Recent Developments in Climate Change Litigation in Australia and Beyond¹

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Introduction

According to the United Nations Environment Programme (UNEP), "climate change litigation" refers to cases brought before administrative, judicial and other investigatory bodies that raise issues of law or fact regarding the science of climate change and climate change mitigation and adaptation efforts.² The UNEP identified five trends regarding the purposes of recent climate change litigation.³ These are holding governments to their legislative and policy commitments, linking the impacts of resource extraction to climate change and resilience, establishing that particular emissions are the proximate cause of particular adverse climate change impacts, establishing liability for failures to adapt to climate change, and applying the public trust doctrine to climate change.

As of March 2017, 80 climate change cases had been filed in Australia, almost 90 cases in the United Kingdom (UK) and the Court of Justice of the European Union. Sixteen and 13 cases have been heard in New Zealand and Spain respectively. The Columbia Law School Sabin Center for Climate Change Law records 1,288 climate

¹ I would like to thank Georgia Pick tipstaff and researcher at the Land and Environment Court of NSW for her considerable assistance in the preparation of this paper.

² United Nations Environment Programme, 'The Status of Climate Change Litigation: A Global Review' (May 2017) p 10 https://www.unenvironment.org/resources/publication/status-climate-change-litigation-global-review.

³ Ibid p 14.

⁴ United Nations Environment Programme, above n 2, p 11. Based on data from the Sabin Center for Climate Change Law.

change cases to date.⁵ The majority of cases have been filed in the United States of America (USA) (1009) while 279 cases have been filed in other jurisdictions.⁶

The large volume of climate change litigation worldwide means this presentation will not be in any way comprehensive of developments in all jurisdictions. A few cases of note which demonstrate the diversity of legal action being taken will be considered, drawing on recent cases in Australia, the Netherlands, the USA and the UK.

Categorising climate change litigation

The legal rights and obligations that give rise to domestic climate change litigation can be categorised as follows. First, many cases have been based on constitutional rights such as the right to a clean or healthy environment. Cases have also been based on constitutional rights that do not expressly relate to the environment, for example the due process clause in the USA Constitution considered in *Clean Air Council v United States of America* (Clean Air Council).

Secondly, plaintiffs in common law jurisdictions have begun to use causes of action for tort, nuisance and negligence. Legal codes in civil law jurisdictions may recognise similar causes of action, see for example *Urgenda v The State of the Netherlands* (*Urgenda*)¹⁰.

Thirdly, statutes or national policies have codified climate change obligations for private and public entities.¹¹ Litigation has arisen concerning the applicability and

⁵ Sabin Center for Climate Change Law, 'About' (Climate Change Litigation Databases, 2019) http://climatecasechart.com/about/>.

⁶ Ibid; USA 'cases' include not just judicial and quasi-judicial administrative actions and proceedings but also rulemaking petitions, requests for reconsideration of regulations, notices of intent to sue (in situations where lawsuits were not subsequently filed) and subpoenas.

⁷ United Nations Environment Programme, above n 2, p 32. See for eg, *In re Court on its own Motion v State of Himachal Pradesh and Ors* 389/2014, 1145/2015, 1250/2015, 324/2016 & 325/2016 (National Green Tribunal); *Leghari v Federation of Pakistan* (2015) W.P No 25501/2015.

⁸ Clean Air Council v United States of America, 17-4977.

⁹ United Nations Environment Programme, above n 2, p 34.

¹⁰ Urgenda Foundation v The State of the Netherlands, C/09/456689/HA ZA 13-1396 (24 June 2015).

¹¹ United Nations Environment Programme, above n 2, p 36.

implementation of these obligations, see for example *Plan B Earth v Secretary of State for Business, Energy and Industrial Strategy*¹² (*Plan B*) in the UK. Australian climate change litigation has mostly arisen in the context of environmental and planning legislation, which is recognised by the UNEP within this category of climate change litigation.¹³

Fourthly, some sources of domestic legal rights and obligations have constitutional, common law and statutory elements (*Urgenda*) and can be categorised as hybrid approaches to climate change litigation. Further the public trust doctrine (a common law doctrine informed by constitutional and statutory provisions)¹⁴ – relied on in *Juliana v United States of America*¹⁵ and *Clean Air Council* – is also a hybrid approach.

Climate change litigation in the Land and Environment Court of NSW

Most climate change litigation in Australia to date including in the Land and Environment Court of NSW has challenged administrative decision-making about a particular development through judicial review proceedings or a merits review appeal under planning legislation. These are quite different kinds of cases and serve quite different purposes. Hence their outcomes are also different.

Broadly, proceedings focus on climate change mitigation and/or climate change adaptation. Proceedings concerning the former could involve renewable energy projects like wind farm approvals and point-source greenhouse gas (GHG) emitters like coal mines. Proceedings concerning the latter could involve coastal development and inland water resource planning.

A very recent significant merits appeal judgment considered the impacts of downstream GHG emissions potentially resulting from a proposed coal mine, Gloucester Resources Ltd v Minister for Planning (Gloucester). The merits appeal was commenced in the Land and Environment Court of NSW by the mining company following refusal of its application for the extension of an open cut mine by the

¹³ United Nations Environment Programme, above n 2, p 37; Jacqueline Peel, Hari Osofsky and Anita Foerster, 'Shaping the Next Generation of Climate Change Litigation in Australia' (2017) 41 *Melbourne University Law Review* 793, 802.

¹² C1/2018/1750

¹⁴ United Nations Environment Programme, above n 2, p 39.

¹⁵ Juliana v United States of America, 6:15-cv-1517

¹⁶ [2019] NSWLEC 7.

Independent Hearing Assessment Panel (IHAP). A community group Groundswell Gloucester Inc was joined as a party by a commissioner of the Land and Environment Court of NSW. Development consent for the proposed mine extension was refused on several bases including the potential adverse impacts of climate change which this development would contribute to. An excellent discussion of the implications of this decision for consent authorities and the need to consider the potential downstream emissions of the burning of coal from proposed coal mines can be found in Josie Walker, "Gloucester Resources Ltd v Minister for Planning [2019]: What will and will not change as a result of this decision" (barrister, Frederick Jordan Chambers, presentation delivered to UNSWCLE, 14 March 2019, Sydney NSW). A copy of that paper is available today.

Wollar Progress Association v Wilpinjong Coal Pty Ltd and Minister for Planning (Wollar), 17 a recent judicial review decision, addressed climate change issues. The applicant community association in that case sought to challenge the decision by the New South Wales (NSW) Planning Assessment Commission (PAC) as delegate of the Minister for Planning in April 2017 to allow the extension of the Wilpinjong open cut coal mine in Mudgee. The applicant argued that the PAC failed to consider the matters in cl 14(2) of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP). This subclause states that in determining a development application for the purposes of inter alia mining "the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions". The respondent mining company sought to address the requirement of the Mining SEPP by providing expert advice which formed part of the environmental impact statement quantifying the emissions profile of the project and the economic cost of those emissions. The respondent's environmental assessment estimated that the expanded mine would emit 0.02% of Australia's GHGs over its life and priced the additional cost of carbon emissions for the project at approximately \$6.7 million.¹⁸ The reporting of upstream and downstream (scope 3) emissions included transportation and end users of the coal, but did not consider other less easily quantified contributions. The applicant argued that the PAC's assessment should have also had regard to particular state or national policies, the Paris Agreement in respect of which Australia has adopted 2005 emissions as a baseline and a target reduction of 26-28% by 2030, and the

¹⁷ [2018] NSWLEC 92.

¹⁸ Wollar Progress Association v Wilpinjong Coal Pty Ltd [2018] NSWLEC 92 [31], [54].

2016 NSW Climate Change Policy Framework's "long term aspirational objective of net zero-emissions by 2050". 19

Sheahan J accepted the respondent's submissions that while these documents might be generally described as policies, they were not "applicable" policies within the meaning of cl 14(2) of the Mining SEPP.²⁰ They were not capable of being applied to the task of the consent authority, namely considering an assessment of GHG emissions. The relevant policies for the purpose of cl 14(2) had to be ones relevant to the nature of the assessment and capable of being applied by the consent authority. Ultimately the documents set reduction targets without prescribing how these targets are to be achieved and were not capable of application by a consent authority. The PAC had sufficient material before it to satisfy the requirement in the Mining SEPP to consider the GHG emissions of the project. The proceedings were dismissed.

Another very recent judicial review case to consider the approach of a consent authority to GHG emissions is *Australian Coal Alliance Inc v Wyong Coal Pty Ltd* (*Wyong*).²¹ The applicant challenged the validity of the PAC's decision on 16 January 2018 to approve a coal mine project on the basis that inter alia there was a failure to consider downstream emissions and cl 14(2) of the Mining SEPP. The applicant argued that legal errors had been made by the PAC in its determination report.

The applicant argued that there was an absence of specific references to the phrase "clause 14(2) of the SEPP" in the report.²² Moore J rejected this submission finding that the report had addressed the substance of what would be required to satisfy the terms of the provision.²³ Following *Manly Council v Hortis*²⁴ at [32], his Honour held that it is unnecessary to cite expressly a provision such as cl 14(2) of the Mining SEPP if that which is required to be addressed is in fact sufficiently addressed.

The applicant also relied on the following statement in the PAC's determination report:²⁵

¹⁹ Ibid at [127].

²⁰ Ibid at [146]-[149], [183].

²¹ [2019] NSWLEC 31.

²² Ibid at [86].

²³ Ibid at [87].

²⁴ (2001) 113 LGERA 321.

²⁵ [2019] NSWLEC 31 at [90].

[t]he Commission also acknowledges the greenhouse gas emissions that would be produced from any future burning of the coal extracted, whether it is consumed locally or internationally. It is noted that presently there are alternative coal sources available to the market in the event that this mine does not proceed. Consequently, the downstream use of the coal ... will need to be considered at that location.

The applicant argued that the downstream emissions of the proposed mine were deferred to consideration in the context of emissions at the location of burning of the coal proposed to be extracted from this mine. They should have been dealt with in the context of the proposed mine. Rejecting this submission, Moore J held at [93] that the PAC did consider the issue of whether or not it was appropriate or possible to apply conditions to the consent dealing with scope 3 emissions. The PAC concluded that the appropriate place to deal with such emissions was at the location where they were caused to be emitted by the burning of the coal proposed to be produced by the mine or at "a national and international policy or strategic planning level, outside and above the project assessment process in NSW". The proceedings were dismissed.

Climate change litigation in other Australian jurisdictions

The Carmichael coal mine proposed by Adani Mining Pty Ltd (Adani) in the north of the Galilee Basin in Central Queensland was initially valued at \$16.5 billion²⁷ which would have made it the largest mine in Australia.²⁸ The mine has been the subject of extensive litigation in both state and federal courts.

At the state level, the mine required mining leases under the *Mineral Resources Act* 1989 (Qld) (MR Act) and an environmental authority (EA) under the *Environmental Protection Act* 1994 (Qld) (EP Act). The Queensland Coordinator-General published

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²⁶ Ibid at [91].

²⁷ Prior to a recent announcement by Adani that the output of the project be reduced from 60 to 10-15 million tonnes per year: SBS News, 'Construction on Adani Coal Mine in Queensland to Begin Next Year' (29 November 2018)
<a href="https://www.sbs.com.au/news/construction-on-adani-coal-mine-in-queensland-to-begin-deco

next-year>.

²⁸ Queensland Government, Department of State Development, Manufacturing, Infrastructure and Planning, 'Carmichael Coal Mine and Rail Project' (19 July 2018)

http://statedevelopment.qld.gov.au/assessments-and-approvals/carmichael-coal-mine-and-rail-project.html; SBS News, 'Construction on Adani coal mine in Queensland to begin next year' (29 November 2018) https://www.sbs.com.au/news/construction-on-adani-coal-mine-in-queensland-to-begin-next-year.

a report on 7 May 2014 recommending the mine for approval.²⁹ Upon public advertisement of the mine, Land Services of Coast and Country Inc (LSCC) objected to the grant of the mining leases and the EA on a number of grounds including the contribution that combustion of coal from the mine would make to climate change.³⁰

Pursuant to Land Court Practice Direction No 7 of 2013, the first respondent in the Land Court proceedings,³¹ LSCC, elected to be a level 3 objector that is, to participate fully in the proceedings (attend the hearing, call evidence and cross-examine witnesses and make submissions).

Under the MR Act, the Land Court must hear applications for the grant of mining leases and associated objections.³² The Land Court must make a recommendation to the Minister that the application be granted or rejected in whole or in part and recommend that the mining lease be granted subject to such conditions that the Land Court considers appropriate.³³

Sections 269(4)(j) and (k) of the MR Act stated that the Land Court, in making a recommendation to the Minister that an application for a mining lease be granted, must take into account and consider whether "there will be any adverse environmental impact caused by those operations and, if so, the extent thereof" and whether "the public right and interest will be prejudiced" respectively. Section 191(g) of the EP Act required the Land Court to consider the "standard criteria" which according to the dictionary to the EP Act includes inter alia the precautionary principle and intergenerational equity. LSCC argued that if the mine proceeded it would cause severe adverse environmental impacts due to direct and indirect emissions of GHGs contributing to climate change and ocean acidification from the mining, transport and use of coal from the mine. The emissions from the mine

²⁹ Department of State Development, Infrastructure and Planning, 'Carmichael Coal Mine and Rail Project: Coordinator-General's Evaluation Report on the Environmental Impact Statement' (May 2014).

³⁰ Land Services of Coast and Country Inc, 'Objection Form to Mining Lease Application' http://envlaw.com.au/wp-content/uploads/carmichael1.pdf; Land Services of Coast and Country Inc, 'Submission Form – Application or Amendment Application for Environmental Authority' http://envlaw.com.au/wp-content/uploads/carmichael2.pdf.

³¹ Adani Mining Pty Ltd v Land Services of Coast and Country Inc, Conservation Action Trust and Chief Executive, Department of Environment and Heritage Protection [2015] QLC 48.

³² Mineral Resources Act 1989 (Qld) ss 268(1)-(2).

³³ Ibid ss 269(1)(b), (2)-(3).

³⁴ Ibid at [421].

would have a global impact in the physical cause and effect sense.³⁵ That climate impact would damage Queensland's environment generally and the Great Barrier Reef specifically. The contribution of the mine to climate change was a factor that the Land Court was bound to consider under s 191 of the EP Act and s 269(4) of the MR Act.³⁶

Under s 185(1) of the EP Act the Court must make an "objections decision" in relation to the referral of the application for a draft EA by recommending to the administering authority that the draft EA be approved or refused.³⁷ Regarding the grant of the mining lease, the Court applied the decision of Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth - Brisbane Co-op Ltd³⁸ which held that the impact of scope 3 emissions should be excluded from the matters considered in s 269(4)(j) of the MR Act.³⁹ This hinged on the wording of s 269(4)(j), that the Court is required to consider "any adverse environmental impact caused by those operations" (emphasis added) (that is, the operations to be carried on under the authority of the proposed mining lease per s 269(4)(i)). Accordingly only scope 1 and 2 emissions were considered which would account for 0.01% of the world's and 0.25% of Australia's remaining carbon budget having regard to the 2℃ target. 40 The Court found that these emissions would have an adverse impact on the environment but there was no evidence as to specific adverse effects. 41 With respect to LSCC's objection to the mine on public interest grounds (pursuant to s 269(4)(k) of the MR Act), the Court accepted the applicant's evidence that the supply of coal is governed by global demand which would not change as a result of the commissioning of the mine.⁴² If the coal was not supplied by the mine it would come from elsewhere. Accordingly there would be no increase in GHG emissions if the mine was

³⁵ Ibid at [438].

³⁶ Ibid at [454].

³⁷ Environmental Protection Act 1994 (Qld) s 190.

³⁸ (2012) 33 QLCR 79.

³⁹ Adani Mining Pty Ltd v Land Services of Coast and Country Inc, Conservation Action Trust and Chief Executive, Department of Environment and Heritage Protection [2015] QLC 48 at [446], followed by Hancock Coal Pty Ltd v Kelly (No 4) [2014] QLC 12 at [216]; Coast and Country Association of Queensland Inc v Smith [2015] QSC 260 at [39].

⁴⁰ Ibid at [457].

⁴¹ Ibid at [617].

⁴² Ibid at [448].

approved.⁴³ This is because alternative supply would be sourced elsewhere to meet global demand if the mine was not approved. Therefore the scope 3 emissions would not have an adverse impact on the public interest. The Court recommended that the Minister Administering the MR Act grant the relevant mining leases.⁴⁴

Regarding the grant of an EA, LSCC stated that environmental harm likely to be caused by the GHGs produced by the mining, transport and use of the coal was clearly harm which was a "direct or indirect" result of the mining activities as comprehended by s 14 of the EP Act. 45 It followed, therefore, that the fact that a decision to approve an EA for the mine would authorise that "environmental harm" required the Court to consider the contribution that the mine would make to climate change through the mining, transport and use of the coal from the mine. The Court stated that although s 191 of the EP Act does not expressly refer to "environmental harm" as defined in s 14 as a matter to be taken into account in considering an objection, the matters set out in s 191 the Court will inevitably determine whether actions may give rise to "environmental harm" as defined. 46 This did not mean that the Court's jurisdiction to examine factors such as any climate change caused by burning the coal from the mine was thereby expanded. The Court stated that it would only consider aspects of environmental harm that are within its jurisdiction. Applying the Supreme Court of Queensland's decision in Coast and Country Association of Queensland Inc v Smith, 47 the Court stated that if global emissions are not increased due to the mine then there is no impact that constitutes or causes environmental harm. 48 As discussed above in relation to the public interest test under the MR Act. the evidence suggested that there would be no increase in scope 3 emissions if the mine was not approved because other coal would be obtained from elsewhere.⁴⁹ The Court ultimately found that the adverse consequences arising from the environmental damage of the mine was outweighed by the benefits that would flow

⁴³ Ibid at [449].

⁴⁴ Ibid at [626].

⁴⁵ Ibid at [438].

⁴⁶ Ibid at [48].

⁴⁷ [2015] QSC 260.

⁴⁸ Adani Mining Pty Ltd v Land Services of Coast and Country Inc, Conservation Action Trust and Chief Executive, Department of Environment and Heritage Protection [2015] QLC 48 at [453].

⁴⁹ Ibid at [456].

from its development and therefore recommended that the administering authority issue the relevant EA.⁵⁰

Following the Land Court's decision on 15 December 2015, the delegate of the Chief Executive of the Department of Environment and Heritage Protection issued a final EA to Adani on 2 February 2016 pursuant to s 194(2)(ii) of the EP Act. A legal challenge to the validity of this decision was dismissed by the Supreme Court of Queensland in November 2016.⁵¹ The mining leases for the project were granted on 4 March 2016.⁵²

Concurrently with the Queensland assessment of the mine under the EP Act, the mine was assessed under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) under a bilateral agreement between the Queensland and Commonwealth governments. The mine was approved by the Federal Environment Minister in July 2014. This approval was set aside by the Federal Court by consent on 4 August 2015.53 The Minister reconsidered the application and granted a second approval on 14 October 2015.54 The Australian Conservation Foundation Inc (ACF) brought judicial review proceedings under the Administrative Decisions (Judicial Review) Act 1977 and s 39B of the Judiciary Act 1903 (Cth). It argued that the Minister failed to consider the likely impacts of the mine on the Great Barrier Reef by way of GHG emissions arising from the overseas transport and combustion of coal produced at the mine. Specifically, the ACF argued that the Minister erred in characterising combustion emissions as "not a direct consequence" of the proposed action, without firstly applying the "impact" test in s 527E of the EPBC Act. 55 The consequences for the Great Barrier Reef of climate change resulting from the emissions were impacts of the action of the same species as "downstream" consequences. 56 The ACF also argued that in the Minister's statement

⁵⁰ Ibid at [625]-[626].

⁵¹ See Land Services of Coast and Country Inc v Chief Executive, Department of Environment and Heritage Protection & Anor [2016] QSC 272.

⁵² Business Queensland, Queensland Government, 'MinesOnlineMaps' (2019) https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/online-services/minesonlinemaps.

⁵³ Australian Conservation Foundation Inc v Minister for the Environment (2016) FCR 308; [2016] FCA 1042 at [3].

⁵⁴ Ibid at [1].

⁵⁵ Ibid at [63].

⁵⁶ Ibid at [67].

of reasons the Minister did not consider or apply the precautionary principle in relation to climate change (as required by ss 136(2)(a) and 391 of the EPBC Act) to his conclusion regarding the difficulty in identifying the necessary relationship between the taking of the action and possible impacts on matters of national environmental significance.

In relation to s 527E of the EPBC Act, Griffiths J stated that for an event or circumstance to be an indirect consequence of an action, it must be demonstrated that the action is a "substantial cause" of that event or circumstance per s 527E(1)(b).⁵⁷ The Minister was unable to draw firm conclusions as to the likely contribution of the project to a specific increase in global temperatures.⁵⁸ This meant that it was difficult to identify the necessary relationship between the taking of the action and any possible impacts on relevant environmental matters, including the Great Barrier Reef. The Minister had explained that the quantity of overseas gas emissions was subject to a range of variables and that, although it was possible to determine a possible gross quantity of such emissions that may occur, the range of variables relevant to such a determination meant that the quantity of actual net emissions was speculative at that time. Because the Minister explained why he could not make the finding that the combustion emissions would have an adverse impact on the Great Barrier Reef, there was no reviewable error concerning this aspect of the Minister's reasoning.⁵⁹

In relation to the precautionary principle, Griffiths J stated that the Minister made no finding that there was any threat of serious or irreversible damage to the Great Barrier Reef which would be caused by the combustion of emissions.⁶⁰ The Minister stated that the actual quantity of emissions that is likely to be additional to current global GHG emissions depends on a range of variables including whether the coal replaces coal currently provided by other suppliers and whether the coal is used as a substitute for other energy sources.⁶¹ Further, countries responsible for burning the coal would be expected under international agreements to address GHG emissions. Accordingly a necessary precondition to the application of the precautionary principle did not exist in this case. An absence of any explicit reference in the Minister's

⁵⁷ Ibid at [157].

⁵⁸ Ibid at [161].

⁵⁹ Ibid at [174].

⁶⁰ Ibid at [184].

⁶¹ Ibid at [58], [184].

statement of reasons to taking into account the precautionary principle in relation to GHG emissions did not invalidate the approval.⁶²

His Honour's findings were upheld on appeal by the Full Court in August 2017.⁶³ The ACF commenced a third judicial review challenge in the Federal Court on 4 December 2018 challenging the Minister's consideration of the impacts of associated water infrastructure for the mine.⁶⁴

Litigation in Australia based on a breach of directors' duties

Noel Hutley SC and Sebastian Hartford-Davis wrote an opinion piece in October 2016 on the intersection of directors' duties of care and climate change. Hutley and Hartford-Davis characterised climate change risks as physical risks (risks associated with rising aggregate global temperatures) and transaction risks (those associated with developments that may occur in the process of adjusting towards a lower-carbon economy). The degree of care and diligence required of a director depends on the nature and extent of the foreseeable risk of harm to the company. The test is whether the director should have known of the danger. This would involve an assessment of the conduct of the individual against the standard of a reasonable person by reference to the prevailing state of knowledge as publicised at the time.

⁶² Ibid at [176], [186].

⁶³ Australian Conservation Foundation Inc v Minister for the Environment and Energy (2017) 251 FCR 359; [2017] FCAFC 134.

⁶⁴ Australian Conservation Foundation, 'ACF to Challenge Federal Government Failure to Apply the Water Trigger to Adani Pipeline Plan' (4 December 2018) https://www.acf.org.au/acf_challenge_water_trigger>.

⁶⁵ Noel Hutley and Sebastian Hartford-Davis, 'Climate Change and Directors' Duties: Memorandum of Opinion' (Centre for Policy Development and the Future Business Council, 7 October 2016) https://cpd.org.au/wp-content/uploads/2016/10/Legal-Opinion-on-Climate-Change-and-Directors-Duties.pdf.

⁶⁶ Ibid p 2.

 ⁶⁷ Ibid p 6, citing *Vrisakis v ASC* (1993) 9 WAR 395 at 449-50 (Ipp J); *Vines v ASIC* (2007)
 73 NSWLR 451, 603 [814] (Ipp JA); *ASIC v Doyle* (2001) 38 ACSR 606, 641.

⁶⁸ Hutley and Hartford-Davis, above n 60, p 15, citing *ASIC v Rich* (2009) 75 ACSR 1, 622 [7237] (Austin J).

⁶⁹ Hutley and Hartford-Davis, above n 60, p 15.

While it may not be currently possible to prove that a given weather event is attributable to a given source of GHG emissions, Hutley and Hartford-Davis argue that directors should have evidence of forward planning to deal with an overall increase in the frequency and severity of weather events. For example, a director of an insurance company would have a duty to consider the impact of increased incidents of extreme weather events upon the business of the company and to ensure that this was being addressed by updating models and adjusting coverage as appropriate. Directors may also need to consider risks associated with shifts in investor/consumer behaviour and preferences including due to potential reputational damage associated with poor sustainability practices.

In light of the above, Hutley and Hartford-Davis concluded that it is "only a matter of time before proceedings are initiated against a director who has failed to perceive, disclose or take steps in relation to a foreseeable climate-related risk that can be demonstrated to have caused harm to a company" (including reputational harm).⁷³ They urged directors to consider and if appropriate take steps to inform themselves about climate-related risks to their business and whether they will impact the business adversely or favourably.⁷⁴

Hutley and Hartford-Davis's concerns have been recently echoed by the Reserve Bank of Australia (RBA) and the Australian Prudential Regulation Authority (APRA). APRA's head of insurance Geoff Summerhayes acknowledged that the economic risks of climate change are "material, foreseeable and actionable now" and accordingly APRA will increase its scrutiny of how financial service companies are managing the financial risks of climate change to their businesses. The RBA's deputy governor Guy Debelle strongly endorsed Summerhayes' comments, arguing

⁷⁰ Ibid p 7.

⁷¹ Ibid p 9.

⁷² Ibid p 14, citing *ASIC v Cassimatis (No 8)* [2016] FCA 1023 where Edelman J suggested that reputational damage might constitute harm to the interests of a company (in the context of the duty of care and diligence).

⁷³ Hutley and Hartford-Davis, above n 60, p 22.

⁷⁴ Ibid p 16.

⁷⁵ Australian Prudential Regulation Authority, 'APRA to Step up Scrutiny of Climate Risks after Releasing Survey Results' (20 March 2019) http://apra.gov.au/media-centre/media-releases/apra-step-scrutiny-climate-risks-after-releasing-survey-results.

that the physical impact of climate change and the transition to a low-carbon economy will likely have "first-order economic effects". ⁷⁶

Failure to adequately disclose the above climate change risks could put directors at risk of liability under the *Corporations Act 2001* (Cth). A recent report published by the Australian Securities and Investments Commission (ASIC) found that the majority of ASX 100 companies in the study sample had to some extent considered climate risk to the company's business. Forty percent of those ASX 100 companies called out climate risk specifically as a material risk in their operating and financial review. When looking at the total ASX 300 sample, only 17% of listed companies in that cohort cited the risk as material. The ASIC concluded that disclosure practices were overall fragmented and inconsistent. It urged companies to consider climate risk, develop strong and effective corporate governance and disclose useful information under the Task Force on Climate-related Financial Disclosures framework.

Future litigation in this area is likely. For example, a superannuation fund member filed a complaint in the Federal Court of Australia on 26 July 2018 against the Retail Employees Superannuation Trust (REST) alleging that the fund breached the *Corporations Act 2001* (Cth) by failing to provide information related to climate change business risks and any plans to address those risks. Section 1017C of the Act required REST to give to a concerned person, being a REST member or a beneficiary, within a reasonable time, information requested by that person if the

⁷⁶ Guy Debelle, 'Climate Change and the Economy' (Public Forum hosted by the Centre for Policy Development, Reserve Bank of Australia, 12 March 2019) https://www.rba.gov.au/speeches/2019/sp-dg-2019-03-12.html.

⁷⁷ Australian Securities and Investments Commission, 'Climate Risk Disclosure by Australia's Listed Companies: Report 593' (September 2018) p 4 https://asic.gov.au/regulatory-resources/find-a-document/reports/rep-593-climate-risk-disclosure-by-australia-s-listed-companies/.

⁷⁸ Ibid pp 7-8.

⁷⁹ Ibid p 12.

⁸⁰ 'Concise Statement' (*McVeigh v Retail Employees Superannuation Pty Ltd ACN 001 987 739*, NSD1333/2018) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2018/20180724_NSD13332018_complaint.pdf; Sabin Center for Climate Change Law, 'McVeigh v Retail Employees Superannuation Trust' (2019) http://climatecasechart.com/non-us-case/mcveigh-v-retail-employees-superannuation-trust/.

person reasonably required that information for the purposes of making an informed judgment about the management and financial condition of the fund. The applicant requested information from REST regarding its directors' knowledge of the fund's climate change business risks and actions responding to these risks. The applicant alleges that the information REST provided in response to the applicant's requests did not satisfy REST's obligation under s 1017C of the *Corporations Act 2001* (Cth). The applicant seeks a declaration that REST breached s 1017C and an injunction under s 1324(1) requiring REST to give the information requested by the applicant. Alternatively the applicant seeks a declaration and injunction in the Court's equitable jurisdiction. The matter is ongoing.

Climate change litigation overseas – two steps forward, one step back

Urgenda Foundation v The State of the Netherlands

The Urgenda Foundation (Urgenda) (representing 886 individuals) filed a petition in the District Court of the Hague seeking a court order requiring the State of the Netherlands to reduce annual GHG emissions by 40% (or at least 25%) below 1990 levels by the end of 2020. Under art 3:305a of the Dutch Civil Code, a foundation or association with full legal capacity that, according to its articles of association, has as its object to protect specific interests, may bring a legal claim that intends to protect similar interests of other persons. Urgenda argued that this reduction was necessary in order for the State to do its part to limit global temperature increases within 2℃ of pre-industrial conditions.81 Urgenda argued that the State failed to fulfil its duty of care to the people of the Netherlands. This duty, it argued, had three sources. First, art 21 of the Dutch constitution imposed a duty of care on the State relating to the liveability of the country and the protection and improvement of the living environment. 82 Secondly, arts 2 and 8 of the European Convention on Human Rights (ECHR) imposed an obligation on the State to protect its inhabitants (the "right to life" and "right to respect for private and family life" respectively). 83 Thirdly, the Dutch Civil Code imposed a duty of care on the State to maintain the climate and therefore the health of its citizens.84

⁸¹ Urgenda Foundation v The State of the Netherlands, C/09/456689/HA ZA 13-1396 (24 June 2015) at [3.1]-[3.2].

⁸² Ibid at [4.35]-[4.36].

⁸³ Ibid at [4.35], [4.45].

⁸⁴ Ibid at [4.35], [4.51]. Sections 37 and 162 of the Dutch Civil Code were relied on by Urgenda. Section 162 states that a tortious act is one which involves a violation of someone else's right or a duty imposed by law or of what according to unwritten law has to be regarded as proper social conduct. Section 37 states that the owner of immovable property

The District Court held that neither the Dutch constitution⁸⁵ nor the ECHR provided a source of the duty of care as framed by Urgenda. For example, the Court held that Urgenda itself could not be designated as a direct or indirect victim within the meaning of art 34 of the ECHR⁸⁷ of a violation of arts 2 and 8. The Court located the State's duty of care in Dutch private law and found that the provisions of the Dutch constitution and ECHR provided a standard of interpretation of this duty of care derived from private law. The Court termed this interpretative standard the "reflex effect". The Court ultimately found that to prevent hazardous climate change the State must take reduction measures in accordance with the 2℃ limit. The State's 20% reduction target failed to fulfil its duty of care and therefore the State had acted unlawfully. The Court ordered the State to adopt a minimum of a 25% reduction from 1990 emissions levels. As Stein and Castermans observe, this decision represents the first time any court in the world has ordered an elected government to strengthen its response to climate change.

The State submitted 29 grounds of appeal in the Hague Court of Appeal on 12 April 2016. 90 Urgenda submitted a cross-appeal contesting the District Court's decision and the State's argument on appeal that Urgenda could not directly invoke arts 2 and 8 of the ECHR in the proceedings. 91 The Court of Appeal found that the State had a duty of care to protect the rights conferred by arts 2 and 8 of the ECHR from the real

may not, to a degree or in a way that is unlawful according to s 162, cause nuisance to owners of other immovable properties by instigating sounds, vibrations, smells, smoke or gases or by denying these owners daylight or fresh air or by taking away the support of buildings or constructions.

⁸⁵ Ibid at [4.36]-[4.44].

⁸⁶ Ibid at [4.45]-[4.46].

⁸⁷ Article 34 states that the European Court of Human Rights may receive applications from any person, non-governmental organisation or group of individuals claiming to be the victim of a violation of the rights within the ECHR by a contracting state.

⁸⁸ Ibid at [4.43], [4.46].

⁸⁹ Eleanor Stein and Alex Geert Castermans, 'Case Comment – *Urgenda v The State of the Netherlands*: The 'Reflex Effect' – Climate Change, Human Rights, and the Expanding Definitions of the Duty of Care' (2017) 13 *McGill Journal of Sustainable Development Law* 304, 305.

⁹⁰ The State of the Netherlands v Urgenda Foundation, No C/09/456689/HA ZA 13-1396 (9 October 2018) at [31].

⁹¹ Ibid at [32].

threat of climate change. 92 It held at [53] that the order of the District Court for the State to reduce emissions by at least 25% by the end of 2020 satisfied the above duty of care.

All of the defences raised by the State were dismissed. Firstly, the State argued that the European Union (EU) emissions trading scheme (ETS) stood in the way of the State taking measures to further reduce CO₂ emissions. 93 The Court of Appeal rejected this, finding that art 193 of the Treaty on the Functioning of the European Union allows an EU member state to adopt more ambitious protection measures provided these do not interfere with the functioning and the system of the ETS in an unacceptable measure. Secondly, the State argued that any reduction by the State creates more room for emissions elsewhere in the EU under the ETS system, rendering such reductions pointless.94 The Court held at [56] that this falsely assumes that EU member states make maximum use of their allocated emissions, ignoring these states' individual responsibilities to reduce CO2. Other countries (Germany, the UK, Denmark, Sweden and France) are taking more far-reaching measures than the Netherlands. Thirdly, the State also argued that its GHG emissions, in absolute terms and compared with global emissions, are minimal, and the State cannot solve the problem on its own. 95 The Court stated at [62] that this does not release the State from its obligation to take measures in its territory, within its capabilities, which in concert with the efforts of other states provide protection from dangerous climate change. Fourthly, the State argued that the reduction in emissions as ordered by the District Court can only be achieved by adopting legislation and hence the order is effectively an order to create legislation, which is not permissible. 96 The Court accepted the statement by the District Court that the State retains complete freedom to determine how it will comply with the order. 97

A summary of these arguments is identified in the following table:

 ⁹² Ibid at [39]-[45].
 93 Ibid at [54].
 94 Ibid at [55].
 95 Ibid at [61].
 96 Ibid at [68].
 97 Ibid.

Defence	Court's response
EU emissions trading scheme (ETS) stands in the way of the State taking measures to further reduce CO ₂ emissions.	Article 193 of the Treaty on the Functioning of the European Union allows an EU member state to adopt more ambitious protection measures provided these do not interfere with the functioning and the system of the ETS in an unacceptable measure.
Any reduction by the State creates more room for emissions elsewhere in the EU under the ETS system, rendering such reductions pointless.	This falsely assumes that EU member states make maximum use of their allocated emissions, ignoring these states' individual responsibilities to reduce CO_2 . Other countries (Germany, the UK, Denmark, Sweden and France) are taking more far-reaching measures than the Netherlands.
The State's greenhouse gas emissions, in absolute terms and compared with global emissions, are minimal, and the State cannot solve the problem on its own.	This does not release the State from its obligation to take measures in its territory, within its capabilities, which in concert with the efforts of other states provide protection from dangerous climate change.
Realisation of envisaged reduction requires legislation, meaning that the order constitutes an order to create legislation.	The District Court correctly stated that Urgenda's claim is not intended to create legislation and that the State retains complete freedom to determine how it will comply with the order.

The State announced on 16 November 2018 that it will appeal the Hague Court of Appeal's decision to the Supreme Court of the Netherlands (the final court of appeal).⁹⁸

United States of America

Peel, Osofsky and Foerster observe that in contrast to Australia, a range of common law actions have been brought in the USA "alleging government or corporate responsibility for likely climate change damage on the basis of actions in nuisance, negligence or under the public trust doctrine". ⁹⁹

Juliana v United States of America

One notable climate change case alleging a breach of constitutional rights and of the public trust doctrine is *Juliana v United States of America (Juliana*), filed in the

⁹⁸ Urgenda, 'Dutch Government Fights Obligations to Act on Climate Change' https://www.urgenda.nl/en/dutch-government-fights-obligations-to-act-on-climate-change/>.

⁹⁹ Peel, Osofsky and Foerster, above n 10, 797.

District Court of Oregon in August 2015 and ongoing through a number of procedural challenges. The plaintiffs (21 youths) allege that the defendants (the USA government and various federal government officials) have known for more than 50 years CO_2 produced by burning fossil fuels was destabilising the global climate system in a way that would significantly endanger the plaintiffs. Despite that knowledge, the defendants permitted, encouraged and otherwise enabled the continued combustion of fossil fuels, deliberately allowing atmospheric CO_2 concentrations to escalate to unprecedented levels. The defendants bear a higher degree of responsibility than any other individual, entity or country for exposing the plaintiffs to the dangers of climate change. The defendants' actions violate their substantive due process rights to life, liberty and property, and the defendants have violated their obligation to hold certain natural resources in trust for the people and for future generations. The plaintiffs seek a declaration that their constitutional and public trust rights have been violated and an order enjoining the defendants from violating those rights and directing them to develop a plan to reduce CO_2 emissions.

In November 2016 the district of Oregon held that constitutional due process and public trust claims against the federal government for its failure to address climate change sufficiently had been adequately alleged and should survive a notice to dismiss. The plaintiffs had standing and the case raised a justiciable, not a political, question. The District Court exercised its discretion to certify the case for an interlocutory appeal. On 21 November 2018 the case was stayed pending a decision of the Ninth Circuit Court of Appeals regarding an interlocutory appeal by the defendants. On 26 December 2018 the Ninth Circuit Court of Appeals granted the defendants' petition for permission to appeal the District Court's decision allowing constitutional climate change claims to proceed. On 1 February 2019 the

¹⁰⁰ 'Complaint for Declaratory and Injunctive Relief' (12 August 2015, District Court of Oregon, 6:15-cv-1517) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2015/20150812_docket-615-cv-1517_complaint-1.pdf.

¹⁰¹ 'Opinion and Order' (10 November 2016, District Court of Oregon, 6:15-cv-1517) 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.

¹⁰² 'Order' (21 November 2018, District Court of Oregon, 6:15-cv-1517) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2018/20181121_docket-615-cv-1517_order-1.pdf.

¹⁰³ 'Order' (26 December 2018, US Court of Appeals for the Ninth Circuit, 18-80176) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2018/20181226_docket-18-80176_order.pdf.

defendants filed their opening brief in the appeal.¹⁰⁴ The latest update for the case is that on 1 March 2019 fifteen amicus curiae briefs were filed by the plaintiffs requesting the matter return to the District Court of Oregon for trial.

City of New York v BP PLC & Ors

In City of New York v BP PLC & Ors 105 the plaintiff argued that five publicly traded energy companies (BP, Chevron, ExxonMobil, Shell and ConocoPhillips) were liable in state tort law for the impacts of global warming because they were collectively responsible for the production, marketing and sale of fossil fuels for over 11% of all carbon and methane pollution from industrial sources that has accumulated in the atmosphere since the Industrial Revolution. Public nuisance, private nuisance and trespass were alleged. The plaintiff sought relief for injuries of countless actors including New York City and its residents resulting from the defendants' ongoing worldwide fossil fuel production and associated global GHG emissions. The Southern District Court of New York on 19 July 2018 dismissed this action as firstly the state court lacked the statutory or constitutional power to adjudicate it. The Court stated that "the City's claims are governed by federal common law" because this was exactly the type of transboundary pollution suit to which federal common law should apply. 106 Secondly, according to United States Supreme Court precedent the plaintiff could not state a claim for relief under federal common law because "[c]ongress has expressly delegated to the EPA the determination as to what constitutes a reasonable amount of greenhouse gas emission under the Clean Air Act." Thirdly, to the extent that the plaintiff's claims were based on foreign emissions, they were "barred by the presumption against extraterritoriality" and the "serious foreign policy consequences" that would result from declaring worldwide fossil-fuel production and GHG emissions a public nuisance. The District Court stated that "[c]limate change is ... not for the judiciary to ameliorate. Global warming and solutions thereto must be addressed by the other two branches of government."

The plaintiff appealed to the Second Circuit Court of Appeals. This case is ongoing. The defendants filed a brief on 7 February 2019 urging the Court to affirm the

¹⁰⁴ 'Appellants' Opening Brief' (1 February 2019, US Court of Appeals for the Ninth Circuit, 18-36082) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2019/20190201_docket-18-36082_brief.pdf.

¹⁰⁵ City of New York v BP PLC & Ors 18 Civ 00182.

¹⁰⁶ 'Opinion and Order' (19 July 2018, US District Court – Southern District of New York, 18-cv-00182) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2018/20180719_docket-118-cv-00182_opinion-and-order-1.pdf.

dismissal of the case because inter alia the District Court had properly determined that federal common law governed the plaintiff's claims because they involved transboundary pollution. Further any claim based on domestic GHG emissions was displaced by the *Clean Air Act*, SNB 1997 and federal common law had never been applied "to hold manufacturers of lawful products liable merely because the *users* of those products create interstate pollution" or to supply "a remedy where the causal chain connecting the defendant's conduct to the alleged harms extends back several decades, includes billions of intervening actors, and depends on complex phenomena that scientists continue to study." Further the plaintiff did not have viable state law claims because causation requirements were not satisfied and because the doctrine of *in pari delicto* (which prevents the recovery of damages for loss resulting from the plaintiff's wrongdoing) barred the plaintiff's claims since the plaintiff and its residents "have long consumed Defendants' products and have thus willingly contributed to" the emissions that allegedly caused the plaintiff's injuries.

Clean Air Council v United States of America

The Federal District Court for the Eastern District of Pennsylvania dismissed a lawsuit brought by the Clean Air Council and two minors seeking to block the Trump Administration's climate change deregulatory efforts on the grounds that they violated the plaintiffs' constitutional rights under the Fifth Amendment due process clause and the public trust doctrine. The Court first considered the plaintiff's standing to sue and held that it did not have jurisdiction to hear the plaintiffs' claims because neither had established standing. Regarding the Clean Air Council, the Court found that neither the complaint nor an affidavit submitted by the plaintiffs included the necessary specific harms suffered by the organisation's members. Regarding the individuals, the Court found that while their alleged physical harms constituted particularised and concrete injuries, the injuries were not imminent or certain. The Court also found that the alleged injuries could not be traced to the regulatory rollbacks and that a favourable decision by the Court would not redress the injuries.

The Court also found that the plaintiffs failed to state a viable claim based on a right to a life-sustaining climate system. Such a right was not a liberty interest guaranteed by the Fifth Amendment ("[n]o person shall ... be deprived of life, liberty or property, without due process of law ...").

The plaintiffs' claim does not arise under the State-created danger doctrine, one of two exceptions to the general rule that the due process clause does not require the

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¹⁰⁷ 'Brief of Defendants-Appellees Chevron Corporation, Exxon Mobil Corporation, and ConocoPhillips' (7 February 2019, US Court of Appeals for the Second Circuit, 18-2188) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2019/20190207_docket-18-2188_brief.pdf.

State to protect the life and liberty and property of citizens. The plaintiffs have not made out a direct causal link between their injuries and the defendants' actions and any alleged harm was not therefore foreseeable. Nor have the individual plaintiffs established the State owes them a particular obligation.

The Court also found that the defendants did not violate the plaintiff's substantive due process right to property. The plaintiffs alleged that the deprivation of property due to flooding resulting from the USA's increased contributions to climate change was akin to a taking resulting from government-caused flooding. Yet the plaintiffs did not allege that they suffered the loss of any property.

The Court also held that the plaintiffs' public trust claim had no basis in law, rejecting the claim that the USA Government has an affirmative duty to protect all land and resources within the USA enforceable as a substantive due process right. The Court stated that this approach would impermissibly empower the Court to direct any executive branch action related to "the environment". The District Court's decision in *Juliana* has alone recognised this doctrine, the reasoning of which is not persuasive. The decision to the contrary in *Juliana* contravened long-standing authority. The plaintiff's claim was not a legal one but was a disagreement with the Defendant's policy approach.

United Kingdom

An interesting recent climate change case from the UK is Plan B Earth v Secretary of State for Business, Energy, and Industrial Strategy. Plan B, a charity with the mission to realise the goals of the Paris Agreement on climate change and 11 citizen claimants ranging in age from nine to 79 (who claimed to be impacted by climate change in a variety of ways) commenced judicial review proceedings in the High Court of Justice Administrative Court on 8 December 2017. They alleged that the respondent violated the Climate Change Act 2008 (UK) (CC Act) and other law by failing to revise a 2050 carbon reduction target in light of new international agreements and scientific developments. Section 1(1) of the CC Act imposes a duty on the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline. Section 2(1)(a) confers a power on the Secretary of State to amend by order the 2050 target of 80%. Section 2(2) provides that the power in s 2(1)(a) may only be exercised if it appears to the Secretary of State that there have been significant developments in scientific knowledge about climate change, or European or international law or policy that make it appropriate to do so.

In February 2018 the claimants' application for judicial review was denied. The claimants renewed their application for review. On 20 July 2018 the High Court found that the claims were not arguable and denied permission to proceed. The claimants

appealed. On 25 January 2019 the Court of Appeal rejected the claimants' appeal of the High Court's denial to hear their case, ¹⁰⁸ finding none of the seven stated grounds had a real prospect of success. The Court of Appeal held that ss 2 and 6 of the CC Act (which concern amendment of the 2050 target or baseline year and amendment of target percentages respectively) contain discretions, not a duty, and are subject to the duty to consult contained in ss 3 and 7 on any order amending the 2050 target or baseline year and target percentages). It was not arguable that a failure to exercise the discretion to amend the 2050 target at the time was an unlawful exercise of that discretion as being contrary to the legislative purpose of the statute. The claimants' ground that the Committee on Climate Change or the Secretary misunderstood the Paris Agreement was not arguable.

Conclusion

It is not possible to provide an exhaustive oversight of all the climate change focussed litigation taking place around the world within the constraints of this presentation. 109

The substantial challenges posed to courts by such litigation can be seen within Australia in different jurisdictions where judicial review and merits challenges of particular developments have occurred. Particular challenges of evidence and causation arise in relating a substantial global problem which has myriad contributors to a matter before a court which considers a particular project. Courts considering single projects have taken different approaches in merit appeals or similar types of proceedings to scope 3 (downstream, from burning coal from a mine) emissions in particular. The recent approach in the Land and Environment Court of NSW in Gloucester can be contrasted with the approach of the Land Court (Qld) in the Adani litigation. That difference arises partly from the different statutory contexts. The Land and Environment Court of NSW was acting as the consent authority and able to consider a wide range of environmental impacts under the relevant planning act including evidence placed before it concerning GHG emissions. In Queensland, the Land Court was providing a recommendation to the relevant consent authority and the legislation was found to focus on the adverse environmental impacts caused by the operation of the coal mine rather than the actions of others in burning the mined

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¹⁰⁸ 'Order' (25 January 2019, Court of Appeal Civil Division, C1/2018/1750) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190120_Claim-No.-CO162018_decision-1.pdf.

¹⁰⁹ Academics writing comprehensively in this area include Professor Peel at Melbourne University Law School, Professor Hari Osofsky at the University of Pennsylvania and Professor Gerrard of the Sabin Centre for Climate Change Law at Columbia Law School.

coal. The courts also took different approaches to whether the availability of coal from other sources meant there would be no change to global GHG emissions if a particular mine was not approved.

The two judicial review proceedings in the Land and Environment Court of NSW (Wollar and Wyong) were challenges to ministerial decisions approving coal mines. The statutory scheme in NSW required consideration of a specific legislative instrument. Reflecting the limits of judicial review the merits of the decision to approve the mines was not open for consideration. The Land and Environment Court of NSW held that the necessary consideration under the instrument had been adequately (in a legal sense) undertaken in both matters. In Wollar the applicant attempted to engage very broad global and national policy instruments as relevant in the assessment of a single project by the Minister without success, the Court finding it was open for the Minister to consider that these documents could provide no quidance in such an assessment.

At the federal level the Federal Court has been called on to consider ministerial decision-making in relation to a potential large source of GHG emissions, the proposed Adani mine. The requirements of the EPBC Act had to be construed. Whether the effects of scope 3 emissions were a substantial cause of indirect effects such as harm to the Great Barrier Reef were held to be matters for the Commonwealth minister to resolve in his or her discretion.

Breaches of directors' duties in the area of climate change risk is an emerging area of litigation in Australia.

Overseas, systemic changes are sought to be achieved through litigation which challenges government policy dealing with the control of GHGs and the alleged failure to respond adequately to climate change. This has taken many forms. In the USA constitutional provisions such as the due process clause as seen in *Juliana* and *Clean Air Council* have been relied on, with mixed success at interlocutory stages.

That different United States District courts can come to different conclusions on matters such as the public trust doctrine can be seen by contrasting *Juliana* (successful reliance at interlocutory stage in District Court of Oregon) and *Clean Air Council* (unsuccessful in District Court of Eastern District of Pennsylvania).

The UK Government passed the *CC Act* in 2008 which gives rise to the potential for judicial review challenges provided that a justiciable issue can be identified and an applicant can demonstrate standing. The challenges of doing so are highlighted in *Plan B*, where the wide discretion to set GHG reduction targets conferred under the *CC Act* was not amenable to judicial review challenge.

The operation of tort law was relied on in *Urgenda*, *Juliana* and *Clean Air Council*. *Urgenda* decided in the Netherlands remains the high water mark for a successful tort action challenging State government policy-making to curb GHGs.