

“The Impact of the Paris Agreement on Climate Change Litigation and Law”

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The Paris Agreement is the first universal climate change agreement requiring all parties to communicate ambitious greenhouse gas (GHG) reduction targets to achieve a long-term global temperature goal. The Paris Agreement is a game-changer at the international level, but has it been at the national (and sub-national) level? What has been the impact of the Paris Agreement on litigation to improve mitigation of and adaptation to climate change? This paper first examines the international obligations created by the Paris Agreement, noting the flexible nature of the agreement and wide margin of discretion left to parties. Secondly, this paper explores how the Paris Agreement is incorporated in domestic laws and policies. The potential for litigation based on these international and domestic obligations will be considered. Thirdly, the paper will discuss how the Paris Agreement influences courts’ interpretation of societal values, norms and customs. Fourthly, the paper will consider how the Paris Agreement has altered the factual considerations of anthropogenic climate change by demonstrating global agreement on the causal link between anthropogenic greenhouse gas emissions and the catastrophic consequences of climate change. Fifthly, the paper will illustrate how the Paris Agreement is affecting legal responsibilities by focusing on the influence of the Paris Agreement on corporate directors’ liabilities. Finally the paper will note the ripple effect of climate change litigation, contributing to the continued development of climate change law.

The Paris Agreement is the first universal climate change agreement requiring all parties to communicate ambitious greenhouse gas (GHG) reduction targets to achieve a long-term global temperature goal: “holding the increase in the global average temperature to well below 2°C above

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pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels.”¹ The Paris Agreement came into force on 4 November 2016 and has been ratified by 185 of the 197 parties to the United Nations Framework Convention on Climate Change (Convention). It has been lauded as “the most important international agreement in history”,² a “major leap for mankind”,³ and “the best chance we have to save the one planet we have got”.⁴

However, the Paris Agreement was a compromise and has many limitations. To achieve near worldwide ratification, the Paris Agreement had to carefully balance binding and nonbinding obligations in a way that would be acceptable to all parties. At times, this required sacrificing strong substantive legal obligations in favour of nonbinding aspirations and procedural obligations. The Paris Agreement leaves parties with a wide discretion to determine their own contributions to the global effort. Even if all parties succeed in meeting their current Paris pledges and targets, it is estimated that warming will reach 3.0°C by 2100.⁵ This bottom up approach was necessary to ensure global participation,⁶ but it is clear that more is needed to achieve the far-reaching emissions reductions required to meet the primary objective of Paris. The world is already 1°C above pre-industrial levels. July of 2019 was reportedly the hottest month on record, with global average temperatures at 1.22°C above pre-industrial levels.⁷ If all parties achieve their current pledges under the Paris Agreement, global warming is expected to surpass 1.5°C above pre-industrial levels by 2030, even if this is supplemented with increased ambition after 2030.⁸ Without rapid international action, the objectives of the Paris Agreement and the Convention will become impossible.

Over the past three decades climate change litigation has emerged as a response to states’ failures to take action to mitigate or adapt to climate change. Litigation is increasingly viewed as an effective

¹ *Paris Agreement*, opened for signature 16 February 2016, UNTS I-54113 (entered into force 4 November 2016) art 2(1)(a) (‘*Paris Agreement*’).

² Achim Steiner, quoted in James Rothwell and Emily Gosden, ‘Paris climate change deal - ministers adopt historic agreement to keep global warming “well below” 2C’ *The Telegraph* (online, 12 December 2015) <<https://www.telegraph.co.uk/news/earth/paris-climate-change-conference/12047133/Final-text-of-climate-deal-to-be-released-imminently.html>>.

³ François Hollande, quoted in Rothwell and Gosden (n 2).

⁴ President Barack Obama, quoted in Rothwell and Gosden (n 2).

⁵ Climate Action Tracker, ‘Warming Projections Global Update’ (December 2018), <https://climateactiontracker.org/documents/507/CAT_2018-12-11_Briefing_WarmingProjectionsGlobalUpdate_Dec2018.pdf> (accessed 01/07/2019).

⁶ Christina Voigt, ‘The Compliance and Implementation Mechanism of the Paris Agreement’ (2016) 25(2) *Review of European Community & International Environmental Law* 161, 161.

⁷ Andrew Freedman, ‘July was Earth’s hottest month since records began, with the globe missing 1 million square miles of sea ice’ *Washington Post* (online, 15 August 2019) <<https://www.washingtonpost.com/weather/2019/08/15/independent-data-confirms-july-was-earths-hottest-month-since-records-began/?noredirect=on>>.

⁸ J Rogelj et al, ‘Chapter 2: Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development’ in V Masson-Delmotte et al (eds), *Global Warming of 1.5°C* (Special Report, IPCC, 8 October 2018) 95.

tool to influence public policy and corporate behaviour.⁹ The territory of climate litigation is being rapidly mapped as litigants explore a range of actions, from traditional causes of action in tort and administrative law to using human rights, the public trust doctrine and corporations law to advance climate change mitigation and adaptation.¹⁰ Climate change cases have been brought in at least 28 countries and continue to expand across jurisdictions.¹¹ Climate change litigation has begun to utilise the Paris Agreement and explore how it can support action on climate change. Although the international obligations in the Paris Agreement are largely procedural and communicative, the Paris Agreement can support litigation based on domestic obligations and existing causes of action. The Paris Agreement is evidence of increased political will to mitigate and adapt to climate change, and increased scientific certainty that anthropogenic climate change will have dire consequences for the environment and human rights.

This paper will explore how the Paris Agreement has already impacted and may continue to impact climate change litigation. The recent decisions in *Urgenda v Netherlands (Urgenda I)*,¹² *Netherlands v Urgenda (Urgenda II)*¹³ and *Gloucester Resources Limited v Minister (Gloucester)*¹⁴ are particularly demonstrative of how the Paris Agreement might influence climate change litigation. Due to the recent nascence of the Paris Agreement and the frequent delays from which climate litigation suffers, a number of cases that refer to it are yet to be decided. Additionally, some cases seeking to rely on the Paris Agreement will face challenges where the Paris Agreement has not been translated into domestic law. Nevertheless, these cases demonstrate how the Paris Agreement is shaping the way climate litigation is proceeding and further normalises its use in domestic litigation. Indeed, cases that

⁹ Jacqueline Peel and Hari M Osofsky, *Climate change litigation: regulatory pathways to cleaner energy* (Cambridge University Press, 2015) 10; David Estrin, 'Limiting Dangerous Climate Change: The Critical Role of Citizen Suits and Domestic Courts—Despite the Paris Agreement' (CIGI Papers no. 101, Centre for International Governance Innovation, May 2016) <<https://www.cigionline.org/publications/limiting-dangerous-climate-change-critical-role-citizen-suits-and-domestic-courts>> 5; Joana Setzer and Rebecca Byrnes, *Global trends in climate change litigation: 2019 snapshot* (Policy Report, Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science, 4 July 2019) <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2019/07/GRI_Global-trends-in-climate-change-litigation-2019-snapshot-2.pdf>; Tobias Pfrommer et al, 'Establishing causation in climate litigation: admissibility and reliability' (2019) 152 *Climatic Change* 67, 68; Joana Setzer and Lisa C Vanhala, 'Climate change litigation: A review of research on courts and litigants in climate governance' (2019) 10 *WIREs Climate Change* 1.

¹⁰ Brian Preston, 'Mapping Climate Change Litigation' (2018) 92 *Australian Law Journal* 774, 788.

¹¹ Setzer and Byrnes (n 9); see also, Peel and Osofsky (n 9).

¹² *Urgenda Foundation v Netherlands* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015) ('*Urgenda I*'). For an unofficial English translation of the decision see, <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2015/20150624_2015-HAZA-C0900456689_decision-1.pdf>.

¹³ *Netherlands v Urgenda Foundation* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) ('*Urgenda II*'). For an unofficial English translation of the decision see, <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2018/20181009_2015-HAZA-C0900456689_decision.pdf>.

¹⁴ *Gloucester Resources Limited v Minister for Planning* (2019) 234 LGERA 257 ('*Gloucester*') <<https://www.caselaw.nsw.gov.au/decision/5c59012ce4b02a5a800be47f>>.

may be unsuccessful at first may be refined and adapted to produce a later successful case or inspire litigation in other jurisdictions, contributing to the incremental development of climate change law.¹⁵

In parts 1 and 2, this paper examines the obligations created by the Paris Agreement under international law and under domestic law through incorporation of the Paris Agreement or a country's nationally determined contributions into domestic law and policy. The potential for litigation based on the international and domestic obligations in the Paris Agreement will be considered. In part 3, the paper examines how the Paris Agreement has influenced the courts' interpretation of societal values, norms and customs. These include recognition of the globalisation and universality of the problem of climate change and solutions to the problem (every party contributes to the problem and bears responsibility (common but differentiated) for solving the problem), the maximum permissible global temperature rise considered acceptable, the need for zero emissions after 2050 to achieve this long-term temperature goal and the relevance of climate change and its consequences as matters to be considered in administrative and judicial decision-making. In part 4, the paper will explore how the Paris Agreement has altered the factual considerations of anthropogenic climate change. The Paris Agreement assists in establishing causation in litigation because it demonstrates global consensus on key issues, including that increasing GHG emissions are causing climate change, climate change is largely caused by humans (by increasing sources and removing sinks of GHGs) and climate change is causing dire consequences for the planet and its people. In part 5, the paper will illustrate how the Paris Agreement is affecting the law and legal responsibilities by focusing on the influence of the Paris Agreement on corporate directors' liabilities. In part 6, the paper will note the ripple effect that climate change litigation in one country, influenced by the Paris Agreement, has on litigation in other countries.

1. Obligations created by the Paris Agreement under international law

Efforts to address climate change at the international level have been occurring since the 1980s. The first climate treaty, the United Nations Framework Convention on Climate Change (Convention), entered into force in 1994 and has been ratified by 197 countries. It is under this framework that the Paris Agreement arises. The Convention's central objective is to stabilize greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic interference with the climate system."¹⁶ Despite this ambitious objective, the Convention does not impose legally binding

¹⁵ See for example, Justine Bell-James and Sean Ryan, 'Climate change litigation in Queensland: A case study in incrementalism' (2016) 33 *Environmental and Planning Law Journal* 515; Geetanjali Ganguly et al, 'If at First You Don't Succeed: Suing Corporations for Climate Change' (2018) 38(4) *Oxford Journal of Legal Studies* 841.

¹⁶ *United Nations Framework Convention on Climate Change*, opened for signature 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994) art 2 ('UNFCCC').

emissions reductions targets to achieve it. The commitments in the Convention are “general” and “softened by various qualifying adjectives and provisos.”¹⁷ This is to be expected from framework conventions, which “set out broad principles but provide for detailed rules to be elaborated through regular meetings of the parties”.¹⁸ The Convention guides future action by providing an overarching goal, principles of implementation and a basis for developing protocols. The Convention calls for wide participation while recognising that industrialised countries are the source of most past and current GHG emissions.¹⁹ Parties to the Convention are categorised as ‘Annex I’ (developed country parties and economies in transition) and ‘non-Annex I’ (developing country parties). The Convention accepts that the share of GHG emissions produced by developing nations will grow and seeks to help such countries limit emissions in ways that will not hinder their economic progress.²⁰ Developed country parties are ‘to lead the way’ under the principle of common but differentiated responsibilities.²¹

Through the regular conferences of the parties to the Convention (COPs) the Kyoto Protocol was developed to set specific binding emissions reduction targets for individual countries, with agreed rules for reporting and accounting. The first commitment period saw Annex I countries commit to reducing GHG emissions to an average of 5% against 1990 levels. Developing country parties did not have legally binding targets under the Protocol. The targets were the product of international negotiations, enshrined in the Protocol and could not be adjusted except by an amendment agreed by the Parties. This approach was politically difficult and the US notably refused to ratify Kyoto in 2001. As China was a non-Annex I country, this meant that the two largest emitters were not covered by the Protocol. The Kyoto Protocol has not been that successful, partly because of its lack of universality (only developed countries have emissions reduction commitments), partly because of its lack of ambition (the aggregate of emissions reduction commitments are insufficient) and partly because of its top-down approach (targets are imposed on countries).

The Paris Agreement is the successor to the Kyoto Protocol. It has been ratified by 185 of the 197 parties to the Convention. It flips the top-down approach by requiring all parties to communicate their own emissions reduction targets, termed ‘Nationally Determined Contributions’ (NDCs), in a bottom-up approach. It reformulates the principle of common but differentiated responsibilities using new

¹⁷ Susan Biniaz, ‘An Overview of International Climate Change Law, including the Paris Agreement’ (2018) 92 *Australian Law Journal* 750, 751.

¹⁸ Brian Preston and Charlotte Hanson, ‘The Globalisation and Harmonisation of Environmental Law: An Australian Perspective’ (2013) 16 *Asia Pacific Journal of Environmental Law* 1, 4.

¹⁹ *UNFCCC* preamble.

²⁰ *Ibid* preamble, art 3(2), 3(5).

²¹ *Ibid* art 3(1).

language of “different national circumstances”.²² There are no references to Annex I and non-Annex I parties and the commitments in the Agreement, excepting the financial assistance provisions, apply to all parties. Parties may self-differentiate their mitigation efforts based on their respective capabilities through developing their NDCs.²³

The Paris Agreement, like the Convention and Kyoto Protocol, is a treaty under the Vienna Convention on the Law of Treaties and hence legally binding.²⁴ However, the legal form of a treaty as a whole is distinct from the legal character of its constituent provisions.²⁵ While its political achievement is substantial, its legal effect in terms of binding obligations has been described as ‘muted’.²⁶ Only some provisions create legal obligations for the parties to the Paris Agreement. Whether or not a provision is binding depends on a combination of factors, including: “location, subjects, normative content, language, precision and what institutional mechanisms exist for transparency, accountability and compliance”.²⁷ Bodansky et al. explain that the provisions in the Paris Agreement traverse a spectrum of legal character, from non-law, soft law to hard law.²⁸ Provisions that apply to individual Parties (“each Party”), that use mandatory language (“shall”), and that are clear and precise with no qualifications constitute “hard law”. Compliance with these mandatory provisions is not voluntary. Provisions which set standards for individual Parties but use discretionary language (“should” or “encourage”) or have qualifications constitute “soft law”. These provisions may be too general to be enforceable. For example, article 10(2) states that parties shall “strengthen cooperative action on technology development and transfer”. Other provisions can be categorised as “non-law”; these provisions are contextual or descriptive. Generally, provisions contain a combination of hard law, soft law and non-law.

The Paris Agreement balances these hard, soft and non-law provisions. As the Paris Agreement concerns complex environmental issues at a broad policy level involving a wide range of parties, vague and general language is often used.²⁹ The Paris Agreement contains provisions for parties relating to climate change mitigation (article 4), adaptation (article 7(9)), finance (including for developed country parties to provide financial assistance to developing country parties) (article 9(1), 9(5)), technology transfer (article 10(2)), transparency (article 9(7), 13(7), 13(9)), compliance (article

²² Biniiaz (n 17) 754.

²³ Ibid.

²⁴ *Vienna Convention on the Law of Treaties*, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980) Art 26.

²⁵ Daniel Bodansky et al, *International Climate Change Law* (Oxford University Press, 2017) 119.

²⁶ Geoffrey Palmer, 'The Paris climate change agreement and the law' [2016] *New Zealand Law Journal* 152, 152.

²⁷ Bodansky et al (n 25) 119.

²⁸ Ibid.

²⁹ Preston and Hanson (n 18) 4.

15) and research, education and public awareness (article 12).³⁰ The key mechanism by which the central objective of the Paris Agreement is to be achieved is the obligation in article 4(2) that parties “prepare, communicate and maintain successive nationally determined contributions that it intends to achieve.” Each party must communicate a new NDC every five years that is a progression beyond its previous NDC and reflects its highest possible ambition. The preparation of successive NDCs is to be informed by a global stocktake every 5 years.

The following obligations relating to mitigation and transparency must be complied with:³¹ the obligation to prepare and communicate a new, more ambitious NDC every 5 years, and to provide the information necessary for clarity, transparency and understanding;³² the obligation to pursue domestic mitigation measures, with the aim of achieving the objectives of their NDCs;³³ and the obligation for parties to account for their NDCs and maintain a national greenhouse gas inventory.³⁴ Developed country parties also have obligations to provide information about the financial, technological and capacity-building support provided to developing country parties.³⁵ The other provisions in the Paris Agreement are more general, qualified or apply collectively to all parties.³⁶

If a party fails to comply with its obligations to prepare, communicate and maintain successive NDCs, proceedings could be brought in the International Court of Justice, assuming the party has accepted its jurisdiction. Major emitters such as China and the US have not accepted the ICJ jurisdiction.³⁷ However, proceedings would be limited to the procedural obligations and not any failure to achieve the NDC or to communicate a sufficiently ambitious NDC. Given the flexible and general character of the obligations under the Paris Agreement, proceedings would be unlikely to succeed.³⁸

Nevertheless, the consequences of failing to comply with any of the provisions along the spectrum of hard, soft and non-law are not limited to the potential for action in an international court. The Paris Agreement has been widely acclaimed at the international level. A failure to communicate a robust NDC or to achieve a party’s NDC would no doubt damage its reputation in the international community. Parties may also have a diminished ability to participate in the work of the Meeting of the

³⁰ For a fuller discussion of the operation of the Paris Agreement see: Bodansky et al (n 25).

³¹ Bodansky et al (n 25) 251-257.

³² *Paris Agreement* art 4(2), 4(3), 4(8), 4(9).

³³ *Ibid* art 4(2).

³⁴ *Ibid* art 4(13), 13(7).

³⁵ *Ibid* art 9(7), 13(9).

³⁶ Bodansky et al (n 25) Table 7.1, 257.

³⁷ See the list of countries that have made declarations recognising the jurisdiction of the ICJ as compulsory: ‘Declarations recognizing the jurisdiction of the Court as compulsory’ *International Court of Justice* (Web Page) <<https://www.icj-cij.org/en/declarations>>.

³⁸ Tim Stephens, Submission No 5 to Joint Standing Committee on Treaties, *Paris Agreement* (28 September 2016) 5.

Parties to the Paris Agreement or future negotiations under the Convention. The compliance mechanism under the Paris Agreement is designed to be facilitative and non-punitive.³⁹ A failure to meet an NDC could result in suggestions for improvement but would be unlikely to involve severe consequences.

At the international level, the Paris Agreement provides a long-term and flexible basis for taking climate action with a view to increasing ambition over time. Its effectiveness can be determined by three elements: participation, ambition and compliance.⁴⁰ The Paris Agreement has achieved near universal ratification. The Paris Agreement sets ambitious goals, but in encouraging participation, the Paris Agreement has left wide discretion to parties to determine whether these ambitious goals will be achieved. All parties have complied with the obligation to prepare and communicate their NDC, with one party having already submitted their second NDC.⁴¹ Nevertheless, it is clear that current ambition under the Paris Agreement is insufficient to achieve its objectives.⁴²

2. Domestic legal obligations created by the Paris Agreement

While international environmental law has historically focused on relations between states, this attention has shifted more recently, with international agreements regulating the domestic environments of states.⁴³ Thus, for international law to be effective it must be implemented at the domestic level.⁴⁴ Indeed, although the Paris Agreement directs parties to communicate their NDCs to the international community, the NDC requires domestic implementation if it is to be achieved. National legislatures have primary responsibility for giving legal effect to the international commitments under the Paris Agreement.⁴⁵ This raises the important question of the relationship between international law and domestic law, a question that has been subject to significant debate.

Broadly speaking, monism and dualism describe competing theories of the relationship between international law and domestic law; however the scope of each doctrine is itself contentious. On a dualist view, domestic law and international law are distinct and separate. Thus, international treaties

³⁹ *Paris Agreement* art 1(2); Voigt (n 6) 165.

⁴⁰ Voigt (n 6) 161; Daniel Bodansky, 'Legally Binding Versus Non-legally Binding Instruments' in: Scott Barrett et al (eds), *Towards a Workable and Effective Climate Regime* (CEPR Press and Ferdi, 2015) 155, 160.

⁴¹ 'NDC Registry' *UNFCCC* (Web Page) <<https://www4.unfccc.int/sites/NDCStaging/Pages/All.aspx>> (accessed 14/08/2019).

⁴² Climate Action Tracker, 'Climate crisis demands more government action as emissions rise' (Climate Action Tracker Update, June 2019) 4 <https://climateactiontracker.org/documents/537/CAT_2019-06-19_SB50_CAT_Update.pdf>.

⁴³ Preston and Hanson (n 18) 5.

⁴⁴ *Ibid* 8.

⁴⁵ Lord Carnwath JSC, 'Climate Change Adjudication after Paris: A Reflection' (2016) 28 *Journal of Environmental Law* 5, 9.

have no domestic consequences until ‘translated’ or ‘incorporated’ into domestic law through domestic legislation or policy. The effect of the international treaty on domestic rights and obligations will depend on the terms of the incorporating legislation or policy.⁴⁶

On a monist view, international law and domestic law are part of one cohesive legal system; they are ‘concomitant aspects of the same juridical reality’.⁴⁷ A monist legal system or a monist country accepts international law as part of domestic law. When a treaty such as the Paris Agreement is ratified and comes into force, the country will automatically be bound by any obligations arising under it in a domestic legal context. Difficulties arise in the hierarchy of domestic and international law in the event of inconsistency. A pure monist view would assume international law prevails, however in others the doctrine of *lex posterior*, that the later law replaces an earlier law, could apply.⁴⁸

In most cases the lines of monism and dualism are blurred. Indeed, since the end of the twentieth century much international legal scholarship has noted that the spectrum of the relationship between international/national laws depends so entirely on the domestic legal system that the monism/dualism binary is often unhelpful.⁴⁹ For example, Australia is considered a dualist legal system. However, international treaties, and not only the legislation incorporating the treaty, may be considered in certain contexts. The High Court of Australia has not been unanimous in determining the extent to which international law may influence common law,⁵⁰ guide constitutional interpretation,⁵¹ assist in statutory interpretation in the event of ambiguity of a statute incorporating international law,⁵² or

⁴⁶ Preston and Hanson (n 18) 12.

⁴⁷ J G Starke, ‘Monism and Dualism in the Theory of International Law’ (1936) 17 *British Yearbook of International Law* 66, 67.

⁴⁸ For example, Germany’s legal system has been described as ‘tending toward the monist model’: Daniel Lovric, ‘A Constitution Friendly to International Law: Germany and its *Volkerrechtsfreundlichkeit*’ (2006) 25 *Australian Year Book of International Law* 75, 75. The Constitution (Grundgesetz or Basic Law) provides that treaties are treated the same as domestic statutes. The German Constitutional Court has held that a later domestic statute can override an international treaty: Bundesverfassungsgericht [German Constitutional Court], 2 BvL 1/12, ECLI:DE:BVerfG:2015:ls20151215.2bvl000112, 15 December 2015; ‘Treaty overrides by national statutory law are permissible under the Constitution’ *Bundesverfassungsgericht* (Press Release No 9/2016, 12 February 2016) <<https://www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2016/bvg16-009.html>>.

⁴⁹ James R Crawford, *Brownlie's Principles of Public International Law* (Oxford University Press, 8th ed, 2012) 50.

⁵⁰ *Mabo v Queensland (No 2)* (1992) 175 CLR 1, 42 (Brennan J); *Dietrich v The Queen* (1992) 177 CLR 292, 360 (Toohey J); Hilary Charlesworth, ‘International Law and the High Court’ (2005) 68 *Precedent* 20, 21.

⁵¹ *Kartinyeri v Commonwealth* (1998) 195 CLR 337, 419 (Kirby J).

⁵² See for example, *Chu Kheng Lim v Minister for Immigration* (1992) 176 CLR 1, 38 (Brennan, Deane and Dawson JJ), *Newcrest Mining (WA) Ltd v The Commonwealth* (1997) 190 CLR 513, 655-657 (Kirby J). See also Justin Gleeson, ‘The Increasing Internationalisation of Australian Law’ (2017) 28 *Public Law Review* 25, 29-31.

affect administrative decision-making.⁵³ Generally, the relationship between international treaties and domestic law depends on the circumstances of the domestic jurisdiction, treaty and the dispute to which it is being applied.

The individual legal system of a country will determine how international law can influence or become part of domestic law.⁵⁴ Nevertheless, the general distinction between monist countries and dualist countries can be useful when considering how the Paris Agreement can influence climate change litigation. While climate change litigation may be brought under regional and international dispute resolution mechanisms, it predominantly arises in domestic courts. Since 1997 the number of domestic climate change policies and laws has risen from 72 to over 1,500.⁵⁵ In the three years since the Paris Agreement was agreed, more than 100 climate laws and policies have been introduced.⁵⁶ A recent report by the Grantham Research Institute on Climate Change and the Environment analysed 1,328 climate change cases.⁵⁷ Only 59 of 1,328 cases, approximately 4.4%, were brought before a non-domestic court, tribunal or commission. Excluding the cases arising under regional dispute mechanisms,⁵⁸ there has been only one case brought under an international dispute resolution mechanism.⁵⁹ Evidently, the success of climate change litigation based on or utilising the Paris Agreement will rely on the applicability of the Agreement to domestic courts.

(a) Incorporation of the Paris Agreement and/or NDCs into domestic legislation

The legislative branch of government may translate the Paris Agreement into domestic law through passing new legislation or amending existing legislation. The legislation may incorporate the whole of the Paris Agreement or include only some aspects of it. Incorporating legislation could also create additional obligations based on the Paris Agreement, such as by creating an obligation for the state or relevant Minister to ensure an NDC is actually achieved, and not only prepared or communicated. For example, the *Climate Change Act 2008* (UK) provides, “It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990

⁵³ See, *Minister for Immigration and Ethnic Affairs v Teoh* (1995) 183 CLR 273, 291 (Mason CJ and Deane J) and its subsequent treatment in *Re Minister for Immigration and Multicultural Affairs; Ex parte Lam* (2003) 214 CLR 1, 33.

⁵⁴ Preston and Hanson (n 18) 11.

⁵⁵ Michael Nachmany and Joana Setzer, *Global trends in climate change legislation and litigation: 2018 snapshot* (Policy Brief, Grantham Research Institute on Climate Change and the Environment, May 2018) 2.

⁵⁶ *Ibid.*

⁵⁷ Setzer and Byrnes (n 9).

⁵⁸ The three regional mechanisms are: The Court of Justice of the European Union, the Inter-American Court on Human Rights and the Inter-American Commission on Human Rights

⁵⁹ One complaint has been filed with the United Nations Human Rights Commission, The complaint is not currently publicly available, however a summary from the plaintiffs’ lawyers is available: ClientEarth, ‘Torres Strait FAQ’ (Press Release, 13 May 2019) <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190513_Not-Available_press-release-1.pdf>.

baseline”.⁶⁰ This has been described as an “outcome duty”, a duty not only to take actions or take reasonable measures towards achieving an outcome, but to ensure the outcome is actually achieved.⁶¹

The terms of the statute incorporating the Paris Agreement and/or a country’s NDC into domestic legislation will govern the obligations created at the domestic level. If the relevant provisions of the statute of incorporation contain objective legal criteria and require strict compliance with the terms of the Paris Agreement and/or NDC, they could create a justiciable duty. Legislation falling short of imposing a justiciable duty to achieve an NDC or the objectives of the Paris Agreement could still influence courts in other ways, such as those identified in parts 3 and 4 of this paper.

A number of countries around the world have incorporated the Paris Agreement into domestic law through legislation. Papua New Guinea has enacted the *United Nations Paris Agreement (Implementation) Act 2016*.⁶² The Act provides that the Paris Agreement has “the force of law” in Papua New Guinea and shall be implemented under the *Climate Change Management Act 2015*.⁶³ In 2018, Peru enacted the *Framework Law no 30754 on Climate Change* which incorporates Peru’s NDC into domestic law by establishing responsibilities for Peru’s Ministry of Environment relating to its NDC.⁶⁴ The legislation identifies Peru’s NDC as an instrument of climate management that must be considered in institutional budgets and reported on annually.⁶⁵ In Norway, the *Lov om klimamål (klimaloven) 2018* [Climate Change Act] incorporates Norway’s NDC into domestic law. The Act includes a five yearly review process consistent with the Paris Agreement. Section 5 provides that subsequent climate targets must represent a progression from preceding targets and are consistent with Norway’s NDC.⁶⁶ In the European Union, Regulation (EU) 2018/1999 aligns the regulatory framework of the Energy Union with the obligations of Parties under the Paris Agreement.⁶⁷ The Regulation provides for the necessary legislative foundation “which ensures the achievement of the

⁶⁰ *Climate Change Act 2008* (UK) s 1(1).

⁶¹ Colin T Reid, 'A New Sort of Duty? The Significance of "Outcome" Duties in the Climate Change and Child Poverty Acts' (2012) 12(2) *Public Law* 749, 751.

⁶² *United Nations Paris Agreement (Implementation) Act No 3 2016* (Papua New Guinea) available online at: <<http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8727.pdf>>.

⁶³ *United Nations Paris Agreement (Implementation) Act No 3 2016* (Papua New Guinea) ss 6(1), 7(1), available online at: <<http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8727.pdf>>.

⁶⁴ 'Framework Law no 30754 on Climate Change' *London School of Economics and Political Science* (Web Page) <<http://www.lse.ac.uk/GranthamInstitute/law/framework-law-no-30754-on-climate-change/>>.

⁶⁵ 'Framework Law no 30754 on Climate Change' *London School of Economics and Political Science* (Web Page) <<http://www.lse.ac.uk/GranthamInstitute/law/framework-law-no-30754-on-climate-change/>>.

⁶⁶ *Lov om klimamål (klimaloven) 2018* [Climate Change Act] (Norway) s 5, available online at: <<https://lovdata.no/dokument/NLE/lov/2017-06-16-60>>.

⁶⁷ *Regulation (EU) 2018/1999 of 11 December 2018 on the Governance of the Energy Union and Climate Action* [2018] OJ L 328/1.

2030 and long-term objectives and targets of the Energy Union in line with the 2015 Paris Agreement”.⁶⁸

Subnational governments may also be influential in incorporating the Paris Agreement. This may be particularly true where the national government of a country refuses to take meaningful action on climate change or subnational governments have primary responsibility for relevant lawmaking. In Victoria, one of the States of Australia, the *Climate Change Act 2017* recognises the role of subnational governments in its preamble: “although responding to climate change is a responsibility shared by all levels of government, industry, communities and the people of Victoria, the role of subnational governments in driving this transition cannot be understated.” The Act implicitly refers to the Paris Agreement by recognising “that the international community has reached agreement to hold the global average temperature increase to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels”. The Act also incorporates the Paris Agreement goal of reaching net zero emissions by the second half of the century, by setting a long-term emissions reduction target of net zero GHG emissions by 2050.⁶⁹ Section 8 provides that “[t]he Premier and the Minister must ensure that the State achieves the long-term emissions reduction target.” The Act creates a scheme of interim emissions reduction targets for each 5 year period until 2050. Reporting and accountability requirements are also included.⁷⁰ Whether section 8 creates a justiciable duty has not been tested, however the word ‘ensure’ has been held in Canada not to give rise to a justiciable duty in respect of a similar legislative scheme, although turning on its distinct context.

In *Friends of the Earth v Canada*,⁷¹ the Federal Court of Canada held that it had “no role to play” in reviewing the government’s actions under domestic legislation that incorporated the Kyoto Protocol, the *Kyoto Protocol Implementation Act 2007* (Canada) (KPIA).⁷² The KPIA was enacted in 2007 “to ensure that Canada takes effective and timely action to meet its obligations under the Kyoto Protocol and help address the problem of global climate change.”⁷³ However, the KPIA was introduced to Parliament as a private member’s bill and was not supported by the government. Indeed, the Canadian Government had declared that it would not comply with Kyoto Protocol targets and its emissions had increased over the commitment period.

⁶⁸ Ibid.

⁶⁹ *Climate Change Act 2017* (Vic) s 6.

⁷⁰ For further analysis of the Act see, Alannah Calabro et al, 'The Victorian Climate Change Act: A Model' (2018) 92 *Australian Law Journal* 814.

⁷¹ [2009] 3 FCR 201 <<https://www.canlii.org/en/ca/fct/doc/2008/2008fc1183/2008fc1183.html?resultIndex=1>>.

⁷² *Friends of the Earth v Canada* [2009] 3 FCR 201 at [48].

⁷³ *Kyoto Protocol Implementation Act 2007* (Canada) s 3.

The applicants alleged that the government had failed to comply with its duties under the KPIA by failing to prepare a climate change plan or propose regulations adequate to meet Canada's obligations under the Kyoto Protocol pursuant to ss 5 and 7 of the KPIA. Section 5 provided that the "Minister shall prepare a Climate Change Plan that includes (a) a description of the measures to be taken to ensure that Canada meets its obligations under...the Kyoto Protocol". Section 7 provided that within 180 days of the KPIA coming into force, the Governor in Council "shall ensure that Canada fully meets its obligations under Article 3, paragraph 1, of the Kyoto Protocol by making, amending or repealing the necessary regulations under this or any other Act." The Climate Change Plan submitted by the government made it "very clear that the Government of Canada has no present intention to meet its Kyoto Protocol commitments".⁷⁴

The Canadian Federal Court held, in dismissing the proceedings, that the KPIA did not impose a justiciable duty to ensure that Canada met its Kyoto obligations within 180 days of the KPIA coming into force, or to prepare a climate change plan capable of achieving Canada's obligations under the Kyoto Protocol. While the Court considered that a failure to prepare a climate change plan at all may be justiciable, due to the mandatory language 'shall', the content of that plan was not.⁷⁵ The Court held that in the context of ss 5 and 7, 'to ensure' reflected only a 'permissive intent' and did not impose a justiciable duty.⁷⁶ The Court distinguished between the language of 'ensure' and the commonly used mandatory statutory language of 'shall'.⁷⁷ The Court noted that if the legislature had sought to require strict compliance with Canada's Kyoto obligations a "simple and unequivocal statement of such an intent would not have been difficult to draft". Instead, section 5 involved a mixture of 'policy-laden' considerations with no objective legal criteria that a court could apply.⁷⁸ As the section could not be split into 'justiciable and non-justiciable components', read as a whole it was not justiciable. The Court also held that a literal reading of section 7 was incompatible with the practical realities of making regulatory changes and in the context of other provisions creating an "ongoing process to regulate Kyoto compliance" did not create a mandatory or justiciable 180 day time limit. The decision was upheld on appeal.⁷⁹

In contrast, the High Court of New Zealand in *Thomson v Minister for Climate Change Issues (Thomson)*⁸⁰ found that both the domestic climate change legislation and Paris Agreement imposed justiciable duties on the Minister for Climate Change Issues. A law student inspired by the *Urgenda I* decision sought judicial review of two decisions made by the Minister for Climate Change Issues

⁷⁴ *Friends of the Earth v Canada* [2009] 3 FCR 201, [12].

⁷⁵ *Ibid* [34].

⁷⁶ *Ibid* [34], [37].

⁷⁷ *Ibid* [34].

⁷⁸ *Ibid* [33].

⁷⁹ *Friends of the Earth v Governor* (2009) 131 DLR (4th) 767.

⁸⁰ [2018] 2 NZLR 160 <<http://www.nzlii.org/nz/cases/NZHC/2017/733.html>>.

concerning New Zealand's emissions reduction targets. The first decision concerned the 2050 emissions reduction target under domestic law.⁸¹ The target was set in 2011, pursuant to the *Climate Change Response Act 2002* (NZ), as a 50% reduction in emissions by 2050 compared to 1990 levels.⁸² The Act empowered the Minister to revoke or amend the target at any time, but the Minister had not done so. The plaintiff alleged that the Minister had erred by failing to amend the target following updated international scientific consensus about climate change, particularly the release of the IPCC's Fifth Assessment Report (AR5). The second decision concerned the emissions reduction target under international law: the 2030 target communicated as New Zealand's NDC pursuant to the Paris Agreement.⁸³ The target set was a 30% reduction in emissions by 2030 when compared with 2005 levels. The plaintiff alleged that the Minister had erred in two respects: first, by failing to take into account relevant considerations and secondly, by making an irrational or unreasonable decision.⁸⁴

The High Court of New Zealand held that the first decision was justiciable, however, as a new government had been elected that had committed to reviewing the 2050 target, no remedy was necessary.⁸⁵ As full argument had been heard, the Court nevertheless considered whether the domestic legislation imposed an obligation on the Minister to review the target in light of AR5. The Court noted the importance that the Paris Agreement and Convention place on responding to climate change in light of the best available scientific knowledge.⁸⁶ Although there was no express requirement to review any target set under domestic legislation when an IPCC report is published, the Convention and Paris Agreement underlined "the pressing need for global action, that global action requires all Parties individually to take appropriate steps to meet the necessary collective action, and that Parties should do so in light of relevant scientific information and update their individual measures in light of such information".⁸⁷ Thus, the Court held that the publishing of a new IPCC report required the Minister to consider whether the target should be reviewed.⁸⁸ While the legislation had not created an express duty to review the target, the Court considered that in the context of "what New Zealand has accepted, recognised and committed to under the international instruments, and in light of the threat that climate change presents to humankind and the environment", the duty was implied.⁸⁹

The Court also held that the second decision was justiciable. The Court did not accept the Minister's argument that the decision could not be reviewed by a domestic court as it was set pursuant to an international obligation that had not been incorporated into domestic law and concerned questions of

⁸¹ *Thomson* [2018] 2 NZLR 160, [6].

⁸² *Ibid* [48].

⁸³ *Ibid* [7], [48].

⁸⁴ *Ibid* [99], [161].

⁸⁵ *Ibid* [73], [98].

⁸⁶ *Ibid* [89]-[90].

⁸⁷ *Ibid* [91].

⁸⁸ *Ibid* [94].

⁸⁹ *Ibid*.

policy.⁹⁰ The Minister’s decision was justiciable under the common law, pursuant to which “the exercise of a public power by the executive having important public consequences is potentially amendable to review by the courts”.⁹¹ However, on the facts the Court did not find that the Minister had erred in law in the ways claimed by the plaintiff. In particular, the Court noted that the Paris Agreement did not stipulate any specific criteria or process for setting NDCs,⁹² and accepted that NDCs were about individual decision making and did not require countries to adopt targets that if adopted by all would achieve the long-term temperature goal.⁹³

Similarly, in *R (on the application of ClientEarth) v Secretary of State for the Environment, Food and Rural Affairs*,⁹⁴ the UK Supreme Court held that Art 13 of an EU directive concerning air quality, EU Directive 2008/50/EC, imposed a justiciable duty on the UK Government to comply with nitrogen dioxide limits throughout the UK within the specified timeframe. The UK Supreme Court requested a preliminary ruling from the European Court of Justice concerning whether an application for extension of time was required. While the High Court of England and Wales⁹⁵ and Court of Appeal⁹⁶ had held that compliance with the emission limits was not justiciable in national courts, the European Court of Justice determined that it did impose a justiciable duty actionable in national courts. The UK Supreme Court, on remitter, found that there was no doubt of the seriousness of the breach and the responsibility of the national court to secure compliance.⁹⁷ In order to remedy the serious and sustained breach, the Supreme Court ordered the Government to produce new plans delineating how it intended to secure compliance as soon as possible.⁹⁸ ClientEarth successfully challenged the validity of the Air Quality Plans published by the UK Government in 2015,⁹⁹ and the 2017¹⁰⁰.

(b) Incorporation of the Paris Agreement and/or NDCs into domestic policy

The executive branch of government may incorporate the Paris Agreement in domestic policies at a state or national level. For example, another State of Australia, New South Wales, has adopted the *Climate Change Policy Framework*, which provides “[t]he NSW Government endorses the Paris

⁹⁰ Ibid [102].

⁹¹ Ibid [101].

⁹² Ibid [139].

⁹³ Ibid [159].

⁹⁴ [2015] UKSC 28 <<https://www.bailii.org/uk/cases/UKSC/2015/28.html>>.

⁹⁵ [2011] EWHC 3623 (Admin) <<https://www.bailii.org/ew/cases/EWHC/Admin/2011/3623.html>>.

⁹⁶ [2012] EWCA Civ 897 <<https://www.bailii.org/ew/cases/EWCA/Civ/2012/897.html>>.

⁹⁷ *R (on the application of ClientEarth) v Secretary of State for the Environment, Food and Rural Affairs* [2015] UKSC 28, [29] <<https://www.bailii.org/uk/cases/UKSC/2015/28.html>>.

⁹⁸ *R (on the application of ClientEarth) v Secretary of State for the Environment, Food and Rural Affairs* [2015] UKSC 28, [27], [35] <<https://www.bailii.org/uk/cases/UKSC/2015/28.html>>.

⁹⁹ *ClientEarth (No 2) v Secretary of State for the Environment, Food and Rural Affairs* [2016] EWHC 2740 (Admin) <<https://www.bailii.org/ew/cases/EWHC/Admin/2016/2740.html>>.

¹⁰⁰ *The Queen (on the application of ClientEarth) (No 3) v Secretary of State for Environment, Food and Rural Affairs* [2018] EWHC 315 (Admin) <<https://www.bailii.org/ew/cases/EWHC/Admin/2018/315.html>>.

Agreement and will take action that is consistent with the level of effort to achieve Australia's commitments to the Paris Agreement."¹⁰¹ Policy incorporation can have legal consequences.

First, a policy incorporating the Paris Agreement could be taken into account by an administrative decision-maker, or a court in a merit appeal. For example, in *Gloucester Resources Limited v Minister for Planning*,¹⁰² the Land and Environment Court took into account the national and state policy context, noting that the NSW Government had endorsed the Paris Agreement and set an ambitious objective to achieve net zero emissions by 2050.¹⁰³ The Paris Agreement informed the Court's analysis of the carbon budget and the impact of the proposed mine's emissions on climate change.¹⁰⁴

An application for a proposed open-cut coal mine has been approved by the NSW Independent Planning Commission (IPC) subject to a condition linking the downstream greenhouse gas emissions of the project to the Paris Agreement.¹⁰⁵ The condition of consent requires the project proponent to use its best endeavours to limit the sale of coal to countries that have signed the Paris Agreement.¹⁰⁶ The IPC considered that the responsibility for Scope 3 emissions was not limited to the consumers of the coal, and was "arguably the responsibility of each party that operates in the relevant supply chain of the product coal."¹⁰⁷ Thus, it was appropriate to ensure that the coal would be sold to countries that account for emissions associated with the burning of the coal and are taking action to reduce those emissions.

The condition has received a mixed response from environmental groups. It has been criticised by some as being "fundamentally flawed". As almost all countries have signed the Paris Agreement, the proposed condition would do "very little to change the business-as-usual approach to mitigation of emissions from coal exports."¹⁰⁸ Nevertheless, it demonstrates how the Paris Agreement is influencing administrative decision-makers. In addition to pursuing domestic measures to reduce GHG emissions,

¹⁰¹ State of NSW and Office of Environment and Heritage, *Climate Change Policy Framework* (October 2016) 4 <<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Climate-change/nsw-climate-change-policy-framework-160618.pdf>>.

¹⁰² (2019) 234 LGERA 257.

¹⁰³ *Gloucester* (2019) 234 LGERA 257, [440].

¹⁰⁴ *Ibid* [439]-[450]; Lesley Hughes 'The Rocky Hill decision: a watershed for climate change action?' (2019) 37(3) *Journal of Energy & Natural Resources Law* 341, 347.

¹⁰⁵ See condition B32, IPC, 'United Wambo Open Cut Coal Mine Project (SSD 7142)' (Development consent, 29 August 2019) <<https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2018/11/united-wambo-open-cut-coal-mine-project-ssd-7142/determination/ssd-7142-recommended-conditions-of-consent-final.pdf>>.

¹⁰⁶ *Ibid*.

¹⁰⁷ IPC, 'United Wambo Open Cut Coal Mine Project (SSD 7142) and associated Modifications (DA 305-7-2003 MOD 16 & DA 177-8-2004 MOD 3)' (Statement of reasons for decision, 29 August 2019) <<https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2018/11/united-wambo-open-cut-coal-mine-project-ssd-7142/determination/uw-jv--sor--final.pdf>> [303].

¹⁰⁸ David Morris, quoted in 'IPC considers linking coal export to Paris Agreement' *EDO NSW* (online, 9 August 2019) <https://www.edonsw.org.au/wambo_export_condition>. See also, Michael McGowan, 'Glencore mine could be forced to sell coal only to Paris agreement signatories' *The Guardian* (online, 6 August 2019) <https://www.theguardian.com/environment/2019/aug/06/glencore-mine-could-be-forced-to-only-sell-coal-to-paris-agreement-signatories?CMP=Share_iOSApp_Other>.

parties to the Paris Agreement are required to monitor and report on emissions of GHGs, by keeping a national inventory report of anthropogenic emissions by sources and removals by sinks.¹⁰⁹ Indeed, the IPC noted in its statement of reasons that the condition ensures “that Scope 3 emissions will be accounted for as Scope 1 emissions in countries that have clear commitments to reducing greenhouse gas emissions”.¹¹⁰ While the practical effect of the proposed condition of consent may be doubted, it is yet another signal that administrative decision-makers are considering the connection between individual projects and global greenhouse gas emissions, assisted by the Paris Agreement.¹¹¹

In Western Australia, the state Environment Protection Authority proposed new environmental assessment guidelines that would require major projects to offset their GHG emissions. Following political and community backlash, the guidelines were withdrawn for further consultation.¹¹² The EPA consultation process is seeking views and information relating to:

- “information that should be required by the EPA for its environmental impact assessments;
- how emissions associated with a proposal should be considered by the EPA;
- the constraints on potential emission mitigation conditions the EPA should recognize; and
- any other advice related to the assessment of greenhouse gas emissions by the EPA that would further clarify or improve the guidelines.”

Increasingly, policymakers and administrative decision-makers will evolve assessment processes, in part influenced by the Paris Agreement, to require robust consideration of GHG emissions.

Secondly, a policy could influence how an existing legal right could be enforced. The failure of a government to take adequate adaptation measures under a policy that impacted human rights could be remedied by the court directing the government to implement the policy. In *Asghar Leghari v Federation of Pakistan*,¹¹³ a farmer affected by drought brought proceedings against the state for failing to implement its climate change policies. The petitioner alleged that the failure to address climate change, particularly through taking measures to adapt to climate change, breached his

¹⁰⁹ *Paris Agreement* art 13(7)(a).

¹¹⁰ IPC, ‘United Wambo Open Cut Coal Mine Project (SSD 7142) and associated Modifications (DA 305-7-2003 MOD 16 & DA 177-8-2004 MOD 3)’ (Statement of reasons for decision, 29 August 2019) <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2018/11/united-wambo-open-cut-coal-mine-project-ssd-7142/determination/uwjv--sor--final.pdf> [310].

¹¹¹ Michael McGowan, ‘Glencore mine could be forced to sell coal only to Paris agreement signatories’ *The Guardian* (online, 6 August 2019) <https://www.theguardian.com/environment/2019/aug/06/glencore-mine-could-be-forced-to-only-sell-coal-to-paris-agreement-signatories?CMP=Share_iOSApp_Other>.

¹¹² Elicia Kennedy et al, ‘WA Premier Mark McGowan attacks EPA guidelines aimed at cutting carbon emissions’ ABC News (online, 8 March 2019) <<https://www.abc.net.au/news/2019-03-08/mark-mcgowan-attacks-epa-carbon-emissions-policy/10882946>>; ‘Greenhouse gas emissions assessment guidance’ *EPA WA* (Web Page) <<https://www.epa.wa.gov.au/pages/greenhouse-gas-emissions-assessment-guidance-consultation>>.

¹¹³ (Lahore High Court, WP No 25501/2015, 4 September 2015) <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2015/20150404_2015-W.P.-No.-25501201_decision.pdf>.

constitutional rights.¹¹⁴ The Lahore High Court recognised the damaging consequences of climate change and held that “the delay and lethargy of the State in implementing the Framework offends the fundamental rights of the citizens which need to be safeguarded”.¹¹⁵ To remedy these breaches, the Court ordered the establishment of a Climate Change Commission to implement the National Climate Change Policy and the Framework for Implementation of the Climate Change Policy (2014-2030).¹¹⁶ The Court assigned 21 members to the Commission from various government Ministries and Departments and ordered that it file interim reports as and when directed by the Court.¹¹⁷ Where a policy is based on, or incorporates, the Paris Agreement, the Court could similarly order its implementation to remedy a breach of an existing legal right.

3. The impact of the Paris Agreement on the courts’ interpretation of societal values, norms and customs

The impact of the Paris Agreement is not limited to the legal obligations contained in it at the international level or the creation of legal and policy obligations at the domestic level. Even where the Paris Agreement does not create justiciable duties, it can influence the courts’ interpretation of societal values, norms and customs in relevant law and policy. According to UNEP’s Global Review of the Status of Climate Change Litigation (2017), the Paris Agreement enables litigants to “place the actions of their governments or private entities into an international climate change policy context”.¹¹⁸ This international policy context makes it easier for courts to characterise development, actions or omissions as lawful or unlawful. The Paris Agreement also makes it clear that policies and projects leading to net increases in emissions are disfavoured. This section identifies some of the ways that the Paris Agreement can influence the courts’ interpretation of societal values, norms and customs.

(a) Globalisation and universality of the problem: a global norm to take action

The Convention acknowledges that “the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response.”¹¹⁹ Nevertheless, the Convention places a heavier burden on developed countries and

¹¹⁴ *Asghar Leghari v Federation of Pakistan* (Lahore High Court, WP No 25501/2015, 4 September 2015) [4] <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2015/20150404_2015-W.P.-No.-25501201_decision.pdf>.

¹¹⁵ *Ibid* [8].

¹¹⁶ *Ibid*.

¹¹⁷ *Ibid*.

¹¹⁸ United Nations Environment Programme, 'The Status of Climate Change Litigation – A Global Review' (May 2017) <<http://wedocs.unep.org/bitstream/handle/20.500.11822/20767/climate-change-litigation.pdf?sequence=1&isAllowed=y>>.

¹¹⁹ *UNFCCC* preamble.

accepts that developing countries' emissions will continue to grow,¹²⁰ recognising that the largest share of historical and current global emissions of greenhouse gases originated in developed countries. This differentiated responsibility was further advanced in the Kyoto Protocol by only imposing emissions reduction obligations on the developed country parties included in annex I. The Paris Agreement shifts this approach by requiring all parties to prepare and communicate an NDC that represents their highest ambition. While developed country parties are to continue 'taking the lead', "developing country Parties should continue enhancing their mitigation efforts".¹²¹ The new approach to common but differentiated responsibilities and the universality of the Paris Agreement creates a global norm that all countries must take, and are taking, action to mitigate climate change. As Jaap Spier argues, the Paris Agreement temperature goal requires that "not only *all countries together*, but also each *single* country should take adequate measures to achieve that imperative".¹²² This norm could impact climate change litigation in a number of ways.

First, courts may be more likely to accept an argument that every entity has an obligation to reduce their greenhouse gas emissions and contribute to the global response to climate change. The argument that a state or corporation's emissions are only 'a drop in the ocean' is often raised in response to climate change litigation and can frustrate attempts to connect a relatively small amount of emissions to the global problem of climate change. While courts have been mixed in their response to this argument, both before and after the Paris Agreement came into force, it will become increasingly difficult for courts to accept that the individual emissions of an entity are inconsequential when the Paris Agreement recognises that climate change mitigation is a global responsibility requiring "the engagements of all levels of government and various actors".¹²³

In *Urgenda Foundation v Netherlands (Urgenda I)*,¹²⁴ The Hague District Court dismissed the State's argument that a reduction in the Netherlands' emissions would be of no significance to the global problem of climate change abatement and therefore negligible. While the case was decided some months before the COP21, where the Paris Agreement was adopted, there were a number of precursors to the Paris Agreement that the Court relevantly referred to. The European Commission had published a blueprint for the impending Paris climate talks which recognised "the below 2°C objective",¹²⁵ government documents showed that the Netherlands supported a "global climate

¹²⁰ Ibid preamble.

¹²¹ *Paris Agreement* art 4(4).

¹²² Jaap Spier, 'There is no future without addressing climate change' (2019) 37(2) *Journal of Energy & Natural Resources Law* 181, 195-196.

¹²³ *Paris Agreement* preamble.

¹²⁴ (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015) (*'Urgenda I'*).

¹²⁵ *Urgenda I* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015) [2.68].

agreement in which all parties participate”,¹²⁶ and the parties to the Convention had agreed to submit intended nationally determined contributions before the Paris conference.¹²⁷ The global norm to take action had clearly gained traction in the international negotiations.

The State of the Netherlands argued that whether the below 2°C target would be achieved largely depended on other countries with higher emissions.¹²⁸ The Netherlands’ emissions represented only 0.5% of global emissions. Even if the higher emissions reduction target that Urgenda sought was achieved by the State, this would only result in a reduction of 0.04-0.09% of global emissions.¹²⁹ Thus, Urgenda had “no interest in an allowance of its claim for additional reduction”.¹³⁰ This was emphatically rejected by the District Court:

“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...Therefore, the court arrives at the opinion that the 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.”¹³¹

On appeal, The Hague Court of Appeal in *Netherlands v Urgenda Foundation (Urgenda II)*,¹³² again dismissed the State’s argument that ambitious action was not required at the domestic level as Dutch emissions were comparatively small. The Court made direct reference to the Paris Agreement, which had been agreed by this time, noting that “[e]ach country is brought to account regarding their individual responsibility”.¹³³ The Court recognised that climate change is a global problem which cannot be solved by the Netherlands alone. However, this did not release the State from its obligation to take measures which, in conjunction with the efforts of other states, could provide some protection from the impacts of dangerous climate change.¹³⁴

¹²⁶ Ibid [2.78].

¹²⁷ Ibid [2.78], [4.27].

¹²⁸ Ibid [4.78].

¹²⁹ Ibid [4.78].

¹³⁰ Ibid [4.78].

¹³¹ Ibid [4.79].

¹³² (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) (*‘Urgenda II’*).

¹³³ *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) [15].

¹³⁴ Ibid [62].

This norm can also support the need for action by private enterprises, such as fossil fuel intensive industries. In *Gloucester Resources Ltd v Minister for Planning (Gloucester)*¹³⁵, the Land and Environment Court of NSW considered the merits of a proposed open cut coal mine. The applicants, Gloucester Resources Limited (GRL), appealed against the decision of the Minister’s delegate, the Independent Planning Commission, to refuse consent to develop, operate and rehabilitate a mine near the town of Gloucester in New South Wales. A local community group opposed to the mine was joined as a party to the proceedings¹³⁶ and raised the impacts of the mine on climate change. The Court noted that the total emissions from the proposed mine were only a small source of global emissions, however, this did not mean that they were insignificant: “It matters not that this aggregate of the Project’s GHG emissions may represent a small fraction of the global total of GHG emissions. The global problem of climate change needs to be addressed by multiple local actions to mitigate emissions by sources and remove GHGs by sinks.”¹³⁷

Secondly, the global norm to take action supports a rejection of two common arguments raised in response to climate change litigation. The ‘market substitution’¹³⁸ and ‘carbon leakage’ arguments are commonly raised in defence of emissions intensive projects. The market substitution argument presumes that due to demand for a project, if the project is not approved in the country proposed, a similar project will inevitably be approved in another country to meet market demand.¹³⁹ There will therefore be at least the same amount of GHG emissions caused.¹⁴⁰

The ‘carbon leakage’ argument suggests that as a result of more stringent climate policies or more stringent application of climate policies in a country, businesses will move their production from that country to other countries with less ambitious climate policies or less ambitious application of climate policies.¹⁴¹ For example, in *Gloucester*, it was argued that “Australian coal mines operate to some of the highest environmental standards in the world and regulations ensure a strict recognition and accounting of GHG emissions, but this is not the case in all countries where coal mining occurs”.¹⁴² In particular it was suggested that developing countries such as India or Indonesia would approve more coal projects to meet demand. The projects in these countries may have lesser environmental safeguards, which would lead to an increase in global GHG emissions.

¹³⁵ (2019) 234 LGERA 257 (*Gloucester*).

¹³⁶ *Gloucester Resources Limited v Minister for Planning and Environment (No 2)* [2018] NSWLEC 1200 <<https://www.caselaw.nsw.gov.au/decision/5add730be4b074a7c6e1e761>>.

¹³⁷ *Gloucester* (2019) 234 LGERA 257, [525].

¹³⁸ Also referred to as the ‘waterbed effect’ in *Urgenda I* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015) and *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018).

¹³⁹ *Gloucester* (2019) 234 LGERA 257, [534].

¹⁴⁰ *Ibid*.

¹⁴¹ *Ibid* [535].

¹⁴² *Ibid* [535].

The global norm that all countries must take, and are taking, action to mitigate climate change supports the rejection of these arguments. In *Urgenda II*, the Hague Court of Appeal rejected the Netherlands' market substitution argument in the European context, noting that other states also have individual responsibilities to limit CO₂ emissions as far as possible.¹⁴³

Similarly, in *Gloucester*, the Court considered that developing countries that are parties to the Paris Agreement are also under obligations to reduce their emissions:

“Developing countries which are parties to the Climate Change Convention and Paris Agreement also have committed to taking ambitious efforts to achieve a balance between anthropogenic emissions by sources and removal by sinks of GHGs in the second half of this century (Article 4.1) of the Paris Agreement and the long term temperature goal of limiting the increase in global average temperature to well below 2°C above pre-industrial levels (Article 2 of the Paris Agreement)...there is no certainty that refusal of consent to the Project will cause a new coal mine in another country to substitute coking coal for the volume lost in the open market by refusal of the Project.”¹⁴⁴

This was also supported by the international community's recognition, in the Convention, Kyoto Protocol and Paris Agreement, that developed country parties are to take the lead in climate change mitigation.¹⁴⁵ Australia had a responsibility as a developed country to take the lead. Additionally, instead of approving a mine, a developing country could be encouraged to take mitigation measures in their own countries and may determine not to approve a similar project.¹⁴⁶

The responsibility of developed countries to take the lead was also recognised in the *Urgenda* decisions. The courts considered not only the obligation for developed countries to take the lead, but the underlying basis for this proposition: that some countries are more responsible for historical emissions and have a greater capacity to reduce future emissions. This notion of common but differentiated responsibilities also pervades EU climate policy which was influential in the *Urgenda* cases. In *Urgenda I*, the District Court took into account that for a “fair distribution”, the Netherlands and other Annex I countries taking the lead had committed a more than proportionate reduction in emissions.¹⁴⁷ Similarly in *Urgenda II*, the Court of Appeal considered that even among Annex I countries, the Netherlands had a high per capita GDP. Thus, the Court found that it was not

¹⁴³ *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) [56].

¹⁴⁴ *Gloucester* (2019) 234 LGERA 257, [539]-[540].

¹⁴⁵ *Ibid* [539].

¹⁴⁶ *Ibid* [540].

¹⁴⁷ *Urgenda I* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015) [4.79].

reasonable to suggest that the Netherlands should have an individual emissions reduction target less than the suggested 25-40% for Annex I countries collectively.¹⁴⁸

Thirdly, this norm has a practical effect. It makes it possible to accurately determine and compare the level of ambition of different countries. Through its transparency requirements, the Paris Agreement makes it possible to analyse the actions being taken by different countries. As all parties must communicate their NDC, this can create pressure on countries to conform to a minimum level of ambition. Ambition must be increased through subsequent NDCs, meaning the level of ambition will be progressively raised. This can be used in litigation as a benchmark. In *Urgenda I*, the District Court held that the Netherlands had a tortious duty to take domestic mitigation measures to address climate change. The District Court found that the Netherlands' policy to achieve a reduction of 17% in emissions by 2020 was below the norm of 25% to 40% for developed countries. Accordingly, it was possible for the Court to quantify the breach and the remedy, which was to order the State to reduce greenhouse gas emissions by at least 25% by 2020. The Paris Agreement can enhance the ability to compare and assess parties' actions. It provides a firmer benchmark to be used in litigation and is easy to establish by reference to parties' NDCs.

(b) The maximum permissible global temperature rise is "well below 2°C"

Article 2 of the Paris Agreement identifies the maximum permissible global temperature rise as 'well below 2°C' with the aspiration of limiting warming to 1.5°C. This sets an international standard with significant ramifications. While the Paris Agreement does not assign each country a carbon budget, scientists are able to use the long-term temperature goal to calculate the remaining global carbon budget. Indeed, many estimates of the remaining carbon budget have been published.¹⁴⁹ Most climate budget estimates "indirectly rely on the approximately linear relationship between peak global mean temperature and cumulative emissions of carbon,"¹⁵⁰ although there are other approaches.

The notion that the maximum permissible temperature rise is "below 2°C" had been gaining traction long before the Paris Agreement was adopted.¹⁵¹ The target has been attributed to an economist, William Nordhaus, who first suggested it in 1977.¹⁵² While it has been described as emerging "nearly by chance",¹⁵³ it had been accepted by more than 100 countries by 2009,¹⁵⁴ and was recognised as a

¹⁴⁸ *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) [60].

¹⁴⁹ See J Rogelj et al (n 8) 104.

¹⁵⁰ *Ibid.*

¹⁵¹ Carlo Jaeger and Julia Jaeger, 'Three views of two degrees' (2010) 1(3) *Climate Change Economics* 145, 145.

¹⁵² William Nordhaus, *Strategies for the control of carbon dioxide* (1977, Connecticut, Cowles Foundation for Research in Economics at Yale University).

¹⁵³ Jaeger and Jaeger (n 151) 162.

global goal of the parties to the Convention for the first time at COP15 in Copenhagen by 2009.¹⁵⁵ In Decision 2/CP.15, the Conference of the Parties “took note” of the Copenhagen Accord but did not agree to it. The Paris Agreement affirms this quantifiable temperature goal with the added aspiration of limiting warming to 1.5°C.

In a seminal paper published in 2009, Meinshausen et al sought to quantify the GHG emission budget from 2000-2050 that would limit global warming to 2°C. The authors hypothesised that total emissions of 1,000Gt CO₂ from 2000-2050 yielded a 25% probability of warming exceeding 2°C.¹⁵⁶ Recently, the Intergovernmental Panel on Climate Change (IPCC) considered the aspirational goal of pursuing efforts to limit warming to 1.5°C. The IPCC suggested in its special report ‘Global Warming of 1.5°C’ a remaining budget of “about 420Gt CO₂ for a two-thirds chance of limiting warming to 1.5°C, and of about 580Gt CO₂ for an even chance (medium confidence)”.¹⁵⁷

Scientific analysis of the remaining carbon budget has also been used to demonstrate the finite life of fossil fuel industries and the unviability of new projects. McGlade and Ekins suggested in 2015 that “globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2°C”.¹⁵⁸ The authors analysed the geographic distribution of fossil fuels that are unburnable, finding that 93-95% of coal in the OECD Pacific region, which includes Australia, could not be burnt before 2050 to remain consistent with a 2°C scenario.¹⁵⁹

The “well below 2°C” temperature goal can be used in climate change litigation in a number of ways. Courts may consider the long-term temperature goal as a scientific reference point or a legally definitive constraint when determining, for example, whether a government’s emissions reduction target is adequate or the significance of a particular emissions intensive project.¹⁶⁰ Analysis of the carbon budget could be used to demonstrate the risks of investing in fossil fuel projects, which is further considered in part 5 of this paper.

¹⁵⁴ Malte Meinshausen et al, 'Greenhouse-gas emission targets for limiting global warming to 2°C' (2009) 458 *Nature* 1158, 1158.

¹⁵⁵ Biniac (n 17).

¹⁵⁶ Meinshausen et al (n 154) 1158.

¹⁵⁷ J Rogelj et al (n 8) 96.

¹⁵⁸ Christopher McGlade and Paul Ekins, 'The geographical distribution of fossil fuels unused when limiting global warming to 2°C' (2015) 517 *Nature* 187, 187.

¹⁵⁹ *Ibid* 189.

¹⁶⁰ Jacqueline Peel et al, 'Shaping the Next Generation of Climate Change Litigation in Australia' (2017) 41 *Melbourne University Law Review* 793, 809.

The carbon budget approach establishes the urgency of reducing emissions. In *Urgenda II*, the Court of Appeal noted that “insight has developed over the past few years that a safe temperature rise should not exceed 1.5°C”.¹⁶¹ The aspirational Paris Agreement target was used as a ‘starting point’ for considering the limited budget remaining for emissions and the urgency of action.¹⁶² This also supported the Court’s finding of the imminent risk posed by climate change.¹⁶³ The Court accepted that the longer action was delayed, the sooner the carbon budget would be exhausted.¹⁶⁴ The Netherlands was unable to rely on its longer-term targets to demonstrate that a more ambitious target for 2020 was unnecessary:

“Targets for 2030 and beyond do not take away from the fact that a dangerous situation is imminent, which requires interventions being taken now. In addition to the risks in that context, the social costs also come into play. The later actions are taken to reduce, the quicker the available carbon budget will diminish, which in turn would require taking considerably more ambitious measures at a later stage...”

The Court held that the Netherlands had failed to fulfil its duties under the European Convention on Human Rights by refusing to reduce emissions by a minimum of 25% on 1990 levels by 2020.¹⁶⁵

In *Gloucester*, the community objector group contended that due to Australia’s state, national and international policy commitments, including under the Paris Agreement, no new coal mines could be approved. The Court heard expert evidence that the Paris Agreement goal of limiting climate change to between 1.5°C and 2°C would require most fossil fuel reserves to remain in the ground and unburnt. The existing coal mines accounted for the remaining fossil fuels that could be burnt while remaining within global carbon budgets. Even these would need to be rapidly phased out. Therefore, it was submitted that the approval of the coal mine would be inconsistent with the maximum permissible temperature rise.

While the Court noted the well-proven scientific basis for the carbon budget approach,¹⁶⁶ this did not compel a finding that no new coal mines could be approved. Although most fossil fuel reserves needed to remain unburnt, the decision accepted that some fossil fuel burning could occur. The Court considered that the appropriate approach to assessing a fossil fuel project was for a consent authority to evaluate the particular merits of the development in question and consider whether the development as a whole should be approved. This would include consideration of the GHG emissions of the development and their likely contribution to climate change and its consequences, as well as the other

¹⁶¹ *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) [3.5].

¹⁶² *Ibid* [3.5].

¹⁶³ *Ibid* [3.5].

¹⁶⁴ *Ibid* [44], [71].

¹⁶⁵ *Ibid* [73].

¹⁶⁶ *Gloucester* (2019) 234 LGERA 257, [441].

impacts or benefits of the development in absolute or relative terms.¹⁶⁷ The Court noted that “in absolute terms, a particular fossil fuel development may itself be a sufficiently large source of GHG emissions that refusal of the development could be seen to make a meaningful contribution to remaining within the carbon budget and achieving the long term temperature goal”.¹⁶⁸ In relative terms, however, similar sized fossil fuel developments could be compared on their other impacts. It would be rational to refuse projects with greater social, planning and economic impacts than those with lesser impacts. In the case of the particular mine the subject of the appeal, the unacceptable planning, visual and social impacts were sufficient for refusal of the mine,¹⁶⁹ although the Court noted that the refusal of the project would prevent a meaningful amount of GHG emissions.

In the European Union, the ‘People’s Climate Case’ brought by 10 families and the Swedish Saami Youth Association is seeking to compel the EU to set a more stringent GHG emissions reduction target pursuant to the Paris Agreement.¹⁷⁰ The plaintiffs allege that the current target of reducing emissions by 40% by 2030 compared to 1990 levels, manifested in three legal instruments,¹⁷¹ violates the EU’s commitments under the Paris Agreement and other international laws. The plaintiffs utilise a carbon budget approach derived from the Paris Agreement to determine an equitable sharing of the carbon budget for the EU. The plaintiffs conclude that the EU has already exceeded its share of the carbon budget in breach of its legal obligations. The plaintiffs seek an emissions reduction target “based on an assessment of capability, in light of the EU’s legal obligations and the grave threat posed by climate change”.¹⁷² The case was dismissed by the EU General Court without consideration of the merits of the case, as the Court found the plaintiffs did not have standing.¹⁷³ The plaintiffs have appealed the decision to the European Court of Justice.¹⁷⁴

¹⁶⁷ Ibid [554]-[555].

¹⁶⁸ Ibid [554].

¹⁶⁹ Ibid [556].

¹⁷⁰ *Carvalho v The European Parliament and the Council* (European General Court, T-330/18, complaint filed 24 May 2018) <<https://peoplesclimatecase.caneurope.org/wp-content/uploads/2018/08/application-delivered-to-european-general-court.pdf>>.

¹⁷¹ *Directive (EU) 2018/410 of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 [2018] OJ L 76/3; Regulation (EU) 2018/841 of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU [2018] OJ L 156/1; Regulation (EU) 2018/842 of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 [2018] OJ L 156/26.*

¹⁷² *Carvalho v The European Parliament and the Council* (European General Court, T-330/18, complaint filed 24 May 2018) <<https://peoplesclimatecase.caneurope.org/wp-content/uploads/2018/08/application-delivered-to-european-general-court.pdf>> [3].

¹⁷³ Order of the Court in *Carvalho v The European Parliament and the Council* (European General Court, T-330/18, 8 May 2019) <https://peoplesclimatecase.caneurope.org/wp-content/uploads/2019/05/european-general-courts-order-_15.05.2019.pdf>.

¹⁷⁴ ‘Families affected by the climate crisis file appeal after the European General Court dismisses their case’ *People’s Climate Case* (Press Release, 11 July 2019)

The maximum permissible temperature goal and carbon budget approach have continued to be raised by litigants to emphasise the urgency of limiting GHG emissions. A number of these cases are yet to be decided. In a complaint filed in the Administrative Court of Berlin in October 2018, Greenpeace and three organic farming families are seeking an *Urgenda* style ruling that Germany must reach a 40% reduction in emissions by 2020 compared with 1990 levels.¹⁷⁵ The claimants allege that the Government has violated their constitutional rights to life and health, property and occupational freedom, by failing to take measures to meet Germany's emission reduction targets under national law and EU law. The Government's own projections show that Germany is unlikely to meet its emissions reduction target under the Climate Protection Program 2020, a 40% reduction on 1990 levels by 2020, yet the Government has declined to take any further action. The complaint refers to the maximum permissible temperature goal and the imminent need to reduce emissions, noting that if the target is not achieved for 2020, increasingly drastic emission reductions will be required in the subsequent decades to meet the 2030 and 2050 targets. Delaying reductions affects the likelihood of meeting those 2030 and 2050 targets and may cause negative economic impacts.

In France, four NGOs have commenced proceedings against the French government for failing to act on climate change in breach of its international, EU and national legal obligations.¹⁷⁶ The plaintiffs emphasise the Paris Agreement's maximum permissible temperature rise and the state's failures to take action consistent with staying below 2°C.

In Ireland, the High Court heard a judicial review challenge to the Irish government's National Mitigation Plan 2017 on the basis that it does not provide for the rapid emissions reductions required to protect Irish citizens and therefore breaches the *Climate Change and Low Carbon Development Act 2015*.¹⁷⁷ The Court's decision is reserved.

(c) *Net zero global emissions in the second half of the 21st century*

Article 4(1) of the Paris Agreement calls for net zero emissions in the second half of this century:

<<https://peoplesclimatecase.caneurope.org/2019/07/families-affected-by-the-climate-crisis-file-appeal-after-the-european-general-court-dismisses-their-case/>>.

¹⁷⁵ *Greenpeace e.V., vertreten durch den Vorstand* (Roland Hipp, Sweelin Heuss und Martin Kaiser) (Verwaltungsgericht Berlin [Berlin Administrative Court], complaint filed 25 October 2018); Greenpeace, 'Legal summary of the German climate case: Family Farmers and Greenpeace Germany v. German Government' (October 2018) <<https://www.greenpeace.de/sites/www.greenpeace.de/files/20181101-greenpeace-legal-summary-climate-case-english.pdf>>.

¹⁷⁶ *Notre Affaire à Tous v France* (Administrative Court of Paris, complaint filed 14 March 2019).

¹⁷⁷ The Irish government has not consented to the release of the court documents. For a summary of the case, see Ronan Daly Jermyn et al, 'Landmark legal challenge against Irish Government on climate change' *Friends of the Irish Environment* (Blog Post, 22/03/2019) <<https://www.friendsoftheirishenvironment.org/climate-case/17632-landmark-legal-challenge-against-irish-government-on-climate-change>>; Sabin Centre for Climate Change Law, 'Friends of the Irish Environment v Ireland' *Climate Case Chart* (Web Page) <climatecasechart.com/non-us-case/friends-of-the-irish-environment-v-ireland/>.

“Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will 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 in the second half of this century...”.

While the language of article 4(1) has been criticised as being imprecise,¹⁷⁸ it leads to the conclusion that ‘net zero emissions’ should be achieved in the second half of the century. The exact timing of reaching net zero is unclear, but at a minimum it must be achieved before 2100. The amount of GHGs released from fossil fuels far exceeds the amount of reductions by sinks. Although there may be some availability for increasing removals by sinks or advancing carbon capture and sequestration technology,¹⁷⁹ “it clearly signals a finite lifespan for the fossil fuel economy globally.”¹⁸⁰

This norm may influence existing legal obligations and in doing so, climate change litigation. Some of the ways it may influence climate change litigation include by affecting duties of care, directors’ duties and environmental assessments.

First, the signalled transition to a net-zero emissions economy may influence director’s duties. As discussed in part 5 of this paper, directors of companies have a legal obligation to act with care and diligence. The finite lifespan of the fossil fuels industry will have particular consequences for directors in this area, as fossil fuel reserves are at risk of becoming stranded assets.¹⁸¹ Indeed, for countries like Australia where the current economy is heavily reliant on high-risk industries,¹⁸² the transition to a net-zero emissions economy will require drastic changes. Litigation brought against directors for failing to act with due care and diligence by engaging in fossil fuel projects is becoming increasingly likely.

Secondly, this norm may influence how a project is assessed. Economically, the net-zero emissions required by the second half of the century may alter economic costs/benefits analysis. If fossil fuels must be rapidly phased out, the long-term economic viability of a project may be called into question. From an environmental perspective, it is clear that fossil fuel projects will be increasingly disfavoured

¹⁷⁸ See Palmer (n 26) 154.

¹⁷⁹ Michael B. Gerrard, ‘Legal Implications of the Paris Agreement for Fossil Fuels’, *Climate Law Blog* (Sabin Center for Climate Change Law, 19 December 2015) <blogs.law.columbia.edu/climatechange/2015/12/19/legal-implications-of-the-paris-agreement-for-fossil-fuels/>.

¹⁸⁰ Peel et al (n 160) 811.

¹⁸¹ Sarah Barker, ‘Director’s Liability and Climate Risk: Australia – Country Paper’ (Commonwealth Climate and Law Initiative, April 2018) <<https://www.smithschool.ox.ac.uk/research/sustainable-finance/publications/CCLI-Australia-Paper-Final.pdf>> 7.

¹⁸² Ibid.

to mitigate the impacts of climate change. The Court in *Gloucester* did not accept that no new coal mines could be approved, as the Paris Agreement permits national discretion in determining how emissions will be reduced. However, the Court noted that the project was likely to run counter to efforts to achieve net zero emissions:

“The approval of the Project (which will be a new source of GHG emissions) is also likely to run counter to the actions that are required to achieve peaking of global GHG emissions as soon as possible and to undertake rapid reductions thereafter in order to achieve net zero emissions (a balance between anthropogenic emissions by sources and removals by sinks) in the second half of this century. This is the globally agreed goal of the Paris Agreement (in Article 4(1)). The NSW government has endorsed the Paris Agreement and set itself the goal of achieving net zero emissions by 2050. It is true that the Paris Agreement, Australia’s NDC of reducing GHG emissions in Australia by 26 to 28% below 2005 levels by 2030 or NSW’s Climate Change Policy Framework do not prescribe the mechanisms by which these reductions in GHG emissions to achieve zero net emissions by 2050 are to occur. In particular, there is no proscription on approval of new sources of GHG emissions, such as new coal mines.

“Nevertheless, the exploitation and burning of a new fossil fuel reserve, which will increase GHG emissions, cannot assist in achieving the rapid and deep reductions in GHG emissions that are necessary in order to achieve “a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century” (Article 4(1) of the Paris Agreement) or the long term temperature goal of limiting the increase in global average temperature to between 1.5°C and 2°C above pre-industrial levels (Article 2 of the Paris Agreement).”¹⁸³

(d) Climate change is a relevant consideration

Climate change litigation, especially in Australia, has typically focussed on challenging administrative decision-making that fails to take into account climate change considerations. These cases have been referred to as the “first generation” of climate change litigation,¹⁸⁴ using administrative law to challenge decisions to require climate change and GHG emissions to be addressed at the decision-making and project level. While other avenues for litigation are being increasingly utilised, these administrative challenges are likely to continue. Such challenges aim to require decision makers to take into account the impacts of a decision on climate change, or the impacts of climate change on the decision being made. The Paris Agreement is a global signal that climate change must be addressed. The Paris Agreement increases the likelihood of climate change and/or its causes (such as the emission of GHGs) being a relevant consideration in administrative decision-making.

¹⁸³ *Gloucester* (2019) 234 LGERA 257, [526]-[527].

¹⁸⁴ Peel et al (n 160) 796.

It is an error of law for a decision-maker to fail to take into account a consideration that the decision-maker was bound to take into account.¹⁸⁵ Such a failure may require the decision to be set aside and remade according to law. Whether a matter is a mandatory relevant consideration turns on the construction of the statute; it may be expressly required to be considered or implied from the subject-matter, purpose or scope of the statute.¹⁸⁶ As legislation and policy is increasingly implementing the Paris Agreement, the likelihood that an express or implied requirement to consider GHG emissions and climate change increases. As attitudes to climate change continue to shift, assisted by the unilateral recognition of the importance of mitigating climate change in the Paris Agreement, existing legislative frameworks are more likely to be interpreted as requiring a decision-maker to take into account climate change.

In Australia, GHG emissions have frequently been held to be a mandatory relevant consideration in the environmental assessment process for high emissions intensity projects, including requiring an assessment of the downstream burning of coal mined by a project.¹⁸⁷ In *Gloucester*, in the context of a merit appeal where the Court re-exercised the power of the decision-maker to assess the project, the impacts of the extraction, transportation and combustion of coal from the mine on climate change were relevant to be considered in determining whether to grant approval to the mine.

In *Earthlife Africa Johannesburg v The Minister for Environmental Affairs*¹⁸⁸ the applicant environmental group appealed against the decision of the Chief Executive of the Department of Environmental Affairs to grant an environmental authorisation for a proposed coal fired power plant. The appeal was first considered by the Minister of Environmental Affairs, who upheld the Chief Executive's decision. Earthlife appealed to the High Court of South Africa.¹⁸⁹

The applicant alleged that the grant of authorisation was invalid as the Chief Executive had failed to adequately take climate change into account. The decision was made pursuant to the *National Environmental Management Act* (NEMA). Section 24(1) of NEMA required all the environmental impacts of the proposal to be “considered, investigated, assessed and reported on” to the decision-

¹⁸⁵ *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24, 39.

¹⁸⁶ *Ibid* 39-40.

¹⁸⁷ See for example, *Gray v The Minister for Planning* (2006) 152 LGERA 258; *Australian Conservation Foundation v Latrobe City Council* (2004) 140 LGERA 100; *Coast and Country Association Queensland Inc v Smith* [2016] QCA 242; *Wollar Property Progress Association Inc v Wilpinjong Coal Pty Ltd* [2018] NSWLEC 92; *Gloucester* (2019) 234 LGERA 257.

¹⁸⁸ [2017] 2 All SA 519 (High Court) <<http://saflii.org/za/cases/ZAGPPHC/2017/58.html>>.

¹⁸⁹ *Earthlife Africa Johannesburg v The Minister for Environmental Affairs* [2017] 2 All SA 519, [2] ('*Earthlife*').

maker.¹⁹⁰ In the Minister's appeal decision, she had accepted that the climate change assessment had been inadequate but nevertheless upheld the authorisation. The Minister amended the authorisation by adding an additional condition concerning climate change, requiring the project proponent to lodge a new climate change impact assessment with the Department of Environmental Affairs.¹⁹¹ Earthlife alleged that the Minister acted unlawfully, as the climate change impact assessment would need to be considered before authorisation could be granted.¹⁹²

The High Court of South Africa upheld the appeal. The Court rejected the proponent's argument that as climate change was not expressly referred to in NEMA, a climate change impact assessment should not be required.¹⁹³ The Court noted that the environmental impact assessment process is "inherently open-ended and context specific".¹⁹⁴ In the context of a proposed coal fired power plant, the Court held that the "text, purpose, ethos and intra- and extra-statutory context" of NEMA supported the conclusion that climate change was required to be considered before the authorisation could be granted.¹⁹⁵ South Africa's NDC under the Paris Agreement was expressly referred to in support of the Court's decision that climate change was a relevant factor. The Court noted:

"A climate change impact assessment is necessary and relevant to ensuring that the proposed coal-fired power station fits South Africa's peak, plateau and decline trajectory as outlined in the NDC and its commitment to build cleaner and more efficient than existing power stations."¹⁹⁶

The Paris Agreement itself may also become a relevant consideration in decision-making, although only in countries that have incorporated the Paris Agreement into domestic law. In the UK, a challenge to a decision supporting the addition of a third runway at Heathrow airport directly raised the Paris Agreement, and not only climate change generally, as a relevant consideration. The proceedings concerned the legality of the Secretary of State for Transport's decision on 26 June 2018 to designate the Airports National Policy Statement (ANPS) as a national policy statement. The ANPS supported the expansion of Heathrow airport, including by constructing a third runway. Applications for judicial review were brought by a number of interested groups, including two environmental groups, Friends of the Earth and Plan B Earth.

The environmental groups contended that the designation of the ANPS was unlawful as the Secretary of State for Transport failed to consider Government policy relating to climate change as required

¹⁹⁰ Ibid [5].

¹⁹¹ Ibid [7]-[8].

¹⁹² Ibid [9].

¹⁹³ Ibid [89].

¹⁹⁴ Ibid [89].

¹⁹⁵ Ibid [91].

¹⁹⁶ Ibid [90].

under s 5(8) of the *Planning Act 2008* (UK). The Secretary took into account the UK's national targets under the *Climate Change Act 2008* (UK) to reduce emissions by 80% compared to 1990 levels by 2050. However, the groups alleged that these were contrary to the Paris Agreement target of net zero emissions in the second half of the century and the objective of "well below 2 degrees". The applicants contended that the statutory scheme included obligations to consider the UK's commitments under the Paris Agreement, the advice of the Committee on Climate Change and the government's agreement to review the UK 2050 target. The applicants contended that the Secretary erred by failing to take into account the Paris Agreement and instead taking into account the targets under the *Climate Change Act 2008*.

Additionally, the applicants alleged that the Secretary failed to act in accordance with s 10 of the *Planning Act 2008* (UK) which provided that the Secretary of State *must* exercise their power to designate a statement as a national policy statement "with the objective of contributing to the achievement of sustainable development". Section 10(3)(a) further provided that the Secretary of State must have regard to the desirability of "mitigating, and adapting to, climate change". By failing to consider the Paris Agreement's overarching objective of holding global average temperature rise to well below 2°C and the net zero emissions target for the second half of the century, the Secretary had failed to consider a mandatory relevant consideration. Plan B Earth submitted that irrespective of the *Planning Act 2008*, the Secretary of State's decision was manifestly unreasonable for failing to take into account the Paris Agreement.

The High Court, although having heard full argument of all issues, determined to refuse permission to appeal on the climate change grounds.¹⁹⁷ The Court held that in the particular domestic policy and legislative context of the UK, the Paris Agreement was not required to be considered in any of the ways claimed.¹⁹⁸ While the Court recognised that the Paris Agreement represents "a firm international commitment to restricting the increase in the global average temperature... as well as an aspiration to achieve net zero GHG emissions during the second half of the 21st century,"¹⁹⁹ the Paris Agreement did not represent domestic English law or policy and was not required to be directly considered. The Court noted that English law is a dualist legal system. The UK had not incorporated the Paris Agreement into domestic law and had declined to revise the existing climate change target in the *Climate Change Act 2008* in response to the Paris Agreement.²⁰⁰ The Court of Appeal has granted the

¹⁹⁷ *R (on application of Neil Richard Spurrier) v Secretary of State & Ors* [2019] EWHC 1070 (Admin) [667] <<https://www.bailii.org/ew/cases/EWHC/Admin/2019/1070.html>>.

¹⁹⁸ *Ibid* [618], [619], [659].

¹⁹⁹ *Ibid* [580].

²⁰⁰ *Ibid* [607]-[609].

applicants permission to appeal the decision noting “the importance of the issues raised in these and the related proceedings is obvious”.²⁰¹ The appeal is to be heard on 21 October 2019.

Although the proceedings so far have been unsuccessful, the UK government has recently reviewed the targets in the *Climate Change Act 2008* (UK). The new target is to reduce emissions to net zero by 2050, incorporating this aspect of the Paris Agreement. As this is now part of UK law, this target would need to be considered in future decisions.

In *Save Lamu v National Environmental Management Authority (NEMA)*,²⁰² Kenya’s National Environment Tribunal ruled that the environmental impact assessment conducted for a coal fired power plant proposed in Kenya had failed to comply with statutory requirements resulting in the invalidity of an environmental impact assessment licence for the project. As part of a government plan for economic development and industrialisation in Kenya, a coal fired power plant was proposed to increase power generation in the country. The plant would be the first coal fired power plant in Kenya and would be built in Lamu County on Kenya’s coast. The successful bidders of the government expression of interest process, Amu Power Company Limited, undertook an Environment and Social Impact Assessment (ESIA) Study for the proposed plant. The ESIA was approved by NEMA and an environmental impact assessment licence (EIA licence) for the project was issued. A local community group opposed to the plant, Save Lamu, and five individuals challenged the decision to grant the EIA licence.

The complainants raised, inter alia, that the project would be in breach of Kenya’s commitments under the Paris Agreement, that the grant of the licence was invalid for failing to comply with public participation requirements in accordance with law and that the grant of the licence was invalid for failing to adequately consider potential climate change risks and consequences.

The Tribunal held that the public participation conducted for the project was inadequate and ineffective.²⁰³ The Tribunal noted that access to relevant information is a fundamental requirement for lawful public participation. While public participation had occurred, it was largely undertaken during the scoping phase for the project report, before an environmental impact assessment had been carried out and a report on environmental impacts was made available to the public. During this phase, certain inaccurate and incomplete information was provided to the public and details of the potential

²⁰¹ Order of Lindblom LJ in *R (on the application of Plan B Earth) v Secretary of State for Transport* (Court of Appeal, C1/2019/1053, 22 July 2019) <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190722_2019-EWHC-1070-Admin_order.pdf>.

²⁰² *Save Lamu v National Environmental Management Authority* (National Environment Tribunal of Kenya, 16/196, 26 June 2019) <<http://kenyalaw.org/caselaw/cases/view/176697>>.

²⁰³ Ibid [69]-[72].

impacts of the project on human health, forests, soil and vegetation were unavailable.²⁰⁴ Without sufficient public participation, the process was unlawful and the licence invalidated.

As the Paris Agreement had not entered into force until after the ESIA study and EIA licence was granted, the Tribunal focused on the failure to consider the provisions of the *Climate Change Act 2016*, which had been enacted during the process of the study. The Tribunal held that the failure to consider the *Climate Change Act 2016* was significant, even if the total effect of that omission was unknown.²⁰⁵ The Tribunal considered the importance of considering climate change issues in these types of projects.²⁰⁶ Applying the precautionary principle, the Tribunal held that the failure to consider the provisions of the *Climate Change Act 2016* rendered the report incomplete and inadequate.²⁰⁷

The Tribunal ordered Amu Power Company Limited to undertake a new EIA study in accordance with law, noting that the study would be required to consider the *Climate Change Act 2016*, if it wished to continue with the project.²⁰⁸ The Kenyan Constitution provides that international treaties are part of domestic law.²⁰⁹ As the Paris Agreement is now in force, it would follow that the Paris Agreement would also be required to be considered.

The Paris Agreement supports a finding that climate change is a relevant consideration in decision-making. As the law evolves and the Paris Agreement is incorporated in domestic laws, the Paris Agreement and its objectives may themselves become relevant considerations.

4. Increased certainty of the factual consideration of anthropogenic climate change

The Paris Agreement may make it easier to establish causation in litigation, because it demonstrates global agreement on three key issues:

- 1) Increasing greenhouse gas emissions is causing climate change;
- 2) Climate change is caused by humans; and
- 3) Climate change is having and will continue to have dire consequences on the environment and human rights.

First, the Paris Agreement accepts that increasing GHG emissions is causing climate change. Article 4(1) identifies that in order to achieve the long-term temperature goal, parties will need to reach peaking of GHG emissions as soon as possible, undertake rapid reductions thereafter and achieve net zero emissions in the second half of the century. This implicitly accepts that increasing GHG

²⁰⁴ Ibid [69].

²⁰⁵ Ibid [138].

²⁰⁶ Ibid [138].

²⁰⁷ Ibid [139].

²⁰⁸ Ibid [155].

²⁰⁹ *The Constitution of Kenya 2010* art 2(6).

emissions is causing climate change as in order to hold the increase in global average temperature to well below 2°C, emissions must be reduced.

Secondly, the Paris Agreement accepts that climate change is caused by humans. The core objective of the Convention is to stabilise GHG concentrations “at a level that would prevent dangerous anthropogenic interferences with the climate system.” The Paris Agreement builds on this objective by identifying that level as “well below 2°C.” The Paris Agreement requirement for each party to prepare and communicate a new, more ambitious NDC every 5 years is implied acknowledgment that humans are causing climate change through an increase in sources of greenhouse gases and a removal of sinks, and that it will not be possible to hold the increase in global average temperature to below 2°C unless a balance between anthropogenic emissions by sources and removals by sinks is achieved as soon as possible.

Thirdly, the Paris Agreement indicates global agreement that climate change will have dire consequences on the environment and human rights. Clearly, there would be no requirement for a climate change agreement unless the consequences were significant. The Paris Agreement recognises “well below 2°C” as the level of temperature rise that is not “dangerous”. The preamble notes the interrelationship between climate change and human rights, stating that parties should respect, promote and consider their respective human rights obligations when taking action to address climate change. The prominence given to adaptation in article 7 of the Paris Agreement also supports the link between climate change and its potential consequences, as countries must adapt to new environmental realities.

The continued acknowledgement of the Parties to the Convention and the Paris Agreement that climate change is caused by anthropogenic interferences and will impact human rights and the environment may assist parties in litigation. Advances in science will support this trend.

(a) Causal links between the emissions of an individual country, global climate change and its consequences

It is often difficult to demonstrate the causal link between the emissions of one country, which may seem individually insignificant, and the global problem of climate change. Litigation brought against a state party to reduce their emissions or for compensation arising from a breach of duties relating to failures to mitigate climate change must demonstrate that there is some connection between global climate change and the actions of the individual country. The Paris Agreement, by recognising the common but differentiated responsibilities of all countries and creating a global norm to take action,

as discussed above, supports establishing causal links between the emissions of an individual country, global climate change and its consequences.

In *Urgenda I*, the District Court held that “a sufficient causal link can be assumed to exist between the Dutch greenhouse gas emissions, global climate change and the effects (now and in the future) on the Dutch living climate”.²¹⁰ The Court identified the responsibility of the Netherlands to limit GHG emissions arising from the private sector. The excess GHG emissions in the Netherlands could be attributed to the State as “the State has the power to issue rules or other measures... to promote the transition to a sustainable society and to reduce greenhouse gas emissions in the Netherlands”.²¹¹

Similarly in *Urgenda II*, the Court of Appeal attributed climate change to increasing global CO₂ emissions and accepted that climate change could be prevented or reduced by reducing those emissions.²¹² The Court rejected the State’s argument that the plaintiffs had failed to demonstrate a causal link between the acts and omissions of the State and the global problem of climate change.²¹³ The Court noted the unacceptability of the argument, as it would preclude “an effective legal remedy for a global problem as complex as this one”.²¹⁴ As discussed in part 3(a) of this paper, the Court did not refuse to recognise this causal link even where the Netherlands emissions represented only 0.5% of global emissions.

(b) Causal links between failure to take regulatory action, global climate change and its consequences

At a broad level, states communicate their NDCs to the international community. Emissions reduction targets demonstrate the commitment of the state to take action to mitigate climate change by reducing the overall emissions of the individual country. To achieve this goal, states must take regulatory action to reduce emissions by sources and protect and enhance carbon sinks. Examples include reducing logging of forests, regulating the emissions of GHGs or requiring emissions to be offset. Litigants seeking to bring proceedings against a state for failing to take regulatory action have encountered difficulties in proving a causal link between isolated actions and the global problem of climate change. The Paris Agreement, by directing parties to pursue domestic mitigation measures with the aim of achieving their NDC,²¹⁵ may provide support for finding a causal link between a failure to take regulatory action and climate change.

²¹⁰ *Urgenda I* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015) [4.90].

²¹¹ *Ibid.*

²¹² *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) [3.6].

²¹³ *Ibid* [64].

²¹⁴ *Ibid.*

²¹⁵ *Paris Agreement* art 4(2).

In *Future Generations v Ministry of the Environment*,²¹⁶ a group of young people filed a special constitutional claim, known as a ‘tutela’, to enforce their human rights in the Superior Tribunal of Bogota. The group alleged that the Colombian government and several Colombian municipalities had breached their rights to a healthy environment, life, food, and water by failing to take action to reduce emissions and prevent rampant deforestation in the Colombian Amazon. The plaintiffs submitted that the government had a responsibility to reduce deforestation pursuant to the Paris Agreement, which recognises the important role of forests as carbon sinks.²¹⁷ The Paris Agreement provides that parties “should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases... including forests.”²¹⁸ The plaintiffs alleged that the failure to reduce deforestation contributed to global warming “due to carbon dioxide emissions that in non-deforestation conditions are stored in forests”.²¹⁹

The plaintiffs were unsuccessful at first instance and successfully appealed to the Supreme Court of Colombia. The Supreme Court accepted that there was a causal link between the failure to reduce deforestation in the Amazon, global climate change, and the specific consequences of climate change for the plaintiffs’ human rights. The Court noted that the regulatory failure was causing:

“short, medium, and long term imminent and serious damage to the children, adolescents and adults who filed this lawsuit, and in general, all inhabitants of the national territory, including both present and future generations, as it leads to rampant emissions of carbon dioxide (CO₂) into the atmosphere, producing the greenhouse gas effect, which in turn transforms and fragments ecosystems, altering water sources and the water supply for population centres and land degradation.”²²⁰

The Court noted that fundamental rights, including the right to life, health, freedom and human dignity, are “substantially linked and determined by the environment and ecosystem”.²²¹ The Court found that the government and agencies the subject of the proceedings had a duty to “evaluate, control, and monitor natural resources” and “to impose and implement sanctions in the case that there

²¹⁶ (Colom Sup Ct, 11001-22-03-000-2018-00319-01, 5 April 2018) (*Future Generations*). A full copy of the decision is available in Spanish at <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2018/20180405_11001-22-03-000-2018-00319-00_decision.pdf>. For extracts of the decision in English see, Dejusticia, ‘Climate Change and Future Generations Lawsuit in Colombia: Key Excerpts from the Supreme Court’s Decision’ (13 April 2018) <<https://www.dejusticia.org/en/climate-change-and-future-generations-lawsuit-in-colombia-key-excerpts-from-the-supreme-courts-decision/>>.

²¹⁷ *Paris Agreement* art 5(1).

²¹⁸ *Ibid.*

²¹⁹ Dejusticia (n 216) 1.

²²⁰ *Ibid* 34.

²²¹ *Ibid.*

is a violation of environmental protection norms in their jurisdiction”.²²² The defendants had failed to fulfil these duties and were ordered to formulate short, medium and long term action plans to counteract the rate of deforestation in the Amazon.²²³

Although the Paris Agreement offers litigants a firmer basis for establishing the link between regulatory action and climate change and its consequences, some courts have demonstrated a continued unwillingness to make these connections.

A recent decision in the US District Court for Eastern Pennsylvania has refused to connect environmental regulatory rollbacks to climate change. In *Clean Air Council v United States*,²²⁴ an environmental NGO and two youth plaintiffs brought proceedings on the basis of their rights under the public trust doctrine and constitution. The plaintiffs sought a declaration that the US President, Secretaries of Energy and the Interior and the Environmental Protection Agency had violated and would violate the plaintiffs’ rights under the public trust doctrine by taking certain actions that increased the frequency or intensity of the impacts of climate change.²²⁵ The actions complained of were broad and included making amendments to laws and regulations that would roll back environmental protections, decisions to remove climate change information from agency websites, hiring decisions, decisions reducing funding of environmental agencies and making changes to staffing of environmental agencies.

The Court did not find any causal links between the regulatory failures of the government and the potential impacts of climate change, describing the plaintiffs claim as relying on “an attenuated, contingent chain of events”.²²⁶ The plaintiffs had failed to show that their alleged injuries were traceable to the ‘rollbacks’ of environmental regulations and other executive decisions. The Court took a narrow view of the role of the state in contributing to and addressing climate change, finding that the actions complained of were “indirect factors in the calculus of rising greenhouse gas emissions... [the] Defendant agencies and officers do not produce greenhouse gases, but act to regulate those third parties that do... As I have discussed, ‘a State’s failure to protect an individual against private violence simply does not constitute a violation of the Due Process Clause.’”²²⁷ Therefore the relief sought would not redress the issues alleged. Finally, the Court determined that the

²²² Ibid 42.

²²³ Ibid 45.

²²⁴ 362 F Supp 3d 237 (ED Pa, 19 February 2019), <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2019/20190219_docket-217-cv-04977_memorandum.pdf>.

²²⁵ *Clean Air Council v United States* 362 F Supp 3d 237 (ED Pa, 19 February 2019) 251.

²²⁶ Ibid 247.

²²⁷ Ibid 253.

action would impermissibly monitor and usurp the powers of the executive, finding that the Court had “neither the authority nor the inclination to assume control of the Executive Branch”.²²⁸

Contrasting this case with the pre-Paris decision of *Massachusetts v EPA*,²²⁹ it can be seen that the nature of the regulatory failure will be determinative of such a claim. In the seminal decision in *Massachusetts v EPA*, the US Supreme Court found that the EPA’s denial of a rulemaking petition to regulate four greenhouse gases, including carbon dioxide, in domestic automobile emissions was sufficiently linked to the plaintiffs’ injuries and could be addressed by the Court. For the plaintiffs to have standing, they were required to prove injury, causation and redressability.²³⁰ First, the Court held that the coastal lands of Massachusetts would in fact be impacted by rising sea levels and coastal storms, meaning that Massachusetts would suffer injury. Secondly, the Court accepted a causal link between regulating greenhouse gas emissions and the potential injuries, finding that reducing domestic automobile emissions was “hardly a tentative step” in mitigating the impacts of climate change.²³¹ Finally, as to redressability, the Court found that regulating automobile emissions might slow down or reduce the effects of global warming.²³² Thus the failure to regulate greenhouse gases could be linked to climate change and its impacts.

(c) Causal links between proposed development, global climate change and its consequences

By recognising that GHGs from human sources cause climate change, the Paris Agreement supports the finding of a causal link between a proposed development and global climate change and its consequences. The Paris Agreement also requires parties to prepare a national inventory of emissions by sources and removals by sinks.²³³ By documenting each individual source, this reinforces the causal link between individual sources of GHG emissions and their contribution to climate change. This causal link is essential in courts finding that climate change or the emissions of GHGs are a relevant consideration in the environmental assessment of proposed developments. As discussed in part 3(d), courts have increasingly found that climate change is a relevant consideration.

In *Gloucester*, the Court provided an unequivocal statement on the causal connection between all GHG emissions and climate change and its consequences. The Court found:

“There is a causal link between the Project’s cumulative GHG emissions and climate change and its consequences. The Project’s cumulative GHG emissions will contribute to the global total of GHG

²²⁸ Ibid 237.

²²⁹ 549 US 497 (2007) <<https://supreme.justia.com/cases/federal/us/549/05-1120/index.pdf>>.

²³⁰ The Court adopting the three part test for standing in *Lujan v Defenders of Wildlife* 504 US 555 (1992).

²³¹ *Massachusetts v EPA* 549 US 497 (2007), 524 [21]-[22] <<https://supreme.justia.com/cases/federal/us/549/05-1120/index.pdf>>.

²³² Ibid 525 [22].

²³³ *Paris Agreement* art 13(7)(a).

concentrations in the atmosphere. The global total of GHG concentrations will affect the climate system and cause climate change impacts. The Project's cumulative GHG emissions are therefore likely to contribute to the future changes to the climate system and the impacts of climate change. In this way, the Project is likely to have indirect impacts on the environment, including the climate system, the oceanic and terrestrial environment, and people."²³⁴

Similarly in *Earthlife v Minister*, referred to above in relation to its finding that climate change was a relevant consideration, the Court accepted that the coal fired power plant the subject of the judicial review was causally linked to climate change and its consequences. The Court noted that "coal-fired power stations emit significant volumes of GHGs, which cause climate change".²³⁵ This was essential for the Court's conclusion that a climate change impact assessment was necessary for the proposed coal-fired power station.

(d) Causal links between the emissions of an individual country, global climate change, extreme weather events and human rights

The Paris Agreement recognises that climate change is increasing the frequency and severity of extreme weather events. Article 8(1) provides that parties "recognise the importance of averting, minimising and addressing loss and damage associated with the effects of climate change, *including extreme weather events*." Advances in extreme weather attribution science may allow litigants to better examine and quantify the nature of the impacts of climate change on extreme weather.²³⁶

Courts have discussed the consequences of climate variability generally, accepting the notion that climate change is causing sea level rise and increasing the frequency of extreme weather events. In *Earthlife v Minister*, the Court accepted that "[c]limate variability, including the increased frequency and intensity of extreme weather events will be consequential for society as a whole."²³⁷ In *Urgenda I*, the District Court accepted the conclusions of the IPCC that climate change was likely to result in "increased hurricane activity, expansion of desert areas and the extinction of many animal species because of the heat... [and] heat-related deaths, particularly among the elderly and children."²³⁸ That anthropogenic climate change contributes to increased extreme weather events was also

²³⁴ *Gloucester* (2019) 234 LGERA 257, [525].

²³⁵ *EarthLife* [2017] 2 All SA 519, [25].

²³⁶ Sophie Marjanac and Lindene Patton, 'Extreme weather event attribution science and climate change litigation: an essential step in the casual chain' (2018) 36(3) *Journal of Energy & Natural Resources Law* 265, 266; Noel Hutley SC and Sebastian Hartford Davis, 'Climate Change and Directors' Duties: Supplementary Memorandum' (Supplementary Memorandum of Opinion, Centre for Policy Development, 26 March 2019) <https://cpd.org.au/wp-content/uploads/2019/03/Noel-Hutley-SC-and-Sebastian-Hartford-Davis-Opinion-2019-and-2016_pdf.pdf> [17] ('*Supplementary 2019 Opinion*').

²³⁷ *EarthLife* [2017] 2 All SA 519, [25].

²³⁸ *Urgenda I* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015) [4.16]

acknowledged in *Urgenda II*,²³⁹ *Future Generations v Ministry of the Environment*,²⁴⁰ and *Gloucester*.²⁴¹

However, claims directly based on increasing severe weather events have so far been unsuccessful. In 2009, a native Inupiat village in Alaska sued oil, power and coal companies for their contributions to climate change and the severe impacts on the village. The coastal village, Kivalina, was abandoned and its community relocated due to rising sea levels and the melting of arctic ice that had protected the village from winter storms. The Court in *Native Village of Kivalina v Exxon Mobil*²⁴² dismissed the plaintiffs' claim, finding that the claim was non-justiciable and the plaintiffs lacked standing as they could not demonstrate causation. The plaintiffs alleged that it was sufficient to demonstrate causation by proving that the defendants had contributed to their injuries, even if they were not wholly responsible.²⁴³ The Court disagreed, finding that the plaintiffs needed to prove that the defendants' conduct was the "seed" of their injury.²⁴⁴ This was not possible as "it is not plausible to state which emissions—emitted by whom and at what time in the last several centuries and at what place in the world—'caused' Plaintiffs' alleged global warming related injuries."²⁴⁵

In contrast, a complaint by a Peruvian farmer against a German electricity company has been allowed to go ahead. The farmer lives nearby a city in Peru threatened by the increasing size of a glacial lake located above the city. The increasing size of the lake, as increased temperatures have led to the melting of glaciers, poses a flood risk for the city and the farmer. The farmer is seeking compensation for the measures he has had to take to respond to the flood risk proportionate to the contribution of the electricity company to the cause of the damage. The claim was dismissed at first instance in the

²³⁹ *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018) [44]: "If the Earth warms by a temperature of substantially more than 2° C, this will cause more flooding due to rising sea levels, heat stress due to more intensive and longer periods of heat, increasing prevalence of respiratory diseases due to worsened air quality, droughts (accompanied by forest fires), increasing spread of infectious diseases and severe flooding as a result of heavy rainfall, disruption in the food production and potable water supply. Ecosystems, flora and fauna will also be affected, and biodiversity loss will occur."

²⁴⁰ *Future Generations v Ministry of the Environment* (Colom Sup Ct, 11001-22-03-000-2018-00319-01, 5 April 2018) 15: "These imminent dangers are evident in phenomena such as the excessive increase of temperatures, the thawing of the poles, the massive extinction of animal and plant species, the increasingly frequent occurrence of meteorological events and disasters outside margins previously considered normal. There are unusual and unforeseen rainy seasons, permanent droughts, hurricanes or destructive tornadoes, strong and unpredictable tidal waves, draining rivers, increasing disappearance of species, etc."

²⁴¹ *Gloucester* (2019) 234 LGERA 257, [435]: "Global average surface temperature is not the only feature of the climate system that is changing. Other features of the climate system that are changing include changes in the basic circulation patterns of the atmosphere and the ocean; increasing intensity and frequency of many extreme weather events; increasing acidity of the oceans; rising sea levels and consequent increases in coastal flooding; and intensification of the hydrological cycle".

²⁴² 663 F Supp 2d 863 (ND Cal, 2009) <<https://cases.justia.com/federal/appellate-courts/ca9/09-17490/09-17490-2012-09-21.pdf?ts=1411068744>>.

²⁴³ *Native Village of Kivalina v Exxon Mobil* 663 F Supp 2d 863 (ND Cal, 2009) 878

<<https://cases.justia.com/federal/appellate-courts/ca9/09-17490/09-17490-2012-09-21.pdf?ts=1411068744>>.

²⁴⁴ *Ibid* 881.

²⁴⁵ *Ibid*.

District Court of Essen. The Court held that it was impossible to establish a chain of causation²⁴⁶ and that as the company's contribution was so minor (alleged to have contributed 0.47% to climate change) it could not have caused the impairment to an adequate degree.²⁴⁷ While the Court accepted that "every single emission of greenhouse gases is to contribute to climate change", applying the test for causation "conditio sine qua non", essentially a "but for" test, causation failed. The Court reasoned that "[e]very living person is, to some extent, an emitter. In the case of cumulative causation, only the coaction of all emitters could cause the supposed flood hazard". However, the Higher Regional Court in Hamm, Germany has accepted the legal arguments raised by the farmer on appeal, ruling that the case may proceed into the evidentiary stage. Under German Procedural Law moving into the evidentiary stage means that the legal arguments have been conclusively argued. Provided that the claim can be substantiated through evidence, the legal argument is accepted. The Court has directed the parties to obtain further expert evidence on the causal link between the company's GHG emissions and the flood risk posed.²⁴⁸

Recent years have seen an increase in litigants bringing causes of action in private law actions against fossil fuel companies.²⁴⁹ These challenges are usually met with standing and justiciability issues. However, as the Paris Agreement continues to shift the general consciousness relating to causation and as extreme event attribution science is better understood, courts are increasingly likely to be required to adjudicate such liability issues.²⁵⁰ Marjanac and Patton note that the common law has evolved to establish liability and allocate responsibility even where strict causal links have not been established by scientific evidence, such as in cases involving asbestos, pharmaceuticals, water pollution and contaminated land.²⁵¹ The authors suggest that "event attribution science is theoretically

²⁴⁶ *Lliuya v RWE AG* (District Court Essen, 14/0354Z/R/rv, 15 December 2016); Sabin Center for Climate Change Law, 'Lliuya v RWE AG' *Climate Case Chart* (Web Page) <climatecasechart.com/non-us-case/liiuya-v-rwe-ag/>.

²⁴⁷ *Ibid.*

²⁴⁸ Order of the court in *Lliuya v RWE* (Higher Regional Court Hamm, 1-5 U 15/17 2 0 285/15, 30 November 2017); Sabin Center for Climate Change Law, 'Lliuya v RWE AG' *Climate Case Chart* (Web Page) <climatecasechart.com/non-us-case/liiuya-v-rwe-ag/>.

²⁴⁹ *People of State of California v BP PLC* (Cal Super Ct, CGC-17-561370, Complaint filed 19 September 2017) and *People of State of California v BP PLC* (Cal Super Ct, RG17875889, Complaint filed 19 September 2017); *City of Imperial Beach v Chevron Corp* (Cal Super Ct, CI7-01227, Complaint filed 17 July 2017); *County of San Mateo v Chevron Corp* (Cal Super Ct, 17CIV03222, Complaint filed 17 July 2017); *County of Marin v Chevron Corp* (Cal Super Ct, CIV1702586, Complaint filed 17 July 2017); *County of Santa Cruz v Chevron Corp* (Cal Super Ct, 17CV03242, Complaint filed 20 December 2017); *Richmond v Chevron Corp* (Cal Super Ct, C18-00055, Complaint filed 22 January 2018); *New York City v BP PLC* (SD NY, 18-cv-182, Complaint filed 9 January 2018); *Board of County Commissioners of Boulder County v Suncor Energy (USA) Inc* (D Colo, 2018CV030349, Complaint filed 17 April 2018); *King County v. BP p.l.c.* (Wash Sup Ct, 18-2-11859-0, Complaint filed 9 May 2018); *Rhode Island v. Chevron Corp* (RI Sup Ct, PC-2018-4716, Complaint filed 2 July 2018) and *Mayor & City Council of Baltimore v. BP p.l.c* (Md Cir Cit, 24-C-18-004219, Complaint filed 20 July 2018).

²⁵⁰ Marjanac and Patton (n 236) 297.

²⁵¹ *Ibid* 280.

capable of proving a sufficient ‘causal’ connection between human greenhouse gas emissions and an extreme weather event in the law.”²⁵²

Litigants may have greater success where a claim is based on the failure of the defendant to adapt to potential extreme weather events. As courts have been more willing to accept at a general level that climate change causes climate variability and increased extreme weather events, the foreseeability of the risk of an extreme weather event may be increased.²⁵³ This may have ramifications for duties of care and support litigation based on a failure to adapt.

A complaint filed by eight Torres Strait Islanders against the Australian government alleges that by failing to take action to mitigate or adapt to climate change Australia has violated the complainants’ human rights under the International Covenant on Civil and Political Rights (ICCPR).²⁵⁴ The complaint was lodged with the United Nations Human Rights Committee, which is responsible for monitoring compliance with the ICCPR, in May 2019.²⁵⁵ The Torres Strait Islands are a group of islands to the north of Queensland and are mostly part of Australia (the balance are in Papua New Guinea). The small low-lying islands are particularly vulnerable to climate change from rising sea levels and increased extreme weather events.

The complaint alleges that Australia has failed to mitigate climate change, including by adopting an insufficient GHG emissions reduction target, continuing to promote investment in fossil fuels and adopting no policies towards meeting its emissions reduction target. Additionally, Australia has failed to take reasonable measures to adapt to climate change, placing the complainants at particular risk from the impacts of climate change. These failures amount to breaches of the complainants’ rights under the ICCPR, including: the right to life (article 6), the right to be free from arbitrary interference with privacy, family and home (article 17), and the right to culture (article 27).²⁵⁶

The complainants are seeking a commitment of at least \$20 million for emergency protection measures such as seawalls and sustained investment in long-term adaptation measures, an emissions reduction target of at least 65% below 2005 levels by 2030 and net zero by 2050, and rapid phasing

²⁵² Ibid 283.

²⁵³ Ibid 287-288.

²⁵⁴ *International Covenant on Civil and Political Rights*, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976).

²⁵⁵ The complaint is not currently publicly available. For a summary from the plaintiff’s lawyers, see: ClientEarth, ‘Torres Strait FAQ’ (Press Release, 13 May 2019) <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190513_Not-Available_press-release-1.pdf>.

²⁵⁶ ClientEarth, ‘Torres Strait FAQ’ (Press Release, 13 May 2019) <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190513_Not-Available_press-release-1.pdf>.

out of coal both for domestic use and export.²⁵⁷ A decision is not expected to be reached for several years.

5. The impact of the Paris Agreement on corporate directors' liabilities

The private sector will inevitably be impacted by climate change and the necessary transition away from fossil fuels, as signalled by the Paris Agreement. If the objectives of the Paris Agreement are to be achieved, far reaching transformations in current economic markets will be required.²⁵⁸ Indeed, if the objectives of the Paris Agreement fail, economic markets will nevertheless be transformed. This is altering our understanding of the duties and obligations of corporations and company directors.

Historically, the main business risk associated with climate change was the 'reputational' risk arising from public concern for the environment.²⁵⁹ It is now generally accepted that climate change poses direct and substantial financial risks to businesses that must be managed by their directors. While the economy frequently changes in response to different forces, "few of these forces have the scale, persistence and systemic risk of climate change".²⁶⁰ These risks are usually described in three broad categories: physical risks, transition risks and liability risks.²⁶¹ Physical risks are those arising from the direct consequences of climate change. Company assets and infrastructure may be at risk of loss or damage from extreme weather events, rising sea levels or increasing temperatures. The impacts of climate change are also impacting company supply chains and service delivery.²⁶² This, in turn, influences insurance liabilities and the value of assets.²⁶³

Transition risks are the risks to a company "associated with developments that may (or may not) occur in the process of adjusting to a lower-carbon economy".²⁶⁴ To achieve the emissions reduction target outlined in a party's NDC, regulatory measures will be necessary. These could include restricting GHG emissions, taxing emissions and promoting alternative technologies.²⁶⁵ The Paris Agreement has been described as "bringing forward the horizon" and forcing governments to step up

²⁵⁷ Ibid.

²⁵⁸ Stephanie Venuti and Martijn Wilder, 'Obligations on Australian Companies to Address Climate Change' (2018) 92 *Australian Law Journal* 789, 791.

²⁵⁹ Marjanac and Patton (n 220) 293.

²⁶⁰ Guy Debelle, 'Climate Change and the Economy (Speech, Public Forum hosted by the Centre for Policy Development, Sydney, 12 March 2019).

²⁶¹ Preston, (n 10) 788; M Carney, 'Breaking the Tragedy of the Horizon – climate change and financial stability' (Speech, Lloyd's of London, 29 September 2015).

²⁶² Marjanac and Patton (n 236) 294.

²⁶³ Preston (n 10) 780.

²⁶⁴ Noel Hutley SC and Sebastian Hartford-Davis, 'Climate Change and Directors' Duties' (Memorandum of Opinion, Centre for Policy Development and Business Council, 7 October 2016), 3 ('2016 Opinion'); Hutley SC and Hartford Davis, 'Supplementary 2019 Opinion' (n 236).

²⁶⁵ Marjanac and Patton (n 236) 294.

to curb carbon emissions.²⁶⁶ As subsequent targets must represent a progression on previous NDCs, the Paris Agreement creates the prospect of increasing measures to transition away from fossil fuels.²⁶⁷ The Paris Agreement makes it clear that “there will be a major process of transition, presenting risks (as well as opportunities) to businesses.”²⁶⁸ If regulatory measures are not taken to assist the shift to a lower-carbon economy, physical risks may be increased. Delaying the shift to a lower-carbon economy also increases the likelihood that more drastic and financially significant changes will be necessary later, raising further risks for long-term investments. As noted by Guy Debelle, Deputy Governor of the Reserve Bank of Australia, “[t]he transition path to a less carbon-intensive world is clearly quite different depending on whether it is managed as a gradual process or is abrupt”.²⁶⁹

Climate change litigation based on the Paris Agreement may be used to ensure that these transitions are achieved in a reasonable timeframe. For example, the *Urgenda* cases were successful in requiring the Netherlands to improve its emissions reduction target for 2020 and not rely on its more ambitious targets for 2030 and 2050. Building on the success of the *Urgenda* case, a non-government organisation, Milieudefensie, 17,200 citizens and 6 co-plaintiff organisations have commenced proceedings in the District Court of the Netherlands seeking to extend the *Urgenda* ruling to a private fossil fuels company, Royal Dutch Shell PLC.²⁷⁰ The complaint, filed 5 April 2019, alleges that Shell’s contributions to climate change are endangering Dutch citizens in breach of its duty of care and human rights obligations. The plaintiffs are seeking a ruling that Shell must reduce its CO₂ emissions by 45% compared to 2010 levels by 2030 and reach net zero emissions by 2050 in line with the Paris Agreement. Shell’s current climate policy is to reduce emissions by 20% by 2035 and 50% by 2050. The plaintiffs contend that Shell’s existing policies are insufficient to prevent catastrophic climate change, contrary to the Paris Agreement.

Liability risk is the risk of being held to account for contributing to, or failing to adapt to, climate change. This includes costs associated with climate change litigation. As has been demonstrated throughout this paper, climate change litigation is becoming increasingly common. It is no longer viewed as raising purely political questions unsuitable for judicial adjudication. As the Paris Agreement continues to influence our collective understanding of climate change, responsibility and causation, litigation is likely to increase. Indeed, these actions are already being brought. Ganguly et

²⁶⁶ Mark Carney, 'Resolving the climate paradox' (Speech, Arthur Burns Memorial Lecture, Berlin, 22 September 2016) <<https://www.bis.org/review/r160926h.pdf>>.

²⁶⁷ Ibid.

²⁶⁸ Hutley SC and Hartford-Davis, '2016 Opinion' (n 248) [27].

²⁶⁹ Guy Debelle, 'Climate Change and the Economy' (Speech, Public Forum hosted by the Centre for Policy Development, Sydney, 12 March 2019).

²⁷⁰ *Milieudefensie v Shell* (The Hague District Court, 90046903/2019, 5 April 2019). For an unofficial English translation of the summons, see: <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190405_8918_summons.pdf>.

al observe that we are now experiencing a second wave of strategic private climate litigation, targeting corporations as defendants.²⁷¹ Commencing proceedings against corporate defendants is seen as appropriate (as corporations bear responsibility for their emitting activities) and effective (as cases brought against a small number of private defendants could have a global impact).²⁷²

The Paris Agreement, by recognising the catastrophic consequences climate change may cause, increases the likelihood that physical, transitional and liability risks would be viewed as reasonably foreseeable. This may influence how a court would assess whether a director of a company had breached its duties to the company.

(a) Duty of due diligence and care

In common law jurisdictions, company directors owe fiduciary duties to the company in equity. One of these duties is the duty of due diligence and care. In Australia, this duty is codified in the *Corporations Act 2001* (Cth) s 180(1), which provides:

(1) A director or other officer of a corporation must exercise their powers and discharge their duties with the degree of care and diligence that a reasonable person would exercise if they:

- (a) were a director or officer of a corporation in the corporation's circumstances; and
- (b) occupied the office held by, and had the same responsibilities within the corporation as, the director or officer.

The standard of care required involves subjective and objective features. It is the conduct of the director “evaluated against an objective standard, namely what a reasonable person would have done in the subjective circumstances faced by that director, in that company”.²⁷³ To prove a breach of s 180(1) it would be necessary to show that the director acted to a lower degree of care and diligence than a reasonable person, in the same position as the director with the same responsibilities, would have done.

The Paris Agreement encourages parties to make “finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development”.²⁷⁴ As Geoff Summerhayes, executive board member of the Australian Prudential Regulatory Authority, has observed, “the [Paris] agreement provides an unmistakable signal about the future direction of policy and the adjustments

²⁷¹ Ganguly et al (n 15) 844.

²⁷² Ibid 844-845.

²⁷³ *ASIC v Adler* (2002) 168 FLR 253, [372]; *ASIC v Rick* (2009) 75 ASCR 1, 623.

²⁷⁴ *Paris Agreement* art 5(c).

that companies, markets and economies will need to make.”²⁷⁵ This coincides with increasing recognition of the pivotal role that corporations play within communities. The Business Roundtable, an association of CEOs from leading US companies, released in August 2019 an updated Statement of the Purpose of the Corporation.²⁷⁶ The statement shifts the focus from shareholder primacy to a broader approach focussed on all stakeholders and emphasises the importance of sustainability. This may influence the duty of diligence and care of directors.

In a landmark legal opinion, two Australian barristers, Hutley SC and Hartford Davis, suggested that climate change risks would be viewed by courts as reasonably foreseeable and directors who failed to respond appropriately could be found to have breached their duty of care and diligence. The Commissioner of the Australian Securities and Investments Commission (ASIC), Australia’s corporate regulator, described the opinion as “legally sound and... reflective of our understanding of the position under the prevailing case law in Australia in so far as directors’ duties are concerned.”²⁷⁷ In a supplementary opinion provided in 2019, the barristers recognised the Paris Agreement as one of the key factors that has elevated the standard of care that will be expected of directors.²⁷⁸ Company directors can reduce their exposure to liability if they “consider climate change risks actively, disclose them properly and respond appropriately... But as time passes, the benchmark is rising.”²⁷⁹ The barristers also identified the decision in *Gloucester* as a material development influencing how climate risks are perceived.²⁸⁰ Indeed, as climate change litigation develops and increases, litigation risks follow. Hutley SC and Hartford Davis have suggested that a negligence action against a director who had ignored climate change risks is only a matter of time.²⁸¹

In Poland, environmental law firm ClientEarth brought proceedings alleging that a shareholder resolution consenting to the construction of a coal fired power plant was unlawful. ClientEarth wrote to the board members prior to commencing the litigation, noting that the project posed impermissible financial risks to the company such that the proposed resolution risked “breaching board members’ fiduciary duties of due diligence and to act in the best interests of the company and its

²⁷⁵ Geoff Summerhayes, 'Australia's new horizon: Climate change challenges and prudential risk' (Speech, Insurance Council of Australia Annual Forum, Sydney, 17 February 2017) <<https://www.apra.gov.au/media-centre/speeches/australias-new-horizon-climate-change-challenges-and-prudential-risk>>.

²⁷⁶ Business Roundtable, 'Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans'' (Press Statement, 19 August 2019) <<https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans>>.

²⁷⁷ John Price, 'Climate Change' (Keynote Address, Centre for Policy Development: Financing a Sustainable Economy, Sydney, 18 June 2018).

²⁷⁸ Hutley SC and Hartford Davis, 'Supplementary 2019 Opinion' (n 236) [10].

²⁷⁹ Ibid [4].

²⁸⁰ Ibid [18].

²⁸¹ Ibid [2].

shareholders.”²⁸² ClientEarth, a shareholder of the company, submitted first, that the resolution was an impermissible instruction to the management board and therefore legally invalid.²⁸³ Secondly, it would harm the economic interests of the company as the project risked becoming a stranded asset.²⁸⁴ While the case did not expressly allege a breach of the directors’ duties, proposing a resolution that would harm the economic interests of a company would arguably amount to a breach. As the District Court in Poznań upheld the challenge on the first ground, it was unnecessary to consider whether the economic interests of the company would be harmed. Nevertheless, the case demonstrates the direction of climate change litigation in this area.

(b) Duty of disclosure

Corporations are under statutory duties to disclose certain matters to financiers, investors, shareholders and stock exchanges.²⁸⁵ Statutes may provide that a director of a company is liable for a company’s failure to meet its disclosure obligations.²⁸⁶ In Australia, for example, companies must disclose the financial statements and notes that provide a true and fair view of the company’s financial position and prospects.²⁸⁷ As it becomes increasingly accepted that climate change poses financial risks to companies through physical, transitional and liability risks, these must be considered and disclosed along with other financial risks.

In recent years there has been an upsurge in interest in climate-related financial disclosures. Climate risk and disclosure has become a shared interest of domestic financial regulatory bodies, international groups, investor bodies and the public.²⁸⁸ The Australian Stock Exchange (ASX) Listing Rules Guidance Note 9 recommends that a listed entity disclose whether it has “any material exposure to economic, environmental and social sustainability risks and, if it does, how it manages or intends to manage those risks”.²⁸⁹ A recent study by the Australian Securities and Investment Commission (ASIC) observed that while the majority of companies in the ASX 100 sample had considered climate risk in some manner, only 17% had identified climate risk as a material risk in their operating and financial reviews.²⁹⁰

²⁸² Sabin Center for Climate Change Law, ‘ClientEarth v Enea’ *Climate Case Chart* (Web Page) <climatecasechart.com/non-us-case/clientearth-v-enea/>.

²⁸³ ClientEarth, ‘Court win in world-first climate risk case puts future of Ostrołęka C coal plant in question’ (Media Release, 1 August 2019) <<https://www.clientearth.org/press/court-win-world-first-climate-case-ostroleka-c-future-in-question/>>.

²⁸⁴ *Ibid*

²⁸⁵ Preston (n 10) 788.

²⁸⁶ For example, see, s 79 of the *Corporations Act 2001* (Cth); Barker (n 181) 25.

²⁸⁷ See s 297 of the *Corporations Act 2001* (Cth).

²⁸⁸ Hutley SC and Hartford Davis, ‘Supplementary 2019 Opinion’ (n 236) [6],[7], [9].

²⁸⁹ ASX Listing Rules Guidance Note 9 (19 December 2016), 9, 19.

²⁹⁰ ASIC, Climate risk disclosure by Australia’s listed companies (Report No 593, September 2018) <<https://download.asic.gov.au/media/4871341/rep593-published-20-september-2018.pdf>>.

In 2017, the Financial Stability Board’s Taskforce on Climate-related Financial Disclosures (TCFD) published a report of recommendations for how companies should disclose climate-related risks.²⁹¹ The TCFD recommendations address disclosures relating to “governance, strategy, risk management, and metrics and targets”.²⁹² In 2018, the Expert Group on Climate Obligations of Enterprises published a set of principles aiming to clarify the emission reduction obligations of enterprises.²⁹³ Principle 18 details the nature of climate risks that enterprises must consider:

“An enterprise must evaluate:

- a) the vulnerability of its facilities and property to climate change;
- b) the financial effect that climate change will or is likely to have on the enterprise;
- c) the enterprise’s actions to increase its resilience to climate change; and
- d) the technically and financially feasible and cost effective options available to reduce GHG emissions.”²⁹⁴

Principle 19 provides that enterprises must disclose this information in a publicly accessible manner so that it is available for those who are likely to be directly or indirectly affected by the enterprises’ activities.²⁹⁵

The Paris Agreement may influence the nature of disclosure required. Corporations will need to consider and disclose the risks posed to the financial future of a corporation in a sub-2°C transition scenario whereby net-zero emissions are anticipated for the second half of the 21st century. For example, in a discussion paper released in 2018, the Australian Centre for Policy Development has recommended that companies should undertake scenario analysis consistent with the long-term temperature target in the Paris Agreement.²⁹⁶ The TCFD report also recommends that organisations use scenario analysis, including a 2°C or lower scenario that is “generally aligned with the objectives of the Paris Agreement”.²⁹⁷

Litigation concerning inadequate climate related risk disclosures is just starting to be commenced. In 2017, shareholders of the Commonwealth Bank of Australia brought proceedings alleging that the company’s 2016 report had violated its disclosure obligations under the *Corporations Act 2001* as it

²⁹¹ Taskforce on Climate-related Financial Disclosures, ‘Recommendations of the Taskforce on Climate-related Financial Disclosures’ (Final Report, 15 June 2017).

²⁹² Ibid 13.

²⁹³ Ibid 29.

²⁹⁴ Ibid 7.

²⁹⁵ Ibid 7.

²⁹⁶ Centre for Policy Development, ‘Climate Horizons: Scenarios and Strategies for Managing Climate Risk’ (Discussion Paper, July 2018) <<https://cpd.org.au/wp-content/uploads/2018/06/Climate-Horizons-report-2018.pdf>> 7, 19.

²⁹⁷ Taskforce on Climate-related Financial Disclosures (n 291) 27-28.

failed to disclose climate-related financial risks.²⁹⁸ In particular, the shareholders were concerned with the Bank’s possible investment in the proposed Adani Carmichael coal mine project. The suit was discontinued after the Bank issued its 2017 annual report that acknowledged the financial risks of climate change. The Bank also ruled out funding the Adani Carmichael coal mine project and issued a climate change policy statement.²⁹⁹

In 2018, a superannuation fund member commenced proceedings against his superannuation fund, REST, for failing to adequately disclose climate related business risks and strategies.³⁰⁰ Under s 1017C of the *Corporations Act 2001*, a superannuation fund must, on request by a concerned person, give the concerned person information that the concerned person reasonably requires for the purposes of understanding and making an informed judgment about the management and financial condition and investment performance of the superannuation product. The plaintiff, who will be unable to access his superannuation until the second half of the century, contends that REST failed to provide adequate information relating to:

- “(a) knowledge of REST’s Climate Change Business Risks;
- (b) opinion of Climate Change, the Physical Risks, the Transition Risks and REST’s Climate Change Business Risks;
- (c) actions responding to REST’s Climate Change Business Risks;
- (d) compliance with the [company and directors’ duties] with respect to REST’s Climate Change Business Risks.”³⁰¹

The case has not yet proceeded to hearing. In January of 2019, the Federal Court of Australia denied the plaintiff’s application for a maximum costs order due to insufficient information.³⁰² However, the Court accepted that the case raises “a socially significant issue about the role of superannuation trusts and trustees in the current public controversy about climate change”³⁰³ and has since granted the plaintiff leave to reapply to have the costs of the case limited.³⁰⁴

²⁹⁸ *Abrahams v Commonwealth Bank of Australia* (FCA, VID879/2017, Concise Statement filed 8 August 2017).

²⁹⁹ Gareth Hutchens, ‘Commonwealth Bank shareholders drop suit over nondisclosure of climate risks’, *The Guardian* (online, 21 September 2017) <<https://www.theguardian.com/australianews/2017/sep/21/commonwealth-bank-shareholders-drop-suit-over-non-disclosure-of-climate-risks>>.

³⁰⁰ *McVeigh v Retail Employees Superannuation Pty Limited* (Federal Court of Australia, NSD1333/2018, 24 July 2018). A copy of the complaint is available online at: <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2018/20180724_NSD13332018_complaint.pdf>.

³⁰¹ *Ibid* [13].

³⁰² *McVeigh v Retail Employees Superannuation Pty Ltd* [2019] FCA 14, <<https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/single/2019/2019fca0014>>.

³⁰³ *Ibid* [9].

³⁰⁴ ‘The 23-year-old taking a \$50bn super fund to court over climate change – Case update 21 Feb, 2019’ *Environmental Justice Australia* (Web Page, 21 February 2019) <<https://www.envirojustice.org.au/our-work/climate/rest-super-case/>>.

Companies are also under obligations to make accurate disclosures and must not make false or misleading financial statements.³⁰⁵ In the United States, between 2015-2016, a number of State attorneys general launched investigations into whether Exxon Mobil had published statements that misrepresented its assessment of the impacts of climate related risks on its business, including by misrepresenting the value of its oil reserves when oil prices were in decline.³⁰⁶ Exxon was unsuccessful in proceedings seeking to restrain the attorney generals in Massachusetts and New York from pursuing these investigations.³⁰⁷

On 24 October 2018, the New York Attorney General filed a complaint in the New York Supreme Court, alleging that Exxon Mobil fraudulently deceived investors and the investment community by making false and misleading assurances that it was effectively managing climate related risks to its business, while employing conflicting internal practices.³⁰⁸ The New York Attorney General submits that Exxon Mobil made representations that it applied an escalating proxy cost of greenhouse gas emissions to its business to simulate the impact of future climate change regulations. However, rather than applying this proxy cost internally, the complaint alleges that Exxon Mobil applied a lower proxy cost or no proxy cost at all in its internal projections for the purposes of making investment decisions, in its assessment of impairment charges prior to 2016 and in its projections of the future demand for oil and gas in the transport sector. The complaint also alleges that Exxon Mobil misled investors by presenting a deceptive assessment of the risks posed to the company by climate change regulations to limit global temperature rise to two degrees Celsius. The trial has been scheduled to commence on 23 October 2019. Shareholder actions against Exxon for misleading climate disclosures have also commenced in Texas³⁰⁹ and New Jersey.³¹⁰

6. The ripple effect of climate change litigation and the Paris Agreement

Litigation in other countries, influenced by or based on the Paris Agreement, may have the effect of inspiring climate change litigation in other countries. This is “the ripple effect” of climate change litigation. Like a pebble dropped into a pond, the ripples of a decision gradually expand outward, increasing in size across the whole pond.

³⁰⁵ See, for example, ss 728, 1041E, 1309 of the *Corporations Act 2001* (Cth).

³⁰⁶ See, for example, Barker (n 181) 35.

³⁰⁷ *Exxon Mobil Corporation v Schneiderman* (SDNY, 1:17-cv-02301, 29 March 2018).

³⁰⁸ *People of the State of New York v Exxon Mobil Corporation* (NY Sup Ct, 452044/2018, Complaint filed 24 October 2018).

³⁰⁹ *Ramirez v Exxon Mobil Corp* (ND Tex, 3:16-cv-3111, 14 August 2018).

³¹⁰ *Saratoga Advantage Trust Energy & Basic Materials Portfolio v Exxon* (D NY, 3:19-cv-16380, 8 June 2019).

Law-making is an iterative process. Judicial decisions influence legislative developments; legislative developments alter and shape common law. As societal views and norms evolve, our understanding of existing legal rights and responsibilities similarly must evolve. This is demonstrated through the need for existing legal instruments to be interpreted to account for climate change. The evolving higher standard to which directors will be held in relation to climate risks, as outlined in part 5, is but one example of such an evolution. The norm-setting nature of the Paris Agreement and its consequences for litigation, discussed in part 3, provides another.

In some jurisdictions breakthrough cases have led to the rapid transformation of the law, such as *Urgenda* in the Netherlands or *Future Generations* in Colombia. In the majority of instances, however, climate change litigation has developed the law incrementally.³¹¹ Cases and arguments that are first viewed as tenuous may be reassessed, adapted and reformulated by future litigants. As noted by Bell-James and Ryan in analysing the development of climate change litigation in Queensland, unsuccessful cases have nevertheless provided “progress, some minor victories, and some incremental development of the law”.³¹² While cases such as *Kivalina* were unsuccessful, the basis for the suit under different conditions may be successful. As our understanding of climate change and its place in traditional legal doctrines continues to shift, the many cases now being brought to hold corporations to account for their contributions to climate change may provide a different result. Indeed, Ganguly et al argue that a “rapidly evolving *scientific, discursive* and *constitutional* context has cleared the path for a second wave of strategic private litigation cases, which have a better chance of overcoming the judicial hurdles of standing, proof of harm and causation that scuppered earlier attempts”.³¹³

The types and nature of climate change cases have expanded rapidly. Part of this trend may be attributed to the ripple effect of climate change litigation. As climate change has increasingly been recognised as a global problem with potentially catastrophic consequences, individuals and groups in civil society have turned to litigation as a tool to strengthen governance and allocate responsibility for loss and damage. The ripple effect of climate litigation occurs as potential litigants are inspired by climate change cases, whether successful or unsuccessful, leading to further cases being brought. For litigants, the successes and failures of particular causes of action are closely examined to enhance and advance climate law. For courts, other jurisdictions may provide guidance on how novel arguments have been understood and adjudicated.³¹⁴ While the global nature of climate change may increase the complexity of climate change litigation, it also “lend[s] itself to remarkably comparative approaches

³¹¹ Bell-James and Ryan (n 15) 516.

³¹² Ibid 531.

³¹³ Ganguly et al (n 15) 849.

³¹⁴ Petra Minnerop, ‘Integrating the ‘duty of care’ under the European Convention on Human Rights and the science and law of climate change: the decision of the Hague Court of Appeal in the *Urgenda* case’ (2019) 37(2) *Journal of Energy & Natural Resources Law* 149, 173.

of courts in an inter-jurisdictional discourse”.³¹⁵ The rise of transnational judicial networks and specialist environmental courts may also support this trend.³¹⁶ As more cases are brought, the ripple effect increases exponentially. As Natasha Affolder explains:

“Environmental law is on the move. This reality is not lost on scholars who, using diverse discourses of transmission, diffusion, cross-fertilisation, dissemination, and even impregnation, document multiple manifestations of a similar idea – environmental law ideas travel...the language of ‘contagious environmental lawmaking’ might effectively define a space for discussing the ways in which legal ideas spread, and are being spread, across diverse jurisdictions and sites of lawmaking”.³¹⁷

Whatever language is used, it is clear that environmental scholarship is beginning to recognise and explore the implications of the increasing transnationalisation of environmental law.³¹⁸ Three cases in particular are demonstrative of this ripple effect in climate change litigation: *Urgenda*, *Juliana* and *Gloucester*.

(a) *Urgenda v Netherlands*

As has been discussed, *Urgenda* has been successful in both the Hague District Court and Court of Appeal in compelling the Netherlands to reduce its GHG emissions to 25% below 1990 levels by 2020, finding that the Government’s pledge of a 17% reduction was insufficient. *Urgenda* has been widely commented on³¹⁹ and viewed as a breakthrough case for climate litigation. The successes of *Urgenda* have been watched around the world, with litigants inspired to bring similar actions in other jurisdictions.

A Belgian non-governmental organisation, Klimaatzaak, has commenced proceedings in Belgium seeking a declaration that the Belgian Government and three regional governments (Flanders, Wallonia and Brussels) have failed to reduce greenhouse gas emissions to the extent required by

³¹⁵ Ibid.

³¹⁶ Ganguly et al (n 15) 862-864.

³¹⁷ Natasha Affolder, ‘Contagious Environmental Lawmaking’ (2019) 31(2) *Journal of Environmental Law* 187, 188-189.

³¹⁸ Ibid 212; Geetanjali Ganguly, ‘Judicial Transnationalization’ in *Research Handbook on Transnational Environmental Law* (Edward Elgar, forthcoming); Preston and Hanson (n 18).

³¹⁹ See for example, Suryapratim Roy and Edwin Woerdman, ‘Situating *Urgenda v the Netherlands* within comparative climate change litigation’ (2016) 34(2) *Journal of Energy & Natural Resources Law* 165; Tim Baxter, ‘*Urgenda*-style climate litigation has promise in Australia’ (2017) 32(2) *Australian Environment Review* 70; Spier (n 122); Minnerop (n 314); Don C Smith, ‘Landmark climate change-related judicial decisions handed down in the Netherlands and Australia: a preview of what’s to come?’ (2019) 37(2) *Journal of Energy & Natural Resources Law* 145; Chris McGrath, ‘*Urgenda* Appeal is groundbreaking for ambitious climate litigation globally’ (2019) 36 *Environmental and Planning Law Journal* 90.

law.³²⁰ *Klimaatzaak* are seeking to compel the governments to take all necessary measures to reduce their greenhouse gas emissions to the extent needed to prevent dangerous global warming. Specifically, the plaintiffs seek an *Urgenda* style ruling, that Belgium must reduce its greenhouse gas emissions by 40% by 2020 compared to 1990 levels.³²¹ The case has been delayed by interlocutory matters, but is expected to be determined to

ward the end of 2020. The website for *Klimaatzaak* refers specifically to the *Urgenda* case, noting: “we’ve seen in the Netherlands that this can be enforced via legal action: the Dutch climate organisation *Urgenda* won a similar case that has led to an ambitious climate law”.³²²

In *PUSH Sweden, Nature & Youth Sweden, et al v Government of Sweden*,³²³ several environmental groups brought proceedings against the Swedish government for negligence. The Swedish government held a controlling stake in an energy firm, Vattenfall. The energy firm, partially responding to an environmental review that recommended that the Swedish government divest from fossil fuels, sold several coal-fired power plants to a foreign company. The plaintiffs alleged that the government breached its duty of care towards its citizens by choosing to sell the assets instead of decommissioning the plants. The plaintiffs framed the government’s duty of care in similar terms to the successful claim in *Urgenda*, submitting that “the scope of the duty of care is determined by a combination of considerations such as Sweden’s accession to international conventions, nationally adopted environmental goals, environmental legislation, [and] government statutes”. The claim was dismissed by the Stockholm District Court as the plaintiffs had failed to demonstrate that they had suffered an injury from the decision.³²⁴

In the European Union, the ‘People’s Climate Case’,³²⁵ discussed earlier in relation to its carbon budget arguments, approaches the issue of emissions reduction targets from the regional perspective. The plaintiffs are seeking to compel the EU to set a more ambitious emissions reduction target pursuant to the Paris Agreement. In a press release, the plaintiffs refer to *Urgenda* and other recent

³²⁰ *VZW Klimaatzaak v Kingdom of Belgium* (Court of First Instance, Brussels, Belgium, Summons filed 27 April 2015). A copy of the summons in French is available online: <https://affaire-climat.be/documents/affaire_climat_Citation_fr.pdf>. A summary is available in English: *Klimaatzaak, 'Together We Demand an Ambitious Climate Policy'* (Web Page) <<https://www.klimaatzaak.eu/en>>.

³²¹ *Klimaatzaak, 'Together We Demand an Ambitious Climate Policy'* (Web Page) <<https://www.klimaatzaak.eu/en>>.

³²² *Klimaatzaak, 'Together We Demand An Ambitious Climate Policy'* (Web Page) <<https://www.klimaatzaak.eu/en>>.

³²³ (Stockholm District Court, Summons filed 15 September 2016).

³²⁴ A copy of the decision in English is not available online. For a summary of the decision, see: Sabin Center for Climate Change Law, 'PUSH Sweden, Nature and Youth Sweden and Others v. Government of Sweden' *Climate Case Chart* (Web Page) <climatecasechart.com/non-us-case/push-sweden-nature-youth-sweden-et-al-v-government-of-sweden/>.

³²⁵ *Carvalho v The European Parliament and the Council* (European General Court, T-330/18, complaint filed 24 May 2018) <<https://peoplesclimatecase.caneurope.org/wp-content/uploads/2018/08/application-delivered-to-european-general-court.pdf>>.

climate change cases to demonstrate the growing trend of litigation seeking to compel governments to cut emissions.³²⁶

In jurisdictions where similar actions may be unavailable or have low prospects of success, litigants look to other causes of action more suited to the jurisdiction to achieve similar ends. For example, in *Thomson v The Minister for Climate Change Issues*,³²⁷ referred to earlier in relation to its justiciability findings, the plaintiff was inspired by *Urgenda* to bring the action against the government. Like *Urgenda*, the case concerned the adequacy of the country's emission reduction targets. However, the proceedings were framed as an administrative law challenge instead of a negligence or human rights challenge. The Court also made reference to *Urgenda*, noting that other courts had similarly accepted that it "may be appropriate for domestic courts to play a role in Government decision making about climate change policy".³²⁸ Indeed, as McGrath explains "the ambition and imagination in the *Urgenda* case, more than the legal principles it was decided on, is the real lesson for lawyers when thinking of the opportunities for future climate litigation."³²⁹

(b) *Juliana v USA*

One of the most high-profile climate change litigation sagas, *Juliana v USA*,³³⁰ is undeniably influencing litigants across the world. In 2015, a group of young people sued the US government in the District Court of Oregon, alleging that both the government's failure to mitigate climate change and its affirmative action in promoting and approving fossil fuel development is leading to catastrophic climate change in breach of the plaintiffs' rights under the Constitution and public trust doctrine. On 10 November 2016, the case survived a motion to dismiss, with District Court Judge Aikin finding, "I have no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society."³³¹ Over the next two years the US government persisted in seeking to have the proceedings dismissed.³³² On 21 November 2018, the District Court stayed the trial pending a decision of the Ninth Circuit Court of Appeals on the defendant's interlocutory appeal.³³³ The appeal was heard on 4 June 2019. Despite the continuous delays by interlocutory

³²⁶ People's Climate Case, 'Courts are increasingly forcing emissions cuts' (Press Release, 5 December 2018) <<https://peoplesclimatecase.caneurope.org/2018/12/courts-are-increasingly-forcing-emissions-cuts/>>.

³²⁷ [2018] 2 NZLR 160.

³²⁸ *Thomson* [2018] 2 NZLR 160, [133].

³²⁹ Chris McGrath, 'Urgenda Appeal is groundbreaking for ambitious climate litigation globally' (2019) 36 *Environmental and Planning Law Journal* 90, 94.

³³⁰ (Or Cir Ct, 16-11-09273, 11 May 2015).

³³¹ *Juliana v USA* 217 F Supp 3d 1224 (D Or, 2016), <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2016/20161110_docket-615-cv-1517_opinion-and-order.pdf>.

³³² See, 'Major Court Orders and Filings' Our Children's Trust (Web Page) <<https://www.ourchildrenstrust.org/court-orders-and-pleadings>>.

³³³ *Juliana v USA* (D Or, 615-cv-01517-AA, 21 November 2018).

matters and appeals, the case has gained international media attention and inspired people across the world.

The ripple effect of climate litigation can be seen not only through the increase in public trust³³⁴ and constitutional rights claims³³⁵, but in the increase of climate change litigation with youth plaintiffs.

While youth plaintiffs have been involved in climate litigation long before *Juliana*, the case has gained international attention and highlighted the particular impacts of climate change on young people and future generations. As current actions contribute to climate change, but their consequences are delayed, the consequences of climate change will be most harshly felt by today's young people and future generations. The organisation co-ordinating *Juliana*, Our Children's Trust, has commenced youth actions against the government in 50 US States.³³⁶ A number of cases advocating for the youth and future generations have also commenced outside of the US. For example, the youth plaintiffs in *Future Generations v Ministry for the Environment*, referred to earlier in relation to the Colombian government's regulatory failures concerning deforestation, were inspired by the *Juliana* plaintiffs.³³⁷

On 26 November 2018, a Canadian environmental group, Environnement Jeunesse (ENJEU), filed a motion in the Superior Court of Québec for authorisation to institute a class action against the Canadian Government for inaction on climate change.³³⁸ The case contends that the government has breached the claimants' rights by not imposing reduction targets that are sufficient to meet the objectives of the Paris Agreement and by failing to comply with the targets it has set. The group are bringing the action on behalf of all persons aged 35 and under residing in Quebec. The claimants allege that failures of the Government to take action on climate change are infringing their fundamental rights under the *Canadian Charter of Rights and Freedoms*³³⁹ and the *Quebec Charter of Human Rights and Freedoms*. ENJEU are seeking a declaration to that effect in addition to punitive damages. Article 46.1 of the Quebec Charter of Human Rights and Freedoms provides that "[e]very person has a right to live in a healthful environment in which biodiversity is preserved, to the extent and according to the standards provided by law." The class action also alleges infringements of the

³³⁴ See for example, *Segovia v Climate Change Commission* (GR No. 211010, 7 March 2017, Supreme Court of the Philippines); *Ali v Federation of Pakistan* (Supreme Court of Pakistan, Constitutional petition filed 5 April 2016); *Pandey v India* (National Green Tribunal of India, Original Application No. 187 of 2017, Petition filed 24 March 2017).

³³⁵ See for example, *Greenpeace v Norwegian Ministry of Petroleum and Energy* (Oslo District Court, No. 16-166674TVI-OTIR/06, 4 January 2018); *Friends of the Irish Environment CLG v Fingal County Council* (High Court of Ireland, No 344 JR, 21 November 2017); *Future Generations v Ministry of the Environment and others* (Colom Sup Ct, 11001-22-03-000-2018-00319-01, 5 April 2018).

³³⁶ See, 'Other Proceedings in All 50 States' *Our Children's Trust* (Web Page)

<<https://www.ourchildrenstrust.org/other-proceedings-in-all-50-states>>.

³³⁷ 'Colombia' *Our Children's Trust* (Web Page) <<https://www.ourchildrenstrust.org/colombia>>.

³³⁸ *Environnement Jeunesse v Attorney General of Canada* (QCCS, 500-06, 26 November 2018).

³³⁹ *Canada Act 1982* (UK) c 11, sch B pt 1 ('*Canadian Charter of Rights and Freedoms*').

right to life and security of the person³⁴⁰ and the right to equality³⁴¹ under both Charters. The Superior Court of Quebec denied the plaintiffs' application for authorisation on 11 June 2019, finding that the identification of the class of plaintiffs was arbitrary.³⁴² However, the Court noted that despite the complex and political nature of the claim, the claim was likely justiciable.³⁴³ The plaintiffs intend to appeal the decision.³⁴⁴

Environmental public interest organisations involved in climate change litigation, such as Our Children's Trust, also engage and collaborate with similar organisations across jurisdictions. This enhances the ripple effect of climate change litigation, as public interest organisations track and evaluate international developments. Our Children's Trust note that they are "working to support youth and attorneys around the world to develop and advance legal actions to compel science-based government action on climate change in their own countries".³⁴⁵ Our Children's Trust, through its partners and attorneys, has also been involved in supporting the litigants in *Urgenda*³⁴⁶ and *Klimaatzaak*.³⁴⁷

(c) *Gloucester Resources Ltd v Minister for Planning*

While the judicial decision is recent, *Gloucester* has already been widely discussed both in Australia and around the world.³⁴⁸ In Australia, where climate litigation has rarely been successful, the decision demonstrates how litigants inspired by actions abroad are finding alternate avenues in their own countries. Leading climate change lawyer, Martijn Wilder, noted that the consideration of climate change in *Gloucester* is part of a world-wide shift in how courts are considering climate change:

³⁴⁰ *Canadian Charter of Rights and Freedoms* art 7; *Quebec Charter of Human Rights and Freedoms* art 1.

³⁴¹ *Canadian Charter of Rights and Freedoms* art 15; *Quebec Charter of Human Rights and Freedoms* art 10.

³⁴² *Environnement Jeunesse v Attorney General of Canada* (Superior Court of Quebec, N 500-06-000955-183, 11 July 2019) <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190711_500-06_decision-2.pdf> [140].

³⁴³ *Ibid* [71], [78], [80], [86].

³⁴⁴ 'ENvironnement JEUnesse will continue to fight for climate justice' *ENJEU* (Web Page) <<https://enjeu.qc.ca/justice-eng/>>.

³⁴⁵ 'Global Legal Actions' *Our Children's Trust* (Web Page) <<https://www.ourchildrenstrust.org/global-legal-actions/>>.

³⁴⁶ 'The Netherlands' *Our Children's Trust* (Web Page) <<https://www.ourchildrenstrust.org/the-netherlands/>>.

³⁴⁷ 'Belgium' *Our Children's Trust* (Web Page) <<https://www.ourchildrenstrust.org/belgium/>>.

³⁴⁸ See for example, Hughes (n 104); Michael Kirby, 'Environmental and Planning Law in the Age of Human Rights and Climate Change' (2019) 36 *Environmental and Planning Law Journal* 181; EDO NSW, Climate-ready planning laws for NSW: Rocky Hill and beyond (March 2019) <https://www.edonsw.org.au/climate_ready_planning_laws/>; Don C Smith, 'Landmark climate change-related judicial decisions handed down in the Netherlands and Australia: a preview of what's to come?' (2019) 37(2) *Journal of Energy & Natural Resources Law* 145; Robert White et al, 'Climate change takes centre stage in Land and Environment Court' (2019) 54 *Law Society Journal* 80; Matthew Groves and Greg Weeks, 'Climate Change as a Relevant Consideration' (2019) 26 *Australian Journal of Administrative Law* 49; Martijn Wilder AM and Sharona Coutts, 'The mainstreaming of climate litigation' (2019) 4 *Asian Jurist* 71.

“Climate change is no longer a niche issue, legally, factually or politically. We are increasingly seeing instances similar to this decision where courts are incorporating climate change into their fact-finding and reasoning as they would any other matter. These developments are having far-reaching and rapid consequences for decision-makers in the public and private sectors.”³⁴⁹

Harro van Asselt, a professor of climate law and policy in Finland, has noted the international attention *Gloucester* has received, explaining “climate litigation is emerging everywhere around the world, meaning that people have an interest in seeing what courts in other countries decide.”³⁵⁰ As climate change law is still developing and evolving, courts may look to international decisions for their approaches to novel arguments. Indeed, as President of the Center for International Environmental Law, Carroll Muffet, argues, climate change cases “tend to feed off each other... where you see the law moving into areas that are, in some respects, new... it's not at all uncommon for both plaintiffs and judges alike to look across borders for examples of relevant precedence.”³⁵¹ *Gloucester* has already been used in this way. In an amicus brief filed in support of the youth plaintiffs in *Chernaik v Brown*, a youth climate case in the Supreme Court of Oregon supported by Our Children’s Trust, the authors refer to the Court’s finding in *Gloucester* that the mine would cause intergenerational inequity in support of the youth challenge.³⁵² In an ongoing Canadian judicial review application, *Rainforest Conservation Foundation v Attorney General of Canada*, the youth plaintiffs allege that the approval for the Trans Mountain pipeline expansion project is invalid for failing to consider the climate change impacts of the project resulting from downstream emissions.³⁵³ The youth plaintiffs have applied for leave to bring the case, and refer to the reasoning in *Gloucester* rejecting the market substitution argument in their reply submissions.³⁵⁴

³⁴⁹ Martijn Wilder AM, 'No More New Coal Mines in NSW?' *Baker McKenzie* (Web Page, 19 February 2019) <<https://www.bakermckenzie.com/en/insight/publications/2019/02/no-more-coalmines>>.

³⁵⁰ Harro Van Asselt, quoted in Peter Hannam, 'These residents stopped a coal mine, made history and sent ripples through boardrooms around the world' *The Sydney Morning Herald* (online, 17 February 2019) <<https://www.smh.com.au/environment/climate-change/these-residents-stopped-a-coal-mine-made-history-and-sent-ripples-through-boardrooms-around-the-world-20190214-p50xw9.html>>.

³⁵¹ Carroll Muffet, quoted in Jennifer Hijazi, 'Climate cases to watch around the world' *E&E News* (online, 10 July 2019) <<https://www.eenews.net/climatewire/stories/1060718241?t=https%3A%2Fwww.eenews.net%2Fstories%2F1060718241>>.

³⁵² Brief of Amici Curiae Law Professors in Support of Petitioners, filed in *Chernaik v Brown* (Supreme Court of Oregon, S066564, July 2019) 14.

³⁵³ Melanie Woods, 'Teens Fighting to Take Feds to Court Over Trans Mountain Pipeline' *Huffpost* (online, 30 July 2019) <https://www.huffingtonpost.ca/entry/teens-suing-federal-government-pipeline_ca_5d40983de4b0db8affaf8c75?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xILmNvbS8&guce_referrer_sig=AQAAALYYappXx3bjMhFp0Nn1AH6hUKPK4Lum8Nk9A2n6oL04MN7SMT1AbDAYMna2M_0Q8ptUMKO8WTM9LgPfvJRh8swKWmyF3EqWvSI_XzupbUEyw0Zvr5VinKsjplS31VSROw24gFDL7umoDVEuqS-WCNiD3v7EiMH52l6VWxez2guW>.

³⁵⁴ Applicants’ submissions in reply, filed in motion for leave to apply for judicial review, *Rainforest Conservation Foundation v Attorney General of Canada* (Federal Court of Appeal of Canada, 19-A-35).

In *Gloucester*, the Court also drew on international jurisprudence in support of a number of its findings.³⁵⁵ The Court referred to decisions in other jurisdictions in finding that not only the Scope 1 and Scope 2 emissions but also the Scope 3 emissions of the Project needed to be considered,³⁵⁶ climate change is caused by cumulative emissions from a myriad of individual sources and will be solved by abatement of the GHG emissions from these myriad of individual sources,³⁵⁷ and in rejecting the market substitution and carbon leakage arguments raised.³⁵⁸

Conclusion

The Paris Agreement is evidence of global political ambition to mitigate and adapt to climate change and increased scientific certainty that anthropogenic climate change will have dire consequences for the environment and human rights. It is an unequivocal global signal of the future direction of climate change policy, with significant implications for the public and private sector. While the Paris Agreement may not create substantive legal obligations to reduce emissions in any particular way, it is nevertheless influencing societal norms and values concurrently with increased scientific certainty of the factual consideration of climate change and heightened public recognition of the severity of the problem. Legislation, policy and judicial decision-making are progressing to reflect these changes.

Climate change litigation may rely on the Paris Agreement to support finding causal links between the overall emissions of a country, specific regulatory failures to reduce emissions and emissions intensive projects to the global problem of climate change. Directors' duties and corporate responsibilities are also being altered by climate change and the undeniable transition away from fossil fuels that is required to meet the Paris Agreement temperature target. As courts are increasingly asked to adjudicate climate change issues, the ripple effect of climate change litigation is likely to continue. Successful climate cases in one jurisdiction will inspire cases in other countries. Emerging climate change cases will continue to explore new avenues for action.

The Paris Agreement is only the first universal climate change agreement. Successive UN climate negotiations may give rise to new obligations that will continue to influence climate change litigation.

³⁵⁵ Minnerop (n 314) 174.

³⁵⁶ The Court referred to: *San Juan Citizens Alliance v United States Bureau of Land Management* 326 F Supp 3d 1227 (D N M, 2018); *Sierra Club v Federal Energy Regulatory Commission* 867 F 3d 1357 (DC Cir, 2017); *Montana Environmental Information Centre v US Office of Mining* 274 F. Supp 3d 1074 (D Mont, 2017).

³⁵⁷ The Court referred to: *Urgenda I* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015); *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018); *Massachusetts v Environmental Protection Agency* 549 US 497 (2007).

³⁵⁸ The Court referred to: *Urgenda I* (The Hague District Court, C/09/456689/HA ZA 13-1396, 24 June 2015); *Urgenda II* (The Hague Court of Appeal, 200.178.245/01, 9 October 2018); *WildEarth Guardians v US Bureau of Land Management* 870 F 3d 1222 (10th Cir, 2017).