstanding that it might touch on functions that are principally assigned to the executive.”⁷² The Supreme Court held that a court finding a Charter infringement can issue an injunction against the executive and that the power of courts to do so “is central to s. 24(1) of the *Charter* which envisions more than declarations of rights. Courts do take actions to ensure that rights are enforced, and not merely declared.”⁷³ The Supreme Court specifically found that the court-imposed reporting obligation on the provincial government to report on the status of measures it had taken in order to comply with the court order “was judicial in the sense that it called on the functions and powers known to courts” and noted that “[i]n several different contexts, courts order remedies that involve their continuing involvement in the relation between the parties....The difficulties of ongoing supervision of parties by the courts have sometimes been advanced as a reason that orders for specific performance and mandatory injunctions should not be awarded. Nonetheless, courts of equity have long accepted and overcome this difficulty of supervision where the situations demanded such remedies.”⁷⁴

Judicial Response to Government Defences

Urgenda also illustrates that in a climate suit where the court concludes a legal remedy is appropriate, usual defences to such a suit may be skeptically regarded. For example, two important defences advanced by the Netherlands, likely to be raised by other countries in response to a similar suit but which were rejected in *Urgenda*, were, first, the asserted non-justiciability of a court reviewing government climate policy and, second, that Dutch emissions were so legally insignificant (*de minimus*) in a global context as to not merit the *Urgenda* Foundation having standing to raise the issue in court.

With respect to the defence of non-justiciability, the *Urgenda* court rejected the Dutch government’s argument that it was improperly political for judges to review the appropriateness of government climate policy and order the government to make emissions reductions. The *Urgenda* court found that if government has a duty to protect citizens from climate harm and is not doing so, a court order to reduce emissions is consistent with preventing further illegality and is therefore a wholly appropriate remedy for a juridical body to issue — even if the result has political consequences. As the court put it: “The task of providing legal protection from government authorities, such as the State, pre-eminently belongs to the

domain of a judge....[T]he claim does not fall outside the scope of the court’s domain. The claim essentially concerns legal protection and therefore requires a ‘judicial review’. This does not mean that allowing one or more components of the claim can [not] also have political consequences.... However, this is inherent in the role of the court with respect to government authorities in a state under the rule of law.”⁷⁵

Most courts would likely concur with the *Urgenda* court’s view that “[t]he 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.”⁷⁶

Even the US Supreme Court has agreed that the regulation of climate change is within the proper ambit of a government environmental regime. In its 2007 decision in *Massachusetts v Environmental Protection Agency*,⁷⁷ the Supreme Court found that an administrative determination by the Environmental Protection Agency (EPA) not to regulate carbon emissions under the Clean Air Act was improper and, in reaching that conclusion, reasoned that “[t]he harms associated with climate change are serious and well recognized;”⁷⁸ “[t]he risk of catastrophic harm, though remote, is nevertheless real;”⁷⁹ and “EPA’s steadfast refusal to regulate greenhouse gas emissions presents a risk of harm to Massachusetts that is both ‘actual’ and ‘imminent’.”⁸⁰ The Supreme Court specifically rejected EPA arguments that the EPA, and not the court, should

⁷² *Ibid* at para 56.

⁷³ *Ibid* at para 70.

⁷⁴ *Ibid* at paras 71–72.

⁷⁵ *Urgenda*, *supra* note 30 at paras 4.97–4.98.

⁷⁶ *Ibid* at para 4.98.

⁷⁷ 549 US 497 (2007), 127 S Ct 1438 [*Massachusetts v EPA* cited to S Ct].

⁷⁸ *Ibid* at 1442.

⁷⁹ *Ibid* at 1458.

⁸⁰ *Ibid* at 1442.

have the final policy decision on when climate change should be regulated.⁸¹

The Dutch government also asserted a *de minimus* defence, that because the Netherlands' carbon emissions are only 0.5 percent of worldwide emissions, a court order to reduce these is without merit and does not deserve legal redress. The *Urgenda* court rejected this defence, finding it was legally invalid for the government to argue Dutch citizens had no legitimate interest sufficient to seek a court order for emissions reductions, even if the percentage of Dutch emissions on a world scale is low and even if countries with larger emissions are not before the court. In the court's words:

Starting from the idea that this additional reduction would hardly affect global emissions, the State argues that *Urgenda* has no interest in an allowance of its claim for additional reduction.

This argument does not succeed. It is an established fact that climate change is a global problem and therefore requires global accountability....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. Emission reduction therefore concerns both a joint and

individual responsibility of the signatories to the UN Climate Change Convention. In view of the fact that the Dutch emission reduction is determined by the State, it may not reject possible liability by stating that its contribution is minor....[T]he single circumstance that the Dutch emissions only constitute a minor contribution to global emissions does not alter the State's obligation to exercise care towards third parties....Moreover, it is beyond dispute that the Dutch per capita emissions are one of the highest in the world.⁸²

This reasoning is similar to a strong common law line of authority regarding tort nuisance claims, which holds that "it is no defence to a nuisance claim that others are also contributing to the nuisance."⁸³ In the United States, even the US Supreme Court in its *Massachusetts v EPA* decision rejected this defence, finding that "[a] reduction in domestic emissions would slow the pace of global emissions increases no matter what happens elsewhere."⁸⁴

State Knowledge of Climate Dangers Contrasted with State Inaction as a Judicial Factor

Urgenda illustrates that domestic court judges may also be inclined to sympathetically consider citizen suits asking for judicial review of government climate change inaction because the UNFCCC parties know of climate change dangers and have agreed they should act on them with alacrity, but are not doing so. More specifically, the inherent contradiction between parties' knowledge that emissions must be reduced to limit the global temperature rise to less than 2°C and the failure of the same governments to reduce their emissions will likely increase the empathy of domestic judges in considering whether they can find a legal basis for acting on, and should grant a judicial remedy for, citizen climate suit claims.

81 *Ibid* at 1462–63:

EPA...has offered a laundry list of reasons not to regulate. For example, EPA said that a number of voluntary Executive Branch programs already provide an effective response to the threat of global warming...., that regulating greenhouse gases might impair the President's ability to negotiate with "key developing nations" to reduce emissions,...and that curtailing motor-vehicle emissions would reflect "an inefficient, piecemeal approach to address the climate change issue"....

Although we have neither the expertise nor the authority to evaluate these policy judgments, it is evident they have nothing to do with whether greenhouse gas emissions contribute to climate change. Still less do they amount to a reasoned justification for declining to form a scientific judgment....

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."

82 *Urgenda*, *supra* note 30 at paras 4.78–4.79. The *Urgenda* court's reasoning that such a defence should not be sustained was noted with approval and cited in a US federal magistrate judge's findings and recommendations in April 2016. See the discussion below under the heading "*Juliana v United States*."

83 See, for example, the decision of Ontario Chief Justice McRuer in *Walker v McKinnon Industries Ltd*, [1949] OR 549, [1949] 4 DLR 739, 1949 CarswellOnt 262 at para 82 (H Ct J), var'd [1950] OWN 309, [1950] 3 DLR 159 (CA), aff'd [1951] 3 DLR 577 (PC): "Some evidence was adduced to show that others are polluting the air over the plaintiff's property....[E]ven if others are in some degree polluting the air, that is no defence if the defendant contributes to the pollution so that the plaintiff is materially injured. It is no defence even if the act of the defendant would not amount to a nuisance were it not for others acting independently of it doing the same thing at the same time." See also *Rapier v London Tramways Co*, [1893] 2 Ch 588 (CA (Eng)).

84 *Supra* note 77 at 1458.

In the case of Canada and some other developed countries, INDC targets filed in 2015 before the Paris COP would actually result in *less* effort to mitigate emissions from those previously agreed as necessary, for example, at the Copenhagen COP in 2009.⁸⁵ The negative implications of the INDC process were succinctly expressed in a recent report published by *Civil Society Review*: “Countries have moved to a ‘bottom-up pledge’ approach, with highly unequal levels of commitment and effort. This is not fair and the pledges do not add up to what climate scientists say is needed. The result is a large shortfall of emissions reductions creating risks that are tantamount to gambling with planetary security.”⁸⁶ While the parties may have adopted the INDC voluntary emissions reduction pledge approach in the belief this is a more realistic means of motivating states to implement emissions reductions, the INDC approach fails to ensure that any particular state, let alone all states, will take the measures the IPCC has indicated are required to prevent dangerous climate change and catastrophic impacts on human and civil rights.

Even under the 2015 Paris Agreement, the renamed “nationally determined contributions” (NDCs) (of emissions reductions) process does not require states to act with alacrity or specificity to reduce emissions. The content of the NDCs remains, like the pre-Paris INDCs, voluntary pledges. While from a legal perspective the Paris Agreement does require parties to file successive NDCs every five years, the Paris Agreement stops short of specifically requiring that future filings must contain progressively more stringent carbon limits than previous filings.⁸⁷ The wording used is vague and provides only that successive NDCs will “represent a progression” beyond the party’s then current NDC.⁸⁸

Moreover, the Paris Agreement is devoid of measures that authorize “enforcement” action that could sanction a particular country for failing to file an NDC or for failing to file an NDC that demonstrates future emissions would be reduced by certain amounts or times. While the Paris Agreement references a mechanism to “facilitate implementation of and promote compliance,” this activity is to be carried out by an expert committee in a “facilitative” and “non-adversarial and non-punitive” manner.⁸⁹ In short, the Paris Agreement provides no assurance that even voluntary commitments to reduce carbon emissions will be kept.

In this context, *Urgenda* exemplifies how other domestic courts may choose to use independent review of the sufficiency of the NDC reduction pledges in terms of their being protective of citizens’ human and civil rights. In that process, the court could find a domestic government has a duty to its citizens to achieve more stringent carbon emissions reductions. And, if the court had any doubt, it could appoint its own experts or a commission to advise it.⁹⁰

Leghari v Pakistan: Decisions from the Lahore High Court Green Bench, Pakistan

The 2015 and 2016 decisions in the *Leghari v Pakistan* case⁹¹ from Pakistan’s Lahore High Court Green Bench are vitally important for two reasons. First, as in *Urgenda*, they demonstrate how a domestic court can take a direct role in requiring governments to prevent or specifically act on climate change; and, second, the *Leghari* court decisions are, as in *Urgenda*, based on a finding that government has a duty to citizens to do so, in this case based on constitutional rights. For these reasons it is reasonable to suggest that *Leghari* and *Urgenda* are not “one-off” cases, but may well be the beginning of an increasing role for domestic courts in holding national and subnational governments responsible for effecting international climate commitments. *Leghari* is also significant for a unique third reason, in that here the court ordered government to implement a climate adaptation plan, and established a judicial commission to supervise and report back to the court on how its implementation was progressing.

In this case, a farmer, Ashgar Leghari, challenged the “inaction, delay and lack of seriousness” of Pakistan’s federal government, as well as that of the subnational province of Punjab, “to address the challenges and to meet the vulnerabilities associated with climate change.”⁹² He submitted that climate change is a serious threat to the water, food and energy security of Pakistan, which offends the fundamental right to life under article 9 of the Constitution, and that in spite of the National Climate Change Policy (2012) and the Framework for Implementation of Climate Change Policy (2014–2030), “there is no progress on the ground.”⁹³ Quoting from the policy, the claim said that climate change threats have led to “major survival concerns for Pakistan, particularly in relation to the country’s water security, food security and energy security.”⁹⁴

85 See, for example, Climate Action Tracker’s analysis of Canada’s submitted INDCs: Climate Action Tracker, Canada, online: <climateactiontracker.org/countries/canada.html>.

86 Civil Society Review, *supra* note 18 at 1.

87 Paris Agreement, *supra* note 22 at 22, art 4.

88 *Ibid* at 23, art 4.3.

89 *Ibid* at 32, art 15.

90 See, for example, Ontario, *Rules of Civil Procedure*, RRO 1990, Reg 194, r 52.03; United States, FED. R. EVID. 706.

91 *Leghari* (31 August 2015), *supra* note 31.

92 *Leghari* (4 September 2015), *supra* note 31 at 2.

93 *Ibid*.

94 Mehra, *supra* note 31.

In response to the claim, Justice Syed Mansoor Ali Shah summoned senior officials from all branches of Pakistan's civilian government with responsibility for climate change-related impacts to appear before him within the first week the matter was on his docket. After hearing from these officials, the judge agreed there had been no real progress and he made an interim order requiring government ministries to nominate a climate change focal person to ensure the implementation within their department of the framework and to present a list of adaptation action points that could be achieved by December 31, 2015. He also announced that he would constitute a Climate Change Commission (CCC) comprised of representatives of key ministries "to assist this Court to monitor the progress of the Framework."⁹⁵ In his reasons, the judge found climate change to be a challenge to fundamental rights protected under the constitution and that orders requiring climate change justice to be achieved were required. The eloquence and strength of the judge's views will likely be referred to in future cases in approximately 100 nations, as well as in some subnational provinces and states, that enjoy constitutional rights to life and dignity:

6. Climate Change is a defining challenge of our time and has led to dramatic alterations in our planet's climate system. For Pakistan, these climatic variations have primarily resulted in heavy floods and droughts, raising serious concerns regarding water and food security. On a legal and constitutional plane this is [a] clarion call for the protection of fundamental rights of the citizens of Pakistan, in particular, the vulnerable and weak segments of the society who are unable to approach this Court.

7. Fundamental rights, like the right to life (article 9) which includes the right to a healthy and clean environment and right to human dignity (article 14) read with constitutional principles of democracy, equality, social, economic and political justice include within their ambit and commitment, the international environmental principles of sustainable development, precautionary principle, environmental impact assessment, inter and intra-generational equity and public trust doctrine. Environment and its protection has taken a center stage in the scheme of our constitutional rights. It appears that we have to move on. The existing environmental jurisprudence has to be fashioned to meet the needs of something more urgent and overpowering i.e., Climate Change. From *Environmental Justice*, which

was largely localized and limited to our own ecosystems and biodiversity, we need to move to *Climate Change Justice*. Fundamental rights lay at the foundation of these two overlapping justice systems. Right to life, right to human dignity, right to property and right to information under articles 9, 14, 23 and 19A of the Constitution read with the constitutional values of political, economic and social justice provide the necessary judicial toolkit to address and monitor the Government's response to climate change.⁹⁶

In a subsequent hearing held October 5, 2015, the judge reiterated the court's constitutional obligation and duty on this issue to ensure issues of climate change are dealt with in "a more proactive and robust manner": "As a constitutional Court it is a constitutional obligation to protect the fundamental rights of the people. *Climate Change* has devastating impact on the rights to life, health, business, trade, movement, dignity and property of the people under Articles 9, 14, 15, 23 and 24 of the Constitution of Islamic Republic of Pakistan, 1973, so, it is high time that we deal with the issues of *Climate Change* head-on in a more proactive and robust manner."⁹⁷

Further, the court found that the submission of the cabinet secretary that the Cabinet Division should take up the issue of climate change "as and when informed by the Ministry of *Climate Change*" was a "lackadaisical approach":

Considering that *Climate Change* is a major national security threat, this lackadaisical approach is not appreciated. *Climate Change*

⁹⁶ *Ibid* at 5-6 [emphasis in original]. See also *Constitution of the Islamic Republic of Pakistan*, 10 April 1973, online: <www.pakistani.org/pakistan/constitution/>. In a further hearing in *Leghari*, the judge said, "It is quite clear to me that no material exercise has been done on the ground to implement the Framework. In order to expedite the matter and to effectively implement the rights of the people of Punjab, *Climate Change Commission* is constituted by this Court": *Leghari* (14 September 2015), *supra* note 31 at 10-11 [emphasis in original]. The commission was initially comprised of senior officials of 21 government ministries and agencies for the specific purpose of the "[e]ffective implementation of National Climate Change Policy, 2012...and the Framework for Implementation" (*ibid* at 13). The commission was given the power to "co-opt any person/expert, at any stage" and to seek assistance from any federal or provincial government ministry or department, who in turn "are hereby directed to render full assistance to the Commission" (*ibid* at 13). The commission was ordered to file interim reports "as and when directed by this Court" (*ibid* at 14).

⁹⁷ *Leghari* (5 October 2015), *supra* note 31 at 3, para 3. Noting that the CCC was scheduled to meet 12 days later, the judge then directed the concerned ministries and departments "to make targeted presentations identifying 2 or 3 achievable actionable items/targets out of the Framework latest by 31 December, 2015 and place the same before CCC in its next meeting scheduled for 17.10.15" (*ibid*, para 3), and further directed the secretary of the CCC to summarize these and place them in writing before the court prior to the next date of hearing. (*Ibid*, para 5.) [emphasis in original]

⁹⁵ *Leghari* (4 September 2015), *supra* note 31 at 7.

seriously impairs the fundamental rights of the citizens of Pakistan, therefore, the *Secretaries' Committee* is directed to vigilantly take up and consider the progress made on behalf of the Ministry of *Climate Change* regarding the implementation of NCCP and Framework on a monthly basis....Joint Secretary Cabinet Division and Focal Person for the purposes of *Climate Change* will closely liaise with the Ministry of *Climate Change* and ensure that implementation of the Framework is a regular monthly agenda item in the meeting of the Secretaries' Committee. He shall report the progress in this regard to the Court on the next date of hearing.⁹⁸

In January 2016, the CCC, established by order of Justice Mansoor Ali Shah, reported major findings and recommendations to the court. These, together with the judge's response to them as reflected in his January 18, 2016, order,⁹⁹ further demonstrate the effectiveness of citizen suits exemplified by the *Leghari* case: "Chairman CCC submitted that after the intervention by this Court, the concern and debate on the issue of climate change has gathered momentum....It is clear that the Policy as well as the Framework were almost untouched till the Commission was constituted by this Court, resulting in mobilizing the government machinery. Since then there has been modest progress in achieving the objectives and goals laid down under the Policy and the Framework."¹⁰⁰

Some major findings of the CCC were:

- "The degree of familiarity with the Policy is not particularly visible, or uniformly high, in the concerned Ministries, Departments, or Agencies at both the national and provincial levels."¹⁰¹
- "Several of the projects that are part of Pakistan's development agenda do not even refer to the climate change, or climate threats to Pakistan, or refer to the country's mitigation and adaptation needs, or the damages caused by factors that could be reasonably attributed to climate change. There is, therefore, an urgency to review existing departmental policies, programs and initiatives for them to be climate compatible."¹⁰²

- "What is required is a paradigm shift in the mindset of the Federal and Provincial Governments, its Ministries, Departments and Agencies that climate change is a real threat which needs to be countered effectively to ensure a better future for the country."¹⁰³
- There are "no separate budget lines for climate change mitigation/adaptation despite the fact that Pakistan is regarded as one of the most vulnerable countries and has begun to lose a high percentage of its Gross Domestic Product (GDP) to climate induced disasters."¹⁰⁴
- "Without the supporting resource allocation, many of the Priority Actions may not be implementable and will merely become a wish list." Indeed, the CCC recognized budgetary allocation as "the biggest obstacle in the implementation of many projects and plans which could mitigate the climate change" and recommended that the "Federal Ministry of Finance, the Punjab Ministry of Finance and the Ministry of Planning, Development and Reforms, allocate appropriate budgets for the implementation of the Framework, in particular the Priority Actions."¹⁰⁵

In his order, Justice Mansoor Ali Shah noted the CCC's findings that the priority actions under the Framework that were to be taken by December 31, 2015, had not been implemented, and ordered them to be achieved by June 2016. He also ordered the Ministry of Climate Change to consult with the CCC to work out an estimate of funds required by the various departments to achieve the priority and short-term actions under the framework, to be submitted prior to the finalization of Punjab's 2016 budget. On this issue, the judge drew the connection between the government's duty to allocate a budget to address climate change and the enforcement of fundamental rights by holding as follows: "The allocation of budget by the Government of the Punjab is integral to the enforcement of fundamental rights of the people of Punjab as climate change can cause serious food and health security issues and unless immediate adaptative steps are taken, people of Punjab may suffer at the hands of severe floods and drought. Therefore, in order to protect and safeguard the fundamental rights of the people, Government of Punjab is directed to look into the matter with utmost seriousness and allocate budget for climate change in consultation with CCC."¹⁰⁶

The findings of the CCC, providing clear guidance to the federal and provincial governments on how they

98 *Ibid* at 3-4, para 6. [emphasis in original]

99 *Leghari v Pakistan* (18 January 2016) Lahore W.P. No 25501/2015 No 8 (HC Green Bench, Pakistan), online: <sys.lhc.gov.pk/greenBenchOrders/WP-Environment-25501-15-02-02-2016.pdf>.

100 *Ibid* at 13-14.

101 *Ibid* at 2.

102 *Ibid* at 3.

103 *Ibid* at 6.

104 *Ibid* at 2-3.

105 *Ibid* at 7-8.

106 *Ibid* at 15.

can best address climate change issues, and Justice Mansoor Ali Shah's decision requiring the Punjab provincial government to allocate a budget for climate change activities, have effectively removed the excuse for government inaction based on a lack of funding. In fact, one of the CCC's recommendations was for Pakistan to "make concerted efforts to acquire GCF [Green Climate Fund] accreditation in order to have the eligibility to access GCF funds and to strengthen its overall capacity to access international finance."¹⁰⁷

Leghari, like *Urgenda*, illustrates that citizen suits before domestic courts can make a difference regarding government inaction on climate change. According to a writer¹⁰⁸ who interviewed Justice Mansoor Ali Shah, the proceedings had not been adversarial.

His intention was not to "put officials on the mat" but to help them, he said. Senior government officials had admitted in court to receiving no response from ministries to requests on what action they had taken to implement the government's own climate commitment.

He noted that many were "totally at sea" with "no idea what was going on or what climate change was", and stressed the need for greater awareness raising and capacity building.

And he characterized the case as having "jump-started" the government's climate change efforts at a time when they had been "totally dead."¹⁰⁹

The Pakistani writer further noted:

Using a human rights-centric approach invoking fundamental rights and constitutional duties, the judge had enforced within a month what others, including civil society and legislators, had failed to do for years.

...

The courts can bring remedies and will now increasingly be used to enforce political accountability and ensure climate justice. Litigation need not cost the earth.

¹⁰⁷ *Ibid* at 12.

¹⁰⁸ Malini Mehra, a board member of India Climate Dialogue. See Mehra, *supra* note 31.

¹⁰⁹ *Ibid*.

The case probably cost less than a week's stay in Bonn for Pakistan's climate negotiators. Justice can also be swift.

They set a model for fast track adjudication of climate change-related issues that are too often dismissed as too complicated for the courts to handle.

The *Leghari* case highlights a simple but fundamental truth — individuals can and do make a difference. The case was brought by one man and judged by one man. Each made history.¹¹⁰

This ruling, like *Urgenda*, is an example of the new timeliness of climate litigation before domestic courts in which some judges will enthusiastically engage with the legal challenge and use creativity to provide an effective judicial remedy. Following the 2015 orders, Michael Gerrard, Director of the Sabin Center for Climate Change Law at Columbia Law School, noted that "[e]ach successful ruling motivates people in other countries to try it....[I]t is useful to be able to say to a judge that you are not the first one to do this. Others have already done it. Having a precedent is not binding, but it's helpful."¹¹¹

Foster v Washington Department of Ecology: Washington State Superior Court (United States)

In a third significant 2015 decision, *Foster v Washington Department of Ecology*,¹¹² Judge Hollis Hill of the Washington State Superior Court, in ruling on a petition by American children seeking more stringent state GHG emissions rules for their generation and future generations, determined 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."¹¹³ As in *Urgenda* and *Leghari*, the petitioners sought to have the court find a duty on government to act on climate change, stressing that doing so is timely because of the availability of clear climate science. This case, like the other two, "advances the fundamental duty of government today: to address the climate crisis based on

¹¹⁰ *Ibid*.

¹¹¹ Cited in Raveena Aulakh, "Pakistan judge orders state to enforce climate policies", *The Toronto Star* (3 October 2015), online: <www.thestar.com/news/world/2015/10/03/pakistan-judge-orders-state-to-enforce-climate-policies.html>.

¹¹² *Foster v Washington*, *supra* note 32.

¹¹³ *Ibid* at 8.

scientific baselines and benchmarks, and to do so within timeframes determined by scientific analysis.”¹¹⁴

Judge Hill declared 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 first too costly and then too late.”¹¹⁵ Highlighting inextricable relationships between navigable waters and the atmosphere, and finding that separating the two is “nonsensical,” the judge found the public trust doctrine mandates that the state act through its designated agency “to protect what it holds in trust.”¹¹⁶

While validating the youths’ claims that the “scientific evidence is clear that the current rates of reduction mandated by Washington law cannot...ensure the survival of an environment in which [youth] can grow to adulthood safely,”¹¹⁷ the court declined, in its November 2015 ruling, to order the Ecology Department to promulgate the youths’ proposed rule, having regard to the fact that the department by then was undertaking a review of its Clean Air Rule. However, the judge made clear that in that process the state has a “mandatory duty” to “[p]reserve, protect, and enhance the air quality for the current and future generations.”¹¹⁸ The judge ruled 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.”¹¹⁹

The case is a primary example of how citizen litigation regarding climate harm can motivate and result in positive government actions, even where initially the specific litigation relief claimed was not granted. The youth petitioners first requested that the state initiate GHG rule-making procedures in June 2014. After the state refused to do so in August of the same year, the youth appealed and in a June 2015 decision highlighting the urgency of the climate crisis, the judge ordered the state to reconsider the youths’ petition, taking into account current climate

science. In July 2015, the youth plaintiffs met with the state governor to plead their case personally. Eleven days later, Governor Jay Inslee ordered the Department of Ecology to institute GHG rule making, which the youth had requested for more than a year. In August 2015, the department again refused the youths’ request for a science-based rule making because the department had initiated similar rule making at the governor’s request. Because the department also rejected the youths’ constitutional and public trust rights, the case was argued in front of Judge Hill on November 3, 2015. Attorney Andrea Rodgers of the WELC, who acted for the petitioners, said in a statement following the November 19, 2015, decision that, “Judge Hill has made it very clear what Ecology must do when promulgating the Clean Air Rule: preserve, protect and enhance air quality for present and future generations and uphold the constitutional rights of these young people.... We will hold Ecology accountable every step of the way to make sure that Judge Hill’s powerful words are put into action. This is a huge victory for our children and for the climate movement.”¹²⁰

On April 29, 2016, there were dramatic new developments in this case, resulting in Judge Hill reversing part of her November 2015 decision and issuing an order from the bench requiring the Ecology Department to bring in a new emissions rule by the end of the year. She also required Ecology to make a recommendation to the 2017 state legislature to update GHG emissions targets based on current science. Before Ecology makes the recommendations, it must consult with the youth petitioners.

Judge Hill’s extraordinary April 2016 order arose from a motion brought by Andrea Rodgers, the youths’ lawyer, who informed the court that despite Ecology’s November 2015 submissions that it would bring in a new rule (in accordance with its duty to do so as articulated by Judge Hill), Ecology withdrew the proposed rule in February 2016.

Judge Hill stated, “I’m not confident at this point that the rule-making procedure will be completed by the end of 2016 without a court order, and I think it’s necessary that that be in a court order... The reason I’m doing this is because this is an urgent situation. This is not a situation that these children can wait on. Polar bears can’t wait; the people of Bangladesh can’t wait. I don’t have jurisdiction over their needs in this matter, but I do have jurisdiction in this court, and for that reason I’m taking this action.”¹²¹

114 Western Environmental Law Center (WELC), Press Release, “Washington State Youth Win Unprecedented Decision in their Climate Change Lawsuit” (24 June 2015), online: <www.westernlaw.org/article/washington-state-youth-win-unprecedented-decision-their-climate-change-lawsuit-press-release>.

115 *Foster v Washington*, *supra* note 32 at 5.

116 *Ibid* at 8. See also WELC, Press Release, “In Advance of Paris Climate Talks, Washington Court Recognizes Constitutional and Public Trust Rights and Announces Agency’s Legal Duty to Protect Atmosphere for Present and Future Generations” (20 November 2015), online: <westernlaw.org/article/advance-paris-climate-talks-washington-court-recognizes-constitutional-and-public-trust-right>.

117 *Foster v Washington*, *supra* note 32 at 5.

118 *Ibid* at 6.

119 *Ibid* at 4-5.

120 WELC release, *supra* note 116.

121 Judge Hollis Hill, *Foster v Washington Department of Ecology*, No 14-2-25295-1, transcript at 18-20 (Wash Super Ct, Apr. 29, 2016) (oral ruling).

According to attorney Andrea Rodgers, this ruling means “the children have won their case.” She said, “This is the first time an American court has ordered a government agency to engage in climate change rule making that must have as its objective enhancing air quality for current and future generations.”¹²²

Other Citizen Climate Cases Pending Against Governments

Foster v Washington is one of several similar American state cases as well as a federal suit, all supported by Our Children’s Trust, that have been brought by youth seeking the legal right to a healthy atmosphere and stable climate. These cases illustrate a trend toward increasing domestic court litigation in which citizens are seeking judicial climate remedies similar to those obtained in *Urgenda* and *Leghari*.¹²³ Set out below are summaries of the current status of two cases begun in 2015, one against the US federal government and another against the State of Pennsylvania.

Juliana v United States

In *Juliana v United States*,¹²⁴ launched August 12, 2015, in the US District Court for Oregon, 21 young Americans asked the court for an order (1) declaring that the federal government has violated and is continuing to violate the fundamental constitutional rights of youth and future generations to life, liberty, property, and public trust resources by causing dangerous CO₂ concentrations in the atmosphere and dangerous government interference with a stable climate system; and (2) ordering the government to protect these constitutional rights by significantly reducing the nation’s CO₂ emissions through implementation of a science-based climate recovery plan.

The plaintiffs cited the US Constitution’s Fifth Amendment, claiming it protects present and future generations from government actions that harm life, liberty, and property without due process of law, and allege their due process rights have been infringed because defendants (various US government departments and the EPA) caused atmospheric CO₂ levels to rise above 350 parts per million from extraction, production, transportation and consumption of fossil fuels, thus “dangerously interfering with a stable climate system,”¹²⁵ and these actions endanger the youth

plaintiffs’ and future generations’ lives, liberties and property. They also allege violation of the equal protection principles embedded into the Fifth Amendment, the claim being that the affirmative aggregate acts of defendants in the areas of fossil fuel extraction, production, consumption and combustion irreversibly discriminate against the plaintiffs’ exercise of their fundamental rights to life, liberty and property, and abridge central precepts of equality by causing irreversible climate change. As a result, the plaintiffs say, they are denied the same protection of fundamental rights afforded to prior and present generations of adult citizens. They claim that “imposition of this disability on Plaintiffs serves only to disrespect and subordinate them.”¹²⁶ The Fifth Amendment’s guarantee to equal protection of the laws prohibits “the Federal Government’s unjustified infringement of Plaintiffs’ right to be free from Defendants’ aggregate acts that destabilize our nation’s climate system whose protection is fundamental to Plaintiffs’ fundamental rights to life, liberty and property.”¹²⁷ They also claim that implied rights retained by the people pursuant to the Ninth Amendment include the right to be sustained by their country’s vital natural systems, including its climate system, and that this right is being infringed by the defendants causing, and continuing to materially contribute to, dangerous levels of atmospheric and oceanic CO₂ and a destabilized climate system.¹²⁸

On November 12, 2015, the National Association of Manufacturers (NAM), the American Petroleum Institute (API) and the American Fuel & Petroleum Manufacturers filed a motion to dismiss the suit for a number of reasons, including that the plaintiffs improperly sought to have the federal courts fill an executive or legislative function.¹²⁹ On January 14, 2016, a federal magistrate judge in Oregon allowed these parties to intervene in the case, ruling that the manufacturers have a protectable interest in the lawsuit. The magistrate judge agreed with the groups that the lawsuit relief sought by Juliana and her co-plaintiffs could affect not only the interests of their members and

122 Interview of Andrea Rodgers (6 May 2016).

123 Our Children’s Trust, *State Lawsuits*, online: <ourchildrenstrust.org/US/LawsuitStates>. Cases pending before trial judges include North Carolina, Pennsylvania and Colorado, and before appellate courts in Massachusetts and Oregon.

124 No 6:15-cv-01517-TC Doc. 1 (D Or Aug. 12, 2015) (pleadings, plaintiff), online: Our Children’s Trust <ourchildrenstrust.org/sites/default/files/15.08.12YouthComplaintAgainstUS.pdf>.

125 *Ibid* at para 279.

126 *Ibid* at para 292.

127 *Ibid*.

128 Our Children’s Trust, “Summary of the Constitutional Climate Change Lawsuit Against the United States Government” [Our Children’s Trust Summary] online: <ourchildrenstrust.org/sites/default/files/Summary-ConstitutionalClimateChangeLawsuit.pdf>.

129 Scott Flaherty, “SidleySquaresOffAgainstYouthActivistsinClimateSuit” *The American Lawyer* (16 November 2015), online: <ourchildrenstrust.org/sites/default/files/15.11.16TheAmericanLawyer.pdf>.

businesses but also the fossil fuel industry itself.¹³⁰ Most recently, on April 8, 2016, the same federal magistrate judge recommended denial of motions brought by NAM and the API, as well as the US federal government, to dismiss the suit.¹³¹ In recommending that the suit continue despite various carbon industry arguments, including that the case raises a non-justiciable political question and a lack of standing by the plaintiffs, Magistrate Judge Thomas Coffin reasoned as follows:

The debate about climate change and its impact has been before various political bodies for some time now. Plaintiffs give this debate justiciability by asserting harms that befall or will befall them personally and to a greater extent than older segments of society. It may be that eventually the alleged harms, assuming the correctness of plaintiffs' analysis of the impacts of global climate change, will befall all of us. But the intractability of the debates before Congress and state legislatures and the alleged valuing of short term economic interest despite the cost to human life, necessitates a need for the courts to evaluate the constitutional parameters of the action or inaction taken by the government. This is especially true when such harms have an alleged disparate impact on a discrete class of society.¹³²

The magistrate judge also held that at this stage the court's role was to determine if the claim could be judicially redressed: "Assuming plaintiffs are correct that the United States is responsible for about 25% of the global CO₂ emissions, the court cannot say, without the record being developed, that it is speculation to posit that a court order to undertake regulation of greenhouse gas emissions to protect the public health will not effectively redress the alleged resulting harm."¹³³

On this point, the magistrate judge referred to *Urgenda*, noting that the Dutch court rejected arguments that a reduction of the Netherlands' emissions would be ineffectual in light of other nations' practices, and quoted from the *Urgenda* decision: "[T]he State should not hide behind the argument that the solution to the global climate problem does not depend solely on Dutch efforts. Any reduction of emissions contributes to the prevention of dangerous climate change and as a developed country the Netherlands should take the lead in this."¹³⁴ Judge Coffin continued: "Thus, regulation by this country, in combination with regulation already being undertaken by other countries, may very well have sufficient impact to redress the alleged harms."¹³⁵ Michael Gerrard, director of the Sabin Center for Climate Change Law, has commented that, "[i]f these recommendations are adopted by the district court and upheld on appeal, the case will have opened up a major new front on climate litigation."¹³⁶

Funk v Wolf

In another 2015 American case, *Funk v Wolf*,¹³⁷ six young people from Pennsylvania filed a constitutional public trust climate change lawsuit in the Commonwealth Court of Pennsylvania against Governor Tom Wolf and six state agencies, including the Department of Environmental Protection and the Pennsylvania Environmental Quality Board. The legal approach is similar to that in *Juliana v US* described above: the youth plaintiffs are seeking to protect their constitutional rights to clean air, pure water and other essential natural resources, which they plead they rely on for their survival and well-being, but

130 *Juliana v United States*, No 6:15-cv-01517-TC (D Or Jan. 14, 2016), online: <<https://cases.justia.com/federal/district-courts/oregon/ordce/6:2015cv01517/123110/50/0.pdf?ts=1452864778>>. See further Mealey's Pollution Liability, "Magistrate Judge Allows Industry Groups to Intervene in Climate Control Suit" (20 January 2016) *Lexis Legal News*, online: <www.lexislegalnews.com/articles/5362/magistrate-judge-allows-industry-groups-to-intervene-in-climate-control-suit>. Not long after the magistrate allowed the fossil fuel interests to join the case alongside the government, the young people acquired some important allies. Two major Catholic groups, one of which includes Pope Francis, announced their support for the youth by filing an *amicus* brief with the court. In the brief, lawyers for the Global Catholic Climate Movement and the Leadership Council of Women Religious argue that "[g]overnment's failure to address impending catastrophic harm violates the basic constitutional public trust duty...to protect resources crucial for future human survival and welfare": *Juliana v United States*, No 6:15-cv-01517-TC (D Or Jan. 15, 2016) at 3, online: <ourchildrenstrust.org/sites/default/files/16.01.15.FaithAmiciCuriaeBrief.pdf>. They also state: "In the papal encyclical, *Laudato Si'*, Pope Francis issued a clarion call for 'the establishment of a legal framework which can set clear boundaries and ensure the protection of ecosystems'" (*ibid* at 10). Unlike the industry groups, the Catholic groups will not actually participate in the trial. But their support shows that the case has attracted international attention: John Light, "Kids Suing Government for Climate Action Attract Influential Allies and Opponents" (22 January 2016), online: Moyers & Company <ourchildrenstrust.org/sites/default/files/16.01.22BillMoyers.pdf>.

131 *Juliana v United States*, No 6:15-cv-01517-TC Doc. 68 (D Or Apr. 8, 2016), online: <ourchildrenstrust.org/sites/default/files/16.04.08.OrderDenyingMTD.pdf>.

132 *Ibid* at 8.

133 *Ibid* at 11.

134 *Ibid* at 11-12, citing *Urgenda*, *supra* note 30 at 11.

135 *Ibid* at 11-12. Judge Coffin's findings and recommendations were for the US District Court Judge. The parties had 14 days to file written objections, followed by 14 days for responses to objections, following which the district court will issue its order or judgment.

136 See Michael Gerrard, "Our Children's Trust Suit Against US Government Surmounts Litigation Hurdle" (9 April 2016) *Climate Law Blog*, online: Sabin Center for Climate Change Law, <blogs.law.columbia.edu/climatechange/2016/04/09/our-childrens-trust-suit-against-us-government-surmounts-litigation-hurdle/>.

137 No 467 MD 2015 (Pa Commw Ct Sept. 16, 2015), online: Our Children's Trust <ourchildrenstrust.org/sites/default/files/15.09.16.PennsylvaniaFiledComplaint.pdf>.

which are currently threatened by climate change. They ask the defendants to take steps necessary to regulate Pennsylvania's carbon dioxide and other GHGs consistent with what they claim is the Commonwealth's duty and obligations as public trustee under article I, section 27, of the Pennsylvania Constitution to conserve and maintain public natural resources, including the atmosphere, for the benefit of present and future generations. Their complaint asserts that the defendants are failing to fulfill their trustee obligations to regulate CO₂ emissions, as evidenced by the current harmful impacts of climate change within Pennsylvania, such as extreme weather events, rising temperatures and disruptions to the hydrological cycle.¹³⁸

Pending Claims Against Private Sector Carbon Emitters

Two other climate proceedings commenced in 2015 are also noteworthy, in that they allege a duty not on government but on private sector carbon emitters to take responsibility for preventing future climate harm and to contribute to rectifying current, and preventing future, impacts. In addition to advancing the "duty" concept for private sector actors, they are also significant for asserting that a new aspect of climate science — a recent study by Richard Heede that finds 90 "carbon majors" are responsible for 63 percent of the CO₂ in the atmosphere — can bridge the causality issue and justify implicating these corporations as parties that should bear responsibility for climate harm that is already occurring.¹³⁹

138 Our Children's Trust, Press Release, "Pennsylvania Youth File Constitutional Climate Change Lawsuit Against Governor Tom Wolf and Six State Agencies" (16 September 2015), online: <ourchildrenstrust.org/event/703/press-release-pennsylvania-youth-file-constitutional-climate-change-lawsuit-against-governor>.

139 Richard Heede, "Tracing anthropogenic CO₂ and methane emissions to fossil fuel and cement producers, 1854–2010" (2014) 122:1-2 *Climatic Change* 229 [Heede], online: <link.springer.com/article/10.1007/s10584-013-0986-y>. The abstract states:

This paper presents a quantitative analysis of the historic fossil fuel and cement production records of the 50 leading investor-owned, 31 state-owned, and 9 nation-state producers of oil, natural gas, coal, and cement from as early as 1854 to 2010. This analysis traces emissions totaling 914 GtCO₂e—63 % of cumulative worldwide emissions of industrial CO₂ and methane between 1751 and 2010—to the 90 "carbon major" entities based on the carbon content of marketed hydrocarbon fuels (subtracting for non-energy uses), process CO₂ from cement manufacture, CO₂ from flaring, venting, and own fuel use, and fugitive or vented methane. Cumulatively, emissions of 315 GtCO₂e have been traced to investor-owned entities, 288 GtCO₂e to state-owned enterprises, and 312 GtCO₂e to nation-states. Of these emissions, half has been emitted since 1986. The carbon major entities possess fossil fuel reserves that will, if produced and emitted, intensify anthropogenic climate change.

Lliuya v RWE: Peruvian Claim Against German Emitter

One of the claims against a private sector emitter is being made in Germany by a Peruvian who is seeking to obtain a contribution from Europe's largest CO₂ emitter for a proportionate share of the cost to take urgent measures in Peru that could alleviate the imminent risk of the claimant's house being washed away due to melting glaciers. A demand was made in March 2015 by Saúl Luciano Lliuya, a Peruvian house owner and mountain guide, against RWE AG, headquartered in Essen, in Germany's industrial Ruhr Valley, asking that the company contribute to the cost of protective measures urgently needed to prevent damage from a glacial lake outburst flood from Lake Palcacocha.¹⁴⁰ Lake Palcacocha currently serves as a lagoon and reservoir for glacial melt-water, which is then released into downstream rivers. It is located upstream of Lliuya's home in the town of Huaraz.¹⁴¹ According to the IPCC Fourth Climate Change Assessment Report, glacial retreat and melting of the tropical Andean glaciers is attributed to climate change.¹⁴² Glacial lake outburst floods represent a growing threat in Huaraz, since a flood could potentially cause devastating damage in populated areas.¹⁴³ The claim is premised on RWE's status as one of Europe's biggest historical emitters, according to the 2013 report published by Richard Heede.¹⁴⁴ According to Heede's report, RWE's contribution to global total CO₂ emissions was 0.47 percent from 1751 to 2010. Based on this figure, Lliuya is claiming that RWE must contribute €20,000, an equivalent of 0.47 percent of the total projected costs to drain or reinforce the lake and install a glacial flood outburst early warning

140 The suit is supported by Germanwatch, a civil society organization concerned about the human rights effects of climate change. See Germanwatch, Press Release, "Melting glaciers: Peruvian requests German utility RWE to pay for protective measures" (17 March 2015), online: <<https://germanwatch.org/en/10002>>.

141 Dan Collyns, "Peruvian farmer demands climate compensation from German company" *The Guardian* (16 March 2015) [Collyns], online: <www.theguardian.com/environment/2015/mar/16/peruvian-farmer-demands-climate-compensation-from-german-company>. See also Lisa Friedman, "Claim blaming utility for devastating glacier melt in Peru may set landmark legal precedent" *ClimateWire* (6 April 2015), online: E&E Publishing <www.eenews.net/stories/1060016270>.

142 IPCC, *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the IPCC* (Cambridge, UK and New York: Cambridge University Press, 2007) at 86, online: <www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4_wg2_full_report.pdf>.

143 See Marcelo A Somos-Valenzuela, *CRWR Online Report 14-01: Inundation Modeling of a Potential Glacial Lake Outburst Flood in Huaraz, Peru* (Austin, Texas: Center for Research in Water Resources, University of Texas, 2014), detailing the dangers associated with glacial lake outburst flood in Huaraz, online: CRWR <www.cwrw.utexas.edu/reports/pdf/2014/rpt14-01.pdf>.

144 Heede, *supra* note 139, supplementary electronic materials at 6.

system.¹⁴⁵ On April 30, 2015, RWE rejected the demand and denied any responsibility for the risks faced by Lliuya.¹⁴⁶ On November 24, 2015, Lliuya launched a civil suit against RWE. This is apparently the first time a company in Europe has been sued by a person claiming that he or she is or will be affected by the hazards of climate change. When the suit was launched, Lliuya's lawyer, Roda Verheyen, said: "This is a precedent. RWE AG releases significant emissions, principally through its coal-fired power plants, which makes global temperatures rise, causes glaciers to melt and leads to an acute threat to my client's property. We request that the court declare RWE liable to remove this impairment."¹⁴⁷

Greenpeace Southeast Asia and Philippine Rural Reconstruction Movement: Petition to Philippines Commission on Human Rights

Another significant 2015 legal proceeding that implicates private company responsibility for climate change impacts is the petition to the Philippines Commission on Human Rights that seeks to hold major carbon producers accountable for their role in climate change and the alleged violation of human rights arising therefrom.¹⁴⁸ Created under section 17(1), article XIII, of the Constitution of the Philippines, the Philippines Commission on Human Rights is an independent office that has the function of investigating all forms of human rights violations involving civil and political rights.¹⁴⁹ It also has the power to "provide appropriate legal measures for the protection of human rights of all persons within the Philippines."¹⁵⁰ In September 2015, a complaint by typhoon survivors,

advocates and NGOs was filed with the commission.¹⁵¹ The complaint requests that an investigation be carried out of the top 50 investor-owned fossil fuel companies and that their responsibility for climate impacts be determined.¹⁵² The complaint avers that climate change interferes with the enjoyment of fundamental rights as human beings and demands that contributors of climate change be held accountable.¹⁵³ The petition cites a number of rights that are in violation or being threatened, including the rights to life, food, water, sanitation and adequate housing. In addition, it cites the adjunct rights to health and to a balanced, healthful ecology, noting that their absence from the Bill of Rights does not preclude their protection given previous precedent acknowledging that environmental rights are included in the complete concept of human rights.¹⁵⁴

151 Greenpeace, Press Release, "For the first time fossil fuel companies face national human rights complaint on climate change" (22 September 2015), online: Greenpeace International <www.greenpeace.org/seasia/ph/press/releases/For-the-first-time-fossil-fuel-companies-face-national-human-rights-complaint-on-climate-change/>.

152 Greenpeace Philippines, *supra* note 34 at 31. The specific relief requested is as follows:

1. Conduct an investigation into the human rights implications of climate change and ocean acidification and the resulting rights violations in the Philippines, and whether the investor-owned Carbon Majors have breached their responsibilities to respect the rights of the Filipino people;
2. Monitor people and communities acutely vulnerable to the impacts of climate change;
3. Recommend that policymakers and legislators develop and adopt clear and implementable objective standards for corporate reporting of human rights issues in relation to the environment, with special regard for current and future climate change impacts and GHGs from fossil fuel products;
4. Recommend that policymakers and legislators develop and adopt effective accountability mechanisms that victims of climate change can easily access in instances of violation or threat of violation;
5. Notify the investor-owned Carbon Majors and request the submission of plans on how such violations or threats of violation resulting from the impacts of climate change will be eliminated and remedied and prevented in the future; and
6. Recommend that the President call upon other States, especially where the investor-owned Carbon Majors are incorporated, to take steps to prevent, remedy, or eliminate human rights violations or threats of violations resulting from the impacts of climate change, or seek a remedy before international mechanisms.

153 *Ibid* at 3-4.

154 *Ibid* at 6.

145 Collens, *supra* note 141.

146 Megan Darby, "Around the World in 5 Climate Change Lawsuits — Peruvian Farmer v RWE" (7 August 2015), online: RTCC Climate Home: <www.climatechangenews.com/2015/07/08/around-the-world-in-5-climate-change-lawsuits/>.

147 Germanwatch, "Peruvian farmer sues German utility RWE over dangers related to glacial melting" (24 November 2015), online: Germanwatch <germanwatch.org/en/huaraz>:

"We support Saúl Luciano Lliuya's claim," says Klaus Milke, Chairman of the Board of Germanwatch. "Only a few days before the Paris Climate Summit, this lawsuit against RWE sends an important message to the energy sector and to policy-makers: emissions must drop to prevent more people from being threatened by climate change. And those responsible for the risks must take on the costs to protect the people who are affected." Germanwatch does not consider it a permanent solution that these people — who are often very poor — need to take the matter to the courts. "Ultimately, there needs to be a political solution to hold accountable those who are responsible," says Milke.

148 Greenpeace Philippines, *supra* note 34.

149 *The Constitution of the Republic of the Philippines*, 1987, art XIII, s 18(1).

150 *Ibid* s 18(3).

The link between climate change and human rights violation is made by relying on the UN Human Rights Council's adoption of Resolution 7/23, which acknowledges that climate change "poses an immediate and far-reaching threat to people and communities around the world and has implications for the full enjoyment of human rights," as well as further clarification on this issue in a 2009 report of the Office of the High Commissioner for Human Rights of the United Nations.¹⁵⁵ Similar to the German lawsuit filed on behalf of the Peruvian citizen discussed above, the petition relies on the research published by Heede to demonstrate the cumulative emissions contributed by carbon majors (multinational and state-owned producers of crude oil, natural gas, coal and cement).¹⁵⁶

The petition asserts: "At the heart of this petition is the question of *whether or not the Respondent Carbon Majors must be held accountable*—being the largest corporate contributors of greenhouse gases emissions and having so far failed to curb those emissions despite the companies' knowledge of the harm caused, capacity to do so, and potential involvement in activities that may be undermining climate action — *for the human rights implications of climate change and ocean acidification.*"¹⁵⁷

The petition therefore calls on the commission to investigate the human rights implications of climate change and whether there has been a breach by carbon majors in their responsibilities to respect the rights of the Filipino people.¹⁵⁸ It also requests that the commission recommend that policy makers and legislators develop clear and objective standards for corporate reporting of human rights issues in relation to the environment, and develop and adopt an effective accountability mechanism that is easily accessible by victims of climate change in instances of violation or threat of violation. In addition, the petition asks that the commission recommend to the president that the president call upon states where the carbon majors are incorporated, to take steps to prevent, remedy or eliminate human rights violations resulting from the impacts of climate change.¹⁵⁹ On December 4, 2015, the commission announced that it will launch an investigation of the petition complaints, indicating that its investigation will involve all stakeholders, including the

¹⁵⁵ *Ibid* at 7.

¹⁵⁶ *Ibid* at 3.

¹⁵⁷ *Ibid* at 17 [emphasis in original].

¹⁵⁸ *Ibid* at 31.

¹⁵⁹ *Ibid*. See further comments in Justin Gundlach, "Petition to Philippines Human Rights Commission seeks Investigation into 'Carbon Majors' for Human Rights Violations" (25 September 2015), Climate Law Blog, online: Sabin Center for Climate Change Law <blogs.law.columbia.edu/climatechange/2015/09/25/petition-to-philippines-human-rights-commission-seeks-investigation-into-carbon-majors-for-human-rights-violations/>.

50 corporations, and include consultations and studies. As triggered by the petition, it will organize an investigation committee devoted to climate change and human rights.¹⁶⁰

FUTURE DIRECTIONS: TIME FOR CLIMATIZING JUDICIAL DECISIONS?

Urgenda, as well as the 2015 and 2016 Pakistani court decisions in *Leghari*, illustrate that there are junctures when courts and tribunals find it appropriate to require state actions because, among other important reasons, they conclude governments will not act — unless told to do so by the court. That time appears to have arrived for domestic courts in relation to climate change. Because of the clarity of IPCC climate science as to the harm unabated carbon emissions will cause to humanity, and the acknowledgement by states in the UNFCCC and Paris Agreement that urgent action to abate emissions within all countries is required, domestic courts are better positioned than at any previous time to respond to citizen suit claims that governments have a duty to act and protect them from climate change harms. As indicated by the concern raised by the Oslo Principles and the judicial finding in *Urgenda*, "the time has passed when we can simply ignore or minimize what we know with great certainty has been developing into the most serious environmental crisis in the history of humanity."¹⁶¹

While the *Urgenda* decision does not explicitly state that the time was right for the court to make a groundbreaking decision, timeliness of the issue for judicial intervention is implicit in the court's reasoning, exemplified, for example, by the court expanding the boundaries of the government's tort duty of care and by the court not just making a declaration of insufficiency of government emission targets but ordering the government to ensure more stringent carbon emissions reductions are carried out. *Urgenda* therefore provides important insights that the alleged insufficiency of government carbon reduction policies will increasingly be found a propitious subject of domestic court judicial review.

While judges do not usually admit they have a role in advancing the law, and in that context are not often considered pioneers in reforming the law, from time to time a matter is ripe for judicial leadership. This happens most often when a broad spectrum of society's civil or human rights are being violated or under significant

¹⁶⁰ Greenpeace, Press Release, "Philippines launches world's first national human rights investigation into 50 big polluters" (4 December 2015), online: Greenpeace International <www.greenpeace.org/international/en/press/releases/2015/Philippines-launches-worlds-first-national-human-rights-investigation-into-50-big-polluters/>.

¹⁶¹ Allan Early, *Urgenda Foundation v The State of Netherlands (Ministry of Infrastructure and the Environment) Summary and Commentary* [unpublished].

threat and a court concludes that government laws or policies that lead to such results cannot be justified in the face of that threat, coupled with the government refusing to recognize the infringement or to commit to expeditious rectifications. Courts then can conclude it is appropriate for them to make an order providing the remedy — since the government will not do so.

Urgenda, as well as the *Leghari* decisions and other cases discussed, clearly illustrate that domestic courts and tribunals can not only find it appropriate to “green” tort duties of care, as well as constitutional and human rights, but go further and “climatize” these legal causes of action, allowing judges to more sensitively require mitigation of carbon emissions as well as responsive adaptation to climate change impacts. These 2015 decisions extend to climate change the pragmatic judicial “greening” of remedies that began in the last decades when domestic courts began to construe anti-pollution laws in the wider context of sustainable development and the precautionary principle. In India, as observed by India Senior Advocate Shyam Divan,¹⁶²

[t]he Supreme Court has endeavoured to protect forests from being cleared,¹⁶³ improve water quality in major rivers by shutting down polluters,¹⁶⁴ tighten emission standards for vehicles¹⁶⁵ and to introduce a framework for municipal solid waste disposal across urban centres.¹⁶⁶ The Court has also declared important principles to guide decision making and built a body of environmental jurisprudence premised on the polluter pays principle,¹⁶⁷ the precautionary principle,¹⁶⁸ sustainable development¹⁶⁹ and the public trust doctrine¹⁷⁰ to preserve natural resources for public use and enjoyment. It is the Supreme Court that raised public awareness about the importance of environmental

protection, long before any sustained political or executive initiative.¹⁷¹

For example, in *Mehta v Union of India*,¹⁷² the Supreme Court of India extended the “right to life” in India’s constitution to include environmental rights. It ordered all polluting industries operating in residential areas of Delhi either to be closed or shifted to existing industrial areas. Noting the environmental effects of air pollution, the court cited an earlier judgment handed down by the Calcutta High Court, which observed:

The present-day society has a responsibility towards the posterity for their proper growth and development so as to allow the posterity to breathe normally and live in a cleaner environment and have a consequent fuller development. Time has now come therefore, to check and control the degradation of the environment and since the Law Courts also have a duty towards the society for its proper growth and further development, it is a plain exercise of the judicial power to see that there is no such degradation of the society and there ought not to be any hesitation in regard thereto.¹⁷³

The European Court of Human Rights has similarly recognized that severe environmental degradation may violate the right to life, the right to respect for private life and family life and the right to property protected in the European Convention on Human Rights.¹⁷⁴

Some recent decisions by the supreme courts in Canada, the United States and India, although not environmental cases, illustrate these courts were ruling partially because it was the right juncture for government policy to change

162 Divan, *supra* note 65.

163 *T. N. Godavarman v Union of India*, (1997) 2 SCC 267. [Divan]

164 *M. C. Mehta v Union of India*, (1987) 4 SCC 463 & (1988) 1 SCC 471. [Divan]

165 *M. C. Mehta v Union of India*, (1991) 2 SCC 353. [Divan]

166 *Almitra Patel v Union of India*, (2000) 2 SCC 166. [Divan]

167 *Indian Council for Enviro Legal Action v Union of India*, (1996) 3 SCC 212. [Divan]

168 *Vellore Citizens’ Welfare Forum v Union of India*, (1996) 5 SCC 647. [Divan]

169 *State of Himachal Pradesh v Ganesh Wood Products*, (1995) 6 SCC 363. [Divan]

170 *M. C. Mehta v Kamal Nath*, (1997) 1 SCC 388. [Divan]

171 Divan, *supra* note 65 at 7.

172 *Mehta v Union of India* (1 March 2001) WP (civil) 4677 of 1985 (Sup Ct, India).

173 *Ibid* at 2, citing *People United for a Better Living in Calcutta v West Bengal* (1992), AIR 1993 Cal 215 (HC Calcutta) at para 2.

174 See *Öneriyildiz v Turkey*, No 48939/99, [2004] XII ECHR 657, 41 EHRR 20, online: <www.echr.coe.int/Documents/Reports_Recueil_2004-XII.pdf>; *Guerra v Italy*, No 14967/89, (1998) I ECHR (Ser A) 7 26 EHRR 357 at para 60; *Lopez Ostra v Spain*, No 16798/90, (1994) ECHR (Ser A) 46 at para 58, 20 EHRR 277.

or government inaction to end — through the granting of a judicial remedy.¹⁷⁵

Our Children’s Trust, the organization backing American suits that seek court orders requiring governments to implement a science-based carbon emissions control plan to protect the rights of youth, concluded that this is the moment for domestic courts to show leadership. In summarizing their federal US constitutional challenge, *Juliana v United States*, Our Children’s Trust offers the opinion that “[t]his case presents the opportunity for a landmark decision like *Brown v Board of Education* (on racial equality) or *Obergefell v Hodges* (marriage equality).”¹⁷⁶ In *Obergefell v Hodges*, the Supreme Court stated: “The identification and protection of fundamental rights is an enduring part of the judicial duty to interpret the Constitution.”¹⁷⁷

175 For example, in 2015 the Canadian Supreme Court in its *Carter* decision found there is a right to die, distinguishing its contrary 1993 decision in assisted death, noting that “[I]n 1993...no other Western democracy expressly permitted assistance in dying. By 2010, however, eight jurisdictions permitted some form of assisted dying”: *Carter v Canada (Attorney General)*, 2015 SCC 5 at para 8, [2015] 1 SCR 331. Also in 2015, the US Supreme Court recognized the right to same-sex marriage in *Obergefell v Hodges*, noting: “The nature of injustice is that we may not always see it in our own times....When new insight reveals discord between the Constitution’s central protections and a received legal stricture, a claim to liberty must be addressed”: *Obergefell v Hodges*, 135 S Ct 2584 (2015), slip op at 11. The Supreme Court of India also took into account changing circumstances in its 2013 ruling that non-recognition of transgender people as a third gender was a violation of articles 14 and 21 of the Indian Constitution. In its judgment, the court observed: “Our Constitution, like the law of the society is a living organism. It is based on a factual and social reality that is constantly changing. Sometimes a change in the law precedes societal change and is even intended to stimulate it. Sometimes, a change in the law is the result in the social reality.” The Supreme Court went further to state that “in order to bring about [a] complete paradigm shift...law has to play [a] more pre-dominant role.” The court then directed the government to treat transgender people appropriately by taking proper measures to provide medical care to transgender people in hospitals and provide them with separate public toilets and other facilities: *NALSA v Union of India* (4 April 2014) WP (Civil) Nos 400 of 2012, 604 of 2013 (Sup Ct, India) at 119, para 119, <online: <http://judis.nic.in/supremecourt/imgs1.aspx?filename=41411>>. See also, in England, the 1991 decision, *R v R (Rape: Marital Exception)* (1991), [1992] 1 AC 599 at 616, [1991] UKHL 14 (BAILII), where the House of Lords departed from an earlier decision which recognized the exemption of marital rape, finding that a husband could now be held criminally culpable for rape, and that it was no longer acceptable to maintain the eighteenth-century proposition in criminal law that a husband could never be guilty of rape since by virtue of marriage a woman has given her irrevocable consent. The House of Lords noted that women were now perceived as equal partners in marriage, in contrast to the earlier traditional view in which women were considered the subservient property of men. Addressing this shift in social perception, the House of Lords held that “the common law is...capable of evolving in the light of changing social, economic and cultural developments.”

176 See Our Children’s Trust Summary, *supra* 128 at 4. The summary contains further information about the case. See also Our Children’s Trust, *2015 Federal Lawsuit*, online: <ourchildrenstrust.org/us/federal-lawsuit>.

177 *Obergefell v Hodges*, *supra* note 175, slip op at 10.

CONCLUSIONS

Although the 2015 Paris Agreement is exceptionally aspirational and signals increased recognition of the need for various governmental and private sector measures to limit global temperature increases and consequent impacts to the planet and its peoples, the agreement lacks measures and enforceable means to require countries to reduce emissions by specific amounts or by any particular deadline. However, individual state responsibility to effect reductions of domestic emissions remains both a UNFCCC obligation as well as one recognized by international law principles. The *Urgenda*, *Leghari* and *Foster* decisions demonstrate that citizen suits in domestic courts can result in potentially effective enforcement of individual state responsibility for limiting emissions and their impacts. And, as signalled by the other recently filed cases referenced above, there is likely to be continuing and indeed increased efforts by concerned citizens to use domestic court and human rights tribunals for this purpose. This emerging trend arises from worried and frustrated citizens who are concluding, as *Urgenda* attorney Roger Cox did in his book *Revolution Justified*,¹⁷⁸ that politicians will continue to exhibit systemic ineffectiveness on this issue and, therefore, “only the courts can save us now” from climate harm.

For the reasons discussed above, there are good reasons why many domestic judges are likely to be favourably disposed to listen attentively to citizen claims for specific emissions reduction and other climate actions by government. The IPCC’s science reports make clear the urgency of requiring “dangerous” climate change sources to be abated within a very few years to prevent catastrophic harm. States know the dangers, but are failing to act in accordance with the science. These circumstances make it more likely that domestic judges asked by citizens to protect them and their society from harm will be both empathetic to such claims and more comfortable in judicially reviewing the asserted government inaction. From the statements made by judges in the Dutch, Pakistan and State of Washington decisions, it can be surmised that they, like many other domestic court judges who hear similar claims, would prefer to be remembered for being part of the solution to climate change, and not another roadblock. The increased use of domestic courts and tribunals to require governments to be more responsive in reducing climate impacts to vulnerable populations would be a crucially significant development in the governance of climate change.

Admittedly, the increased use of domestic courts on this issue is not likely to be a universal phenomenon and, where it does occur, there may be setbacks in such future litigation efforts. However, even unsuccessful domestic

178 Roger Cox, *Revolution Justified* (The Netherlands: Planet Prosperity Foundation, 2012).

litigation plays an important role. Where domestic litigation is taken but lost, it will still importantly underline the high level of public concern that this planet and future generations be saved from climate chaos. Because of the UNFCCC agreements, there still remains a collective obligation of states to act with alacrity and effectiveness to limit emissions and climate impacts. Thus, both successful and unsuccessful citizen domestic litigation on this issue can be a positive force to ensure that political leaders not just continue to spout GHG reduction rhetoric but act effectively.

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Dutch attorney and CIGI Senior Fellow Roger Cox, whose groundbreaking Urgenda litigation inspired me to consider and write about why it is now timely for domestic judges in many other countries to empathetically hear citizen claims that their governments must do more to protect them from climate change, and also why domestic judges, despite the UNFCCC and the Paris Agreement, may have good reasons to consider issuing judicial orders requiring an end to government inaction on this issue.

Sue Vern Tan, LL.M., who as a CIGI research assistant effectively used her legal skills, insights and diligence during the writing of this paper to point out ongoing legal developments that would be usefully included, and for identifying the appropriate citations for key components of the extensive reference materials. Jennifer Hashimoto, a seasoned professional legal editor who provided her usual detailed and careful manuscript review, as well as offered valued suggestions for clarification in the text and in the references. CIGI Publications Editor Nicole Langlois, for her improvements on style and clarity in the final manuscript and for her care and concern in the layout of the final version. CIGI Managing Editor Carol Bonnett, who assumed overall responsibility for report publication production and quality and arranged for timely printing of this report for UNFCCC meetings. Oonagh Fitzgerald, director of the International Law Research Program, who provided helpful comments on earlier drafts of this paper.

CIGI PUBLICATIONS

ADVANCING POLICY IDEAS AND DEBATE



When CO₂ Goes to Geneva: Taxing Carbon Across Borders — Without Violating WTO Obligations

CIGI Paper No. 83
Maria Panezi

Carbon taxes become relevant for international trade when they are coupled with border tax adjustment (BTA) legislation for imported products. BTAs are intended to level the playing field between domestic and foreign products, but such tax schemes, if not designed properly, can be found to violate a country's international commitments before the World Trade Organization (WTO). This paper argues that environmentally conscious governments can impose a WTO-compatible BTA to offset domestic CO₂ legislation, and that federal governments need to engage in coordinated efforts to harmonize treatment of high CO₂ emitters domestically, since domestic industries will not bear the burden of environmental regulation alone.



Climate Change and Human Rights: How? Where? When?

CIGI Paper No. 82
Basil Ugochukwu

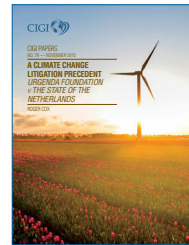
Actions taken to mitigate and adapt to the adverse impacts of climate change must be centred on human rights. This paper analyzes a few examples of national, subnational and corporate climate change policies to show how they have either enshrined human rights principles, or failed to do so. It also examines the challenge of integrating human rights principles into climate change actions. Climate change policies, if they are to respect all human rights, must actually use human rights language to articulate adaptation or mitigation measures.



Global Patent Pledges: A Collaborative Mechanism for Climate Change Technology

CIGI Paper No. 81
Bassem Awad

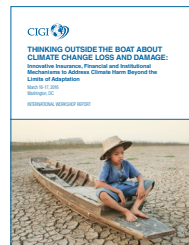
Access to and timely diffusion of green technologies required for adaptation and mitigation are among the major challenges faced by the international community. The role of the patent system has become the subject of increased attention in climate change discussions on technology transfer. New mechanisms for collaborative innovation are required to foster the green technology sector.



A Climate Change Litigation Precedent: *Urgenda Foundation v The State of the Netherlands*

CIGI Paper No. 79
Roger Cox

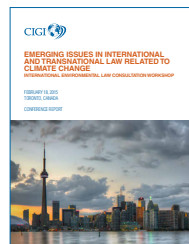
In June 2015, The Hague District Court rendered a historic judgment in the climate case of *Urgenda Foundation v The State of the Netherlands*, stating that the Dutch state commits a tort of negligence by not adequately regulating and curbing greenhouse gas emissions. Roger Cox, lead counsel for Urgenda, presents his account of the case and the ruling, which marks the first successful climate change action founded in tort law — and a landmark precedent for such cases in other jurisdictions around the globe.



Thinking Outside the Boat About Climate Change Loss and Damage: Innovative Insurance, Financial and Institutional Mechanisms to Address Climate Harm Beyond the Limits of Adaptation

Conference Report

What is the role of insurance, existing international funds and other innovative concepts to address catastrophic as well as slow-onset climate-related loss and damage? What are the limitations?



Emerging Issues in International and Transnational Law Related to Climate Change

Conference Report

The purpose of this consultation workshop was to discuss emerging issues in international trade and investment law, to develop a more detailed research agenda, and to identify research partners to collaborate with CIGI's International Law Research Program.

Available as free downloads at www.cigionline.org

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CIGI was founded in 2001 by Jim Balsillie, then co-CEO of Research In Motion (BlackBerry), and collaborates with and gratefully acknowledges support from a number of strategic partners, in particular the Government of Canada and the Government of Ontario.

Le CIGI a été fondé en 2001 par Jim Balsillie, qui était alors co-chef de la direction de Research In Motion (BlackBerry). Il collabore avec de nombreux partenaires stratégiques et exprime sa reconnaissance du soutien reçu de ceux-ci, notamment de l'appui reçu du gouvernement du Canada et de celui du gouvernement de l'Ontario.

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