

Climate Change: Is the Common Law Up to the Task?

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The former Prime Minister of Australia Kevin Rudd described climate change as “the greatest moral, economic and social challenge of our time”. It is also likely to become the biggest legal challenge of our time. Across the world, legal challenges are being mounted against governments and private companies based on harm caused, and to be caused, by climate change. The climate change problem crosses borders, requires collective solutions and has the capacity to cause extraordinary losses. This combination of features fits uneasily with the present state of the common law. This provides a unique opportunity to ask whether the common law remains as capable of adaptation as its proponents suggest and whether — as Professor Mike Taggart might have put it — the cave of the common law still has dusty and forgotten treasures to uncover. This article explores this question through international examples from the atmospheric trust litigation in the United States to the prospect of suing governments in tort for failing to adequately address the impacts of climate change.

I INTRODUCTION

Jedediah Purdy remarked in 2010:¹

Environmental crises are defining challenges for the next few decades and probably well beyond. Yet legal scholars approach these issues in a way that encourages pessimism and needlessly narrows the legal and political imagination. This is especially true of climate change, probably today’s signal environmental question.

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1 Jedediah Purdy “The Politics of Nature: Climate Change, Environmental Law, and Democracy” (2010) 119 Yale L J 1122 at 1125.

We agree and would add that the pessimism and narrowing of legal and political imagination is not limited to legal scholars.² It infects judges and the political discourse on climate change. In New Zealand, the majority decision of the Supreme Court's in *West Coast ENT Inc v Buller Coal Ltd* that amendments to the Resource Management Act 1991 (RMA) removed from the Act all consideration of greenhouse gases (GHGs) from the burning of exported coal, reflects such a narrowing.³ Similarly, in Australia, the Land Court of Queensland's decision in *Adani Mining Pty Ltd v Land Services of Coast and Country Inc* recommending approval of an enormous coal mine also reflects such a narrowing.⁴ The Court reasoned that the mine would have no impact on climate change because if the coal did not come from the mine it would come from some other mine.⁵

The aim of this article is to explore how the common law — with its ability to adapt and apply legal principles to novel facts — is up to the task of responding to climate change. The common law inherently involves a “creative element of both inductive and deductive reasoning in the work of the courts”, especially higher appellate courts.⁶ Our premise and central argument is that the creative element of the common law will respond to meet the challenge of climate change litigation through orthodox application of the law due to the mother of invention: necessity.

The reality of climate change, and the resulting damage to people and property, will demand legal remedies. Much of the harm — such as the inundation of entire islands in the Pacific to the point of extinction⁷ — will be impossible to prevent or fully redress. But perfection is not the measure of the law; nor are legal remedies refused merely because they do not fully redress harm.

Remedies such as damages go some way to redress the harm caused by climate change, and people who suffer losses due to climate change will be entitled to pursue governments, companies and individuals who are responsible for those losses. Many cases will not succeed for a wide variety of reasons, but that is normal in any area of litigation. The scale of loss due to climate change, and the corresponding likely large number of litigants seeking redress in the future, means that many cases will also succeed. Decisions such as *Buller Coal* and *Adani Mining* are not an impenetrable wall that will stop future inundation of climate litigation.

In short, our argument is that the common law remains capable of adaptation to provide remedies — however imperfect — to people who suffer

2 For an illustration of such pessimism in New Zealand, see Trevor Daya-Winterbottom “Country Report: New Zealand - The Legitimacy of Climate Change Litigation: *Buller Coal* in The Supreme Court” (2014) 5 IUCNAEL eJournal 231 at 231–238.

3 *West Coast ENT Inc v Buller Coal Ltd* [2013] NZSC 87, [2014] 1 NZLR 32.

4 *Adani Mining Pty Ltd v Land Services of Coast and Country Inc* [2015] QLC 48.

5 At [581].

6 *PGA v The Queen* [2012] HCA 21, (2012) 245 CLR 355 at 370–374 per French CJ, Gummow, Hayne, Crennan and Kiefel JJ.

7 See Kya Raina Lal “Legal Measures to Address the Impacts of Climate Change-induced Sea Level Rise on Pacific Statehood, Sovereignty and Exclusive Economic Zones” (2017) 23 Auckland U L Rev 235.

loss due to climate change. As the courts are confronted with litigants seeking remedies for climate change losses — or injunctive relief to prevent such loss — the common law will need to be at its most flexible.

We begin our exploration of the role of common law in responding to climate change by examining, briefly, how the reality of the harm climate change is causing — and will cause in the future — necessitates a response from the common law. This harm will occur because of decisions and actions taken by companies and governments with knowledge of the harm occurring, and in the context of a weak international and domestic political, policy and legislative response. We then examine the facts underlying the decisions in *Buller Coal* and *Adani Mining*. Each case involved an assessment of coal mines. We use the facts of those cases as a foundation to explore the opportunities for litigation under the common law against mining companies, or governments that approved these mines, for the harm the mines will cause due to their contribution to climate change. We look at specific facts of these cases deliberately to move from abstract theory about possible legal remedies to the concrete reality of litigation, which demands identification of a defendant and acts that create legal liability.

We use the term “climate change litigation” broadly to mean litigation where a substantial purpose is to address climate change impacts, either directly or indirectly.⁸ Litigation focused on other issues, such as groundwater impacts of a coal mine or the dredging impacts of a coal port expansion, may be regarded as climate change litigation if a substantial motivation for the litigation is to address climate change impacts. There are many forums and causes of action where people can seek remedies to address the impacts of climate change. Most past cases have been based on statutory causes of action, such as judicial review of administrative decisions involving coal mines or GHG regulation,⁹ but the scope for future, novel forms of climate change litigation is very wide, and the outer boundaries are difficult to identify.¹⁰

Our focus is on litigation in Australia and New Zealand, but we also draw on some of the most notable cases internationally for a comparative common law perspective.¹¹ Our intent is not to catalogue every case involving climate litigation or every article and book written about it. There is a great deal of literature in the emerging field of climate litigation.¹² We draw on that literature and past case law, but we attempt to avoid getting lost in the details — missing the forest for the trees — to see the bigger picture. We examine,

8 For a discussion by the leading scholars in this field, see Jacqueline Peel and Hari M Osofsky *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press, Cambridge, 2015) at 4–9.

9 See, for example, *Buller Coal*, above n 3. For an Australian example, see *Coast and Country Association of Queensland Inc v Smith* [2016] QCA 242.

10 See Hari M Osofsky and Jacqueline Peel “The role of litigation in multilevel climate change governance: Possibilities for a lower carbon future?” (2013) 30 EPLJ 303 at 304–305.

11 See, for example, Michael B Taggart “The Contribution of Lord Cooke to Scope of Review Doctrine in Administrative Law: A Comparative Common Law Perspective” in Paul Rishworth (ed) *The Struggle for Simplicity in Law: Essays for Lord Cooke of Thorndon* (Butterworths, Wellington, 1997) 189.

12 See, for example, Sabrina McCormick and others “Strategies in and outcomes of climate change litigation in the United States” (2018) 8 Nature Climate Change 829.

from our perspective as litigators, how the very nature of the common law means that it is able to, and will, meet the challenge of climate litigation, however imperfectly.

II NECESSITY CALLS TO THE COMMON LAW

Climate Change

Little needs to be said about climate change. The scientific consensus on the reality of climate change is well-known and rarely directly contested in litigation, although it remains contested at a political level in countries such as the United States and Australia. It is sufficient here to note that:¹³

1. warming of the climate system is unequivocal;
2. human influence on the climate system — principally from burning fossil fuels, and contributing carbon dioxide (CO₂) and other GHGs to the atmosphere — is clear;
3. recent climate changes have had widespread impacts on human and natural systems;
4. continued emissions of GHGs will cause further warming and changes in all components of the climate system;
5. limiting climate change will require substantial and sustained reductions of GHGs; and
6. the harm from climate change will persist over very long timescales. Most aspects of climate change will persist for many centuries even if emissions of CO₂ are stopped.

Ocean acidification, driven by CO₂ emitted from burning fossil fuels on a vast scale changing ocean chemistry, including by making them more acidic, is less well-known in public discussion than climate change, but its profound and long-term effects on the marine ecosystem are now well-established.¹⁴ For simplicity, we include ocean acidification when referring to climate change.

In this context, and from the perspective of establishing *causation* of harm from large emitters of CO₂ — which is the Holy Grail of climate litigation — an important development in climate science in the past decade has been the recognition that it is cumulative emissions of CO₂ that largely determined global mean surface warming by the late 21st century and for many centuries.¹⁵ From this, the concept of the Carbon Budget has been developed, which quantifies the total (that is, cumulative) amount of CO₂ that can be emitted from burning fossil fuels to hold the rise in mean global temperatures to a particular level — normally the major international target of

13 Intergovernmental Panel on Climate Change “Summary for Policymakers” in Thomas F Stocker and others *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the IPCC* (Cambridge University Press, Cambridge, 2013) 4.

14 For a recent review, see Catriona Hurd and others “Current understanding and challenges for oceans in a higher-CO₂ world” (2018) 8 *Nature Climate Change* 686.

15 Intergovernmental Panel on Climate Change, above n 13, at 27–28.

less than 2 °C above pre-industrial levels.¹⁶ While there is ongoing debate and refinement of the Carbon Budget,¹⁷ it is now widely adopted, and provides a convenient tool for framing climate litigation to establish a causal link and counterarguments that an individual project's emissions are de minimus or "vanishingly small".¹⁸

Weak International and Domestic Action

That necessity calls to the common law to provide remedies for harm caused by climate change reflects the reality that international action, and domestic legislation and policy, are failing to protect people, property and the environment from climate change. Climate policy has been hotly contested globally over the past 20 years. While former Australian Prime Minister Kevin Rudd described climate change as "the greatest moral, economic and social challenge of our time",¹⁹ so far, the issue has proved too difficult for Australian politicians to address and has directly contributed to a series of changes of Prime Minister over the past decade, including in recent weeks.²⁰ New Zealand's climate change policy has not been as politically poisonous as Australia's, but it is still weak and inadequate despite the limited emissions trading scheme established in 2008.²¹

Following a torturous path, in 2015 the global community agreed in the Paris Agreement to a goal of:²²

Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.

The Paris Agreement was an enormous milestone that has been hailed as a "major diplomatic success",²³ and it certainly was in the context of the history, difficulty and complexity of the negotiations. It crossed political and legal canyons that had divided the global community and prevented progress on

16 This is particularly based on the seminal work of Malte Meinshausen and others "Greenhouse-gas emission targets for limiting global warming to 2 °C" (2009) 458 *Nature* 1158.

17 See, for example, Chelsea Harvey "How the 'Carbon Budget' is causing problems" *Scientific American* (online ed, United States, 22 May 2018).

18 *Buller Coal*, above n 3, at [125].

19 Kevin Rudd, former Prime Minister of Australia "Building a Better World Together" (Speech at Kyoto University, Japan, 9 June 2008).

20 Annabel Crabb "Australia's recent climate change policy: A brief history of seven killings" *ABC News* (online ed, Australia, 23 August 2018); and John Hewson "Issue has proved too big for run of Australian leaders" *Sydney Morning Herald* (online ed, Australia, 29 August 2018).

21 See David Bullock "Emissions trading in New Zealand: development, challenges and design" (2012) 21 *Environmental Politics* 657. This analysis is not substantially changed by developments since, including New Zealand's nationally determined contribution under the Paris Agreement.

22 Paris Agreement 55 ILM 743 (opened for signature 22 April 2016, entered into force 4 November 2016) at art 2(1)(a). The Agreement was adopted by the United Nations Framework Convention on Climate Change, decision 1/CP.21, in *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015* FCCC/CP/2015/10/Add1 (2016).

23 Peter Christoff "The promissory note: COP 21 and the Paris Climate Agreement" (2016) 25 *Environmental Politics* 765 at 766.

responding to the threat of dangerous climate change for over a decade. Its goals, and the impacts we expect to occur even if they are achieved, are far better than unmitigated climate change where the global temperatures increase by 4°C or more — a future that would imperil humanity’s continued existence.²⁴ And, as Peter Christoff writes:²⁵

... the power of storytelling in policy and politics should not be underestimated. The acclamation of the Paris Agreement as a success is a powerful mobiliser, in contrast to the narrative of failure that followed [the 2009 international climate meeting in] Copenhagen ... Crucially, Paris has also amplified the economic narrative of an increasingly cheap and viable path for decarbonisation.

But, as Christoff cautions, the value of the Paris Agreement:²⁶

... remains unclear. It will be a success only if it manages to ratchet up collective climate action in ways sufficient to meet its broad aims ... Its powers in ensuring outcomes are limited, and more still needs to be done to elaborate on the enabling framework of the Agreement, but if it fails in either task, Paris will be condemned as the conference that offered the last illusion of hope that we are tackling global warming.

There are currently 197 signatories and 181 parties to the Paris Agreement,²⁷ but that widespread agreement belies the fact that, individually and collectively, the commitments made by the parties are inadequate to achieve even the target of 2°C.²⁸ The current nationally determined contributions pledged under the Paris Agreement put the world on track for temperature rise of more than 3°C degrees.²⁹ There is little evidence that the “rapid and far-reaching transitions in energy, land, urban and infrastructure, and industrial systems [which] are unprecedented in terms of scale”³⁰ required to reach the 1.5°C target are being achieved, or likely to be achieved.

Another obvious, major impediment to the success of the Paris Agreement is the election of the Trump Administration in the United States, which announced in 2017 that it intends to withdraw from the Paris Agreement and has set about dismantling domestic action on climate change.³¹

24 See Mark New and others “Introduction: Four degrees and beyond - the potential for a global temperature increase of four degrees and its implications” (2011) 369 *Philosophical Transactions: Mathematical, Physical and Engineering Sciences* 6 at 6–19; Will Steffen and others “Trajectories of the Earth System in the Anthropocene” (2018) 115 *Proceedings of the National Academy of Sciences of the United States America* 8252; and Connor Nolan and others “Past and future global transformation of terrestrial ecosystems under climate change” (2018) 361 *Science* 920.

25 Christoff, above n 23, at 782.

26 At 781.

27 See “Paris Agreement - Status of Ratification” United Nations Climate Change <<http://unfccc.int>>.

28 United Nations Environment Program “Emissions Gap Report 2017” (November 2017) <www.unenvironment.org>.

29 United Nations Environment Program, above n 28.

30 Intergovernmental Panel on Climate Change *Global Warming of 1.5°C: Summary for Policymakers* (IPCC SR1.5, October 2018) at [C2].

31 See Yong-Xiang Zhang and others “The withdrawal of the U.S. from the Paris Agreement and its impact on global climate change governance” (2017) 8 *Advances in Climate Change Research* 213.

Major Future Losses are Expected

Even leaving aside the vicious headwinds that confront the Paris Agreement in achieving its goals, perhaps worse is the fact that major losses are expected even if the goals are achieved. For instance, coral reefs, such as Australia's iconic Great Barrier Reef, are being severely impacted by climate change even at current levels where mean global temperatures have increased by approximately 1 °C above pre-industrial levels.³² Limiting global temperature increases to 2 °C is unlikely to save most coral reefs globally, including the Great Barrier Reef.³³ If global temperatures rise to 1.5 °C above pre-industrial levels, most coral reefs are expected to be lost around the globe, while at 2 °C virtually all coral reefs are expected to be lost.³⁴ The Intergovernmental Panel on Climate Change recently found that “coral reefs, for example, are projected to decline by a further 70–90% at 1.5°C (high confidence) with larger losses (>99%) at 2°C (very high confidence)”.³⁵ The Report warns:³⁶

... [t]ropical coral reefs will reach a very high risk of impact at 2°C with most available evidence suggesting that coral dominated ecosystems will be non-existent at this temperature or higher ... Impacts at this point (coupled with ocean acidification) are likely to undermine the ability of tropical coral reefs to provide habitat for the current high levels of biodiversity as well as a range of ecosystem services important for millions of people (e.g., food, livelihoods, coastal protection, cultural services).

The Report elaborates:³⁷

Even with warming up until today (0.87°C), a substantial proportion of coral reefs have experienced large scale mortalities that are causing them to rapidly contract. In the last 3 years alone, large coral reef systems such as the Great Barrier Reef (Australia) have lost as much as 50% of their shallow water corals. These changes are part of a series of heat stress impacts that began in the early 1980s events.

The potential losses are staggering:³⁸

Even achieving emission reduction goals consistent with the ambitious goal of 1.5°C under the Paris Agreement will result in the further loss of 90% of reef-building corals compared to today, with 99% of corals being lost under warming of 2°C or more above the pre-industrial period.

32 Great Barrier Reef Marine Park Authority *Great Barrier Reef Region Strategic Assessment: Strategic Assessment Report* (2014).

33 Katja Frieler and others “Limiting global warming to 2 °C is unlikely to save most coral reefs” (2013) 3 *Nature Climate Change* 165.

34 Intergovernmental Panel on Climate Change *Global Warming of 1.5°C: Summary for Policymakers*, above n 30, at [B4-2].

35 At [B4-2].

36 Intergovernmental Panel on Climate Change *Global Warming of 1.5°C* (IPCC SR1.5, October 2018) at ch 3, 3-84 (citations omitted).

37 At 3-89 (citations omitted).

38 At 3-90 (citations omitted).

The goals at the heart of the Paris Agreement, therefore, reflect a dilemma. On one hand, they were the best that was politically possible at the time of the agreement and better than a future of unmitigated climate change. On the other hand, even if they are achieved, we will lose iconic ecosystems such as coral reefs, and humanity will suffer terribly. Even at these levels, the Earth may reach tipping points that are uncontrollable.³⁹

The gap between what is needed to avoid major future losses due to climate change and the international and domestic action on climate change is the context in which the common law will be called on to provide remedies for people who suffer loss.

III *BULLER COAL AND ADANI MINING*

The litigation in *Buller Coal* and *Adani Mining* provides two very pertinent sets of facts to explore possible opportunities for future common law litigation in New Zealand and Australia.

Buller Coal

New Zealand's most famous climate litigation, *Buller Coal*, involved a challenge to the refusal to consider GHG emissions from the burning of exported coal from a proposed coking coal mine, Escarpment Mine, located on the Denniston Plateau on the West Coast of the South Island.⁴⁰ The majority in the Supreme Court held that amendments to the RMA removed from the Act all consideration of the GHGs that would be emitted from burning the coal, as these emissions result only indirectly from the mine and, thus, were not open to territorial authorities and regional councils to regulate.⁴¹

We agree with Nathan Jon Ross's criticisms of the majority in *Buller Coal*,⁴² but our analysis in this article is not about the RMA or the errors in the majority's reasoning. For present purposes, we simply take the facts of the case as a foundation for analysis of future common law action.

Elias CJ summarised the relevant facts in her dissenting judgment:⁴³

It was accepted that Buller Coal is to remove up to 6.1 million tonnes of coal from the Escarpment Mine in a period of 5–12 years. The coal is intended to be exported to India and China for use in the steel manufacturing industry. Solid Energy intends to remove 4.1 million tonnes of coal over a period of approximately 12 years for export to India, China, Japan, Brazil and South Africa for use in steel manufacturing, where it is

39 Steffen and others, above n 24.

40 *Buller Coal*, above n 3. For some background on the mine, see Mining Technology "Buller Coal Project" <www.mining-technology.com>.

41 *Buller Coal*, above n 3, at [104] per McGrath, William Young and Glazebrook JJ.

42 Nathan Jon Ross "Climate Change and the Resource Management Act 1991: A Critique of *West Coast ENT Inc v Buller Coal Ltd*" (2015) 46 VUWLR 1111.

43 *Buller Coal*, above n 3, at [14]. See also [172] and [175].

expected to produce approximately 11.5Mt of CO₂. The parties agreed that the Environment Court could “assume, for the purpose of these proceedings”:

- a. Climate change is a serious global issue.
- b. The coal mined at the sites will probably result in the subsequent discharge of carbon dioxide from the combustion of that coal.
- c. Carbon dioxide is a known greenhouse gas.

The agreed facts in *Buller Coal* did not frame the contribution of the GHG emissions from the mine in the context of the Carbon Budget, but that is useful for discussion here. As the effect of the emissions on climate change are cumulative, it is the total emissions over the 5–12-year life of the mine — 11.5 Mt of CO₂ — that are relevant for assessing its impact on climate change. In 2015, the Carbon Budget was approximately 850 gigatonnes of CO₂.⁴⁴ This means the emissions from the burning of the coal from the mine would need to amount to approximately 0.001 per cent of the remaining Carbon Budget to have a likely chance of limiting global temperature rises to 2°C above pre-industrial levels.⁴⁵

While the arguments in *Buller Coal* were not framed in terms of the Carbon Budget, the majority in *Buller Coal* noted the concept of cumulative effects and the rejection of “de minimis” arguments for smaller quantities of GHG emissions in a previous decision of the Environment Court.⁴⁶

The concept of cumulative effects was addressed in *Environmental Defence Society Inc v Taranaki Regional Council*,⁴⁷ where the Environment Court dealt with a proposal for the generation of electricity by burning natural gas which was going to produce 2.6 million tonnes of carbon dioxide a year. This was assessed as being approximately one millionth of the total annual global emissions. It was conceded that it was not possible “to identify any definable effects attributable to [such discharge] from the application site, locally, regionally or globally”.⁴⁸ The argument that they should be taken into account was that “since all greenhouse gas emissions all contribute cumulatively to the same global atmosphere, every small contribution makes a difference”.⁴⁹ It was this latter argument which prevailed:

Because of the stable nature of carbon dioxide and the fact that each small contribution is spread around the globe to combine and create the greenhouse effect, we are satisfied that, while it cannot be measured scientifically, the effect of the proposed plant will nevertheless be more than “de minimis” or “vanishingly small” ...

We note, however, that consent was granted for reasons which included a conclusion that the new plant would serve to displace less efficient

44 Chris Taylor and Malte Meinshausen “Joint report to the Land Court of Queensland on ‘Climate Change – Emissions’: Adani Mining Pty Ltd (Adani) v Land Services of Coast and Country Inc & Ors” (22 December 2014). The expert report is available at <<http://envlaw.com.au>>

45 At 9.

46 *Buller Coal*, above n 3, at [125]–[126].

47 *Environmental Defence Society Inc v Taranaki Regional Council* EnvC Auckland A/184/2002, 6 September 2002.

48 At [19].

49 Evidence to this effect is set out at [22].

generating capacity and the unreasonableness of the proposed mitigation conditions.⁵⁰

As is apparent, the Environment Court [in *Environmental Defence Society*] took the view that in assessing cumulative effects, it was entitled to have regard to the effects of the activity under consideration in conjunction with the effects of other activities around the world which also produced CO₂ ... [But] it would ... be inappropriate for us to express a view as to whether the approach taken in that case was correct.⁵¹

Applying this reasoning to the quantity of GHG emissions of 11.5 Mt, which was not questioned by the majority in *Buller Coal*, the emissions from the mine would not be “de minimus”. In comparison to the Adani whale, however, the mine in *Buller Coal* was a minnow.

Adani Mining

The Carmichael Coal Mine was proposed in 2010 by Adani Mining Pty Ltd, a subsidiary of the Adani Group from India operating as Adani Australia for its Australian projects. The proposed mine is located in central Queensland, Australia, in a previously undeveloped major coal basin, the Galilee Basin. Coal from the mine was proposed to be transported by a new 189 km rail line to the Port of Abbot Point for export principally to India to be burnt for electricity production. Adani also proposed to expand the Port of Abbot Point to increase its capacity. The port expansion has been the subject of other litigation that is not the focus of this case study.

The proposed mine is one of the largest coal mines in the world, and the mining and burning of coal from it will generate an estimated 4.7 billion tonnes of CO₂ equivalents.⁵² In international greenhouse accounting terms, these emissions from burning the coal are indirect or “Scope 3” emissions of the mine.⁵³

As an example of framing climate litigation in terms of the Carbon Budget to establish a causal link, the emissions from burning the coal from the mine are over the 0.53–0.56 per cent threshold of the remaining Carbon Budget⁵⁴ for limiting global temperature rises to 2°C above pre-industrial levels.⁵⁵

50 To the same effect is *Environmental Defence Society (Inc) v Auckland Regional Council* (2002) 9 ELRNZ 1 (EnvC). Consent was granted and mitigation conditions were not imposed but a climate change argument was accepted as being available on the basis of cumulative effects.

51 The Court notes that it has not been adopted by the Environment Court in at least one case. See *The Outstanding Landscape Protection Society Inc v Hastings District Council* [2008] NZRMA 8 (EnvC) at [51]–[53].

52 Taylor and Meinshausen, above n 44.

53 Scope 1 emissions are GHGs directly emitted from an activity. Scope 2 are indirect emissions from electricity generated offsite. Scope 3 emissions are upstream or downstream emissions associated with an activity. See World Business Council for Sustainable Development and World Resources Institute *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (revised ed, WBCSD & WRI, Geneva, 2015) at 25.

54 In 2015, 850 gigatonnes of CO₂. See Taylor and Meinshausen, above n 44, at 8.

55 At 9.

Framing climate litigation around the Carbon Budget in this way allows a causal link to be established and avoids the “de minimis” defence from any GHG emitter: that their emissions are so small they are just a “drop in the ocean” in the context of total global emissions and do not cause any material harm.⁵⁶

Due to its enormous scale, its impacts on the local and regional environment, and the consequences for climate change if it proceeds, the mine has been strongly opposed by Australian conservation groups, and the campaign against it is the biggest environmental campaign seen in Australia since the Franklin dam campaign in the 1980s.⁵⁷ An unnamed figure in the Australian Labor Party gave a pithy summary of its significance in May 2017: “It is talismanic. It’s the litmus test. Adani has become shorthand for ‘are you serious about climate change?’”⁵⁸

In addition to the enormous political campaign against the mine, the mine and associated expansion of a coal loading terminal named Abbot Point have faced multiple court cases. Two of those cases are the focus here: an objection hearing against the mine in the Land Court of Queensland and a judicial review challenge in the Federal Court of Australia.

1 Objection Hearing in the Land Court of Queensland

In Queensland, any person can object to an application for a large mine, and those objections are heard by the Land Court of Queensland sitting in an administrative capacity as a form of public inquiry into the applications.⁵⁹ The Land Court makes non-binding recommendations to the Minister for Natural Resources, Mines and Energy, and the Department of Environment and Science, who make the ultimate decision as to whether to approve or refuse the applications.

A conservation group objected to the applications for the Carmichael Coal Mine proposed by Adani, in part based on the impacts the mine would have on climate change. The objections were heard by President MacDonald.⁶⁰

There was no dispute at trial over the science of climate change, and President MacDonald recited the agreed expert evidence in her reasons, including in relation to the Carbon Budget and impacts on the Great Barrier

56 See Jacqueline Peel “Issues in Climate Change Litigation” (2011) 5 CCLR 15 at 16–17.

57 See, for example, Nick McKenzie, Richard Baker and Peter Ker “The coal war: Inside the fight against Adani’s plans to build Australia’s biggest coal mine” *Sydney Morning Herald* (online ed, Australia, 15 February 2017); Richard Dennis “Why Adani won’t die” *The Monthly* (online ed, Australia, May 2018); and Quentin Beresford *Adani and the War Over Coal* (NewSouth Books, Sydney, 2018).

58 Katherine Murphy “Federal Labor feels the heat over Adani, and Coalition is sweating too” *The Guardian* (online ed, Australia, 26 May 2017).

59 For the relevant legislation, see the Mineral Resources Act 1989 (Qld) and the Environmental Protection Act 1994 (Qld).

60 For a case study of this litigation, including expert reports and submissions, see Chris McGrath “Carmichael Coal Mine Cases in the Land Court & Supreme Court of Qld” (2016) Environmental Law Australia <<http://envlaw.com.au>>.

Reef.⁶¹ However, based on the evidence of Adani's economic expert, Mr Stanford, her Honour held that the mine would not cause any impact on climate change.⁶²

Mr Stanford's evidence in this case was that the supply of coal is governed by global demand which will not change as a result of the commissioning of the Carmichael mine. He said that, other things being equal, if the coal was not supplied by the Carmichael mine it would come from elsewhere. Global reserves of coal are very substantial. The first respondent criticized Mr Stanford's reasoning, submitting that the effect of approving the mine would be to increase supply. I do not accept that that is a necessary consequence. The effect of the mine may equally be to fulfil increasing demand or to remove other suppliers from the market. I have accepted Mr Stanford's evidence in this regard.

It follows therefore that there will be no increase of greenhouse gas emissions if the Carmichael mine is approved. This is because alternative supply will be sourced elsewhere to meet global demand if the mine is not approved. In that sense then, the Scope 3 emissions into will not have an adverse impact on the public interest.

President MacDonald's reasoning is akin to the *drug dealers' defence*. It says: if we do not supply the coal, another mine would, so allowing this mine will have no impact on climate change. This defence was approved as lawful by the Queensland Court of Appeal for another coal mine in 2016,⁶³ and the High Court of Australia refused an application for special leave to appeal against it, without determining its validity.⁶⁴

Leaving aside the legality of such reasoning for a moment, its fundamental problem is a factual one: it defies basic economic principles of supply and demand. In the United States, the Court of Appeals for the 10th Circuit in *WildEarth Guardians v Bureau of Land Management* rejected the drug dealers' defence based on standard economics.⁶⁵ The case concerned the environmental impact statement (EIS) under the National Environmental Policy Act 1969 for granting leases to extend massive coal mines in Wyoming, totalling 2 million tonnes of coal.⁶⁶ The United States Bureau of Land Management (BLM) had concluded in the EIS that:⁶⁷

... even if it did not approve the proposed leases, the same amount of coal would be sourced from elsewhere, and thus there was no difference between the proposed action [of approving the mine] and the no action alternative in this respect.

61 *Adani Mining*, above n 4, at [420]–[437].

62 At [448]–[449].

63 *Coast and Country Association of Queensland Inc*, above n 9.

64 *Coast and Country Association of Queensland Inc v Smith* [2017] HCATrans 74.

65 *WildEarth Guardians v Bureau of Land Management* 870 F 3d 1222 (10th Cir 2017).

66 National Environmental Policy Act 42 USC §§ 4321–4370h.

67 *WildEarth Guardians*, above n 65, at 1227.

The Court of Appeals rejected this — the drug dealers’ defence — as arbitrary and capricious because the assumption underpinning it was irrational. The Court found:⁶⁸

Here, the blanket assertion [by the BLM] that coal would be substituted from other sources, unsupported by hard data, does not provide “information sufficient to permit a reasoned choice” between the preferred alternative and no action alternative. It provided no information.

Even if we could conclude that the agency had enough data before it to choose between the preferred and no action alternatives, we would still conclude this perfect substitution assumption arbitrary and capricious because the assumption itself is irrational (i.e., contrary to basic supply and demand principles).

The future application of this defence for Australian coal mines remains uncertain, particularly as it contradicts basic economic principles of supply and demand. A polluter who relies upon it as a defence, therefore, relies on a court making factual findings that are contrary to basic economic principles. That in itself — even leaving aside the legality of the argument — makes it a weak defence.

2 Challenges in the Federal Court of Australia

In addition to requiring approval under state law, the Carmichael Coal Mine also required approval under the federal Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act). The first approval of the mine under that Act was set aside by consent after a legal error not related to climate change was identified.⁶⁹

In granting a second approval for the mine under the Act, the Minister found that the GHG emissions from burning to coal would be 4.7 billion tonnes of CO₂-equivalent.⁷⁰ However, he went on to find:⁷¹

While the proponent has identified a quantity of overseas GHG emissions that may result from burning the coal, these emissions are not a direct consequence of the proposed action. The actual quantity of emissions that is likely to be additional to current global GHG emissions depends on a range of variables. They include: whether the coal replaces coal currently provided by other suppliers, whether the coal is used as a substitute for other energy sources, and the efficiency of the coal burning power plants. The international multilateral environment agreements, the United Nations Framework Convention on Climate Change and its Kyoto Protocol, provide mechanisms to address climate change globally. Under these agreements, the nations responsible for burning the coal produced from the proposed

68 At 1235–1236.

69 See Chris McGrath “Carmichael Coal Mine cases in the Federal Court” (2016) Environmental Law Australia <<http://envlaw.com.au>>.

70 The relevant parts of the Minister’s reasons were set out in *Australian Conservation Foundation Inc v Minister for the Environment* [2016] FCA 1042, (2016) 251 FCR 308 at [58].

71 At [68].

mine would be expected to address the emissions from transport by rail, shipping and combustion of the product coal in their own countries.

...

I found that the quantity of overseas GHG emissions from the Carmichael Coal Mine and Rail project proceeding is subject to a range of variables. It is possible to determine a possible total quantity of these emissions that may occur, as provided under paragraph 136. However, determining the actual net emissions from transport by rail, shipping and combustion of the product coal that would occur as a result of the project, after taking account of the variables outlined above, is speculative at this stage. It is therefore not possible to draw robust conclusions on the likely contribution of the project to a specific increase in global temperature. As a result it is difficult to identify the necessary relationship between the taking of the action and any possible impacts on relevant matters of national environmental significance which may occur as a result of an increase in global temperature.

I found that direct and consequential greenhouse gas emissions associated with the project will be managed and mitigated through national and international emissions control frameworks operating in Australia and within countries that are the import market for coal from the project.

The Federal Court and, on appeal, the Full Federal Court found that this reasoning was lawful under the EPBC Act.⁷² We do not need to go into those reasons in detail here. What is relevant to note is the factual difference in the reasoning in the Land Court and by the Minister. The Land Court accepted the drug dealers' defence outright. It found that there would be no impact from the mine because if the coal did not come from this mine, it would come from another mine. The Minister did not clearly accept the drug dealers' defence outright, but muddied the water so that it was not clear what impacts, if any, would result from the mine.

The approach in the Land Court, and by the Minister and Federal Court, in relation to the Carmichael Coal Mine — the correctness of which was left open by the majority in *Buller Coal* — was that, in assessing cumulative effects, it was entitled to have regard to the effects of the activity under consideration in conjunction with the effects of other activities around the world that also produced CO₂.⁷³

The common element of all of these approaches is to avoid legal liability for harm based on the actions of others.

The reasoning in *Buller Coal* and *Adani Mining* reflects what can be seen as failures by governments in administering statutory laws, and courts in preventing harm from contributions to climate change. The facts in these cases provide examples to explore opportunities for future common law claims.

72 *Australian Conservation*, above n 70; and, on appeal, *Australian Conservation Foundation Inc v Minister for the Environment and Energy* [2017] FCAFC 134, (2017) 251 FCR 359.

73 *Buller Coal*, above n 3, at [126].

IV OPPORTUNITIES FOR FUTURE COMMON LAW CLAIMS

Writing from a United States perspective in 2011, Douglas Kysar predicted that “[c]limate change is coming to the common law.”⁷⁴ He argued that:⁷⁵

By forcing courts to confront questions of harm, causation, and responsibility that lie at the frontiers of science and ethics, climate change lawsuits hold potential to move the bar for what counts as exotic in the domain of tort.

We agree.

Australian and New Zealand lawyers can learn much from writers such as Kysar about recalibrating our expectations of the law. We can also learn much about the opportunities for future common law claims for harm caused by climate change from past and present litigation, including overseas litigation. There have been, and are currently, remarkable cases in other jurisdictions that demonstrate ambitious attempts to develop the law to hold governments and individuals accountable for the harm caused by climate change.⁷⁶

The famous *Urgenda Foundation v The State of Netherlands (Ministry of Infrastructure and the Environment)* case in Holland, in which the Hague District Court ordered the Dutch Government to cut GHG emissions in line with international scientific recommendations,⁷⁷ is an example of an ambitious attempt to develop the law. While several lines of argument were raised, the Court’s decision centred on the general negligence provisions of the Dutch Civil Code. The Court held that the State of the Netherlands owed a duty of care to Urgenda and had breached this duty. The decision has been hailed as the first case to use a tortious cause of action to hold a government to account for its inadequate climate change mitigation efforts.⁷⁸

The Hague Court of Appeal recently upheld the *Urgenda* decision and updated it in the context of the Paris Agreement.⁷⁹ It is nothing short of an amazing decision that, even with differences in national legal systems, deserves to be widely read by anyone considering climate change litigation around the world.

74 Douglas A Kysar “What Climate Change Can Do about Tort Law” (2011) 41 *Envtl L* 1 at 2.

75 At 1.

76 Several recent cases are discussed. See Jacqueline Peel and Hari M Osofsky “A Rights Turn in Climate Change Litigation?” (2018) 7 *TEL* 37.

77 *Urgenda Foundation v The State of Netherlands (Ministry of Infrastructure and the Environment)* DC Hague C/09/456689/HA ZA 13–1396, 24 June 2015. See also Urgenda “Climate Case” <www.urgenda.nl>.

78 See Peel and Osofsky “A Rights Turn in Climate Change Litigation?”, above n 76, at 38.

79 *State of the Netherlands v Urgenda Foundation* CA Hague C/09/456689/ HA ZA 13-1396, 9 October 2018.

While upholding the outcome of the District Court trial, the Court of Appeal departed from the District Court's reasoning,⁸⁰ and based its decision heavily on the Netherlands having a positive duty under the Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR).⁸¹ Under art 2, the Netherlands have a duty to protect the lives of citizens within its jurisdiction and, under art 8, a duty to protect the right to home and private life. The Court of Appeal summarised key elements of climate science in the context of the objectives of the Paris Agreement (which had not been agreed at the time of the District Court decision). Its grasp of the climate science was central to rejecting the Netherlands' arguments, such as rejecting reliance on negative emissions to achieve 2°C, which the Court found were "highly uncertain and ... not very realistic considering the current state of affairs".⁸² The Court of Appeal went on to reject multiple defences of the Netherlands, including rejecting an argument that the doctrine of the separation of powers prevented the Court from adjudicating on the dispute.⁸³ The Court of Appeal concluded:⁸⁴

... up till now the State has done too little to prevent a dangerous climate change and is doing too little to catch up, or at least in the short term (up to end-2020). 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.

...

Based on this, the Court is of the opinion that the State fails to fulfil its duty of care pursuant to Articles 2 and 8 ECHR by not wanting to reduce emissions by at least 25% by end-2020. A reduction of 25% should be considered a minimum, in connection with which recent insights about an even more ambitious reduction in connection with the 1.5°C target have not even been taken into consideration. In forming this opinion, the Court has taken into consideration that based on the current proposed policy the Netherlands will have reduced 23% by 2020. That is not far from 25%, but a margin of uncertainty of 19–27% applies. This margin of uncertainty means that there is real chance that the reduction will be (substantially) lower than 25%. Such a margin of uncertainty is unacceptable. Since moreover there are clear indications that the current measures will be insufficient to prevent a dangerous climate change, even leaving aside the question whether the current policy will actually be implemented, measures have to be chosen, also based on the precautionary principle, that are safe,

80 See the analysis in Peel and Osofsky "A Rights Turn in Climate Change Litigation?", above n 76, which emphasised the lack of reliance on human rights as the basis for the trial decision, and contrasted this with other recent international climate change decisions.

81 Convention for the Protection of Human Rights and Fundamental Freedoms 213 UNTS 221 (signed 4 November 1950, entered into force 3 September 1953).

82 See, for example, *Urgenda* (CA Hague), above n 79, at [49] and [53].

83 At [54]–[70].

84 At [71] and [73].

or at least as safe as possible. The very serious dangers, not contested by the State, associated with a temperature rise of 2°C or 1.5°C — let alone higher — also preclude such a margin of uncertainty.

The Court of Appeal’s reasoning, based on fundamental human rights such as the right to life, broadened the relevance of the case to other national systems.

The extent to which the *Urgenda* decision will influence Australian and New Zealand courts is yet to be seen. While there are obvious differences in the Dutch legal system to Australia and New Zealand, there are also broad similarities, such as the concept of a duty of care.

Australia and New Zealand’s legal systems do not incorporate human rights in the same way as the Netherlands but that does not mean *Urgenda* is wholly irrelevant. New Zealand enacted the New Zealand Bill of Rights Act 1990 (NZBORA) to provide some measure of human rights protections.⁸⁵ Australia does not have a national equivalent of the NZBORA but it is acknowledged as a template for laws adopted at a state and territory level in Victoria and the Australian Capital Territory, and recently considered in Queensland.⁸⁶ Andrew Geddis and MB Rodriguez Ferrere comment that, based on New Zealand’s experience, the effect of such laws is somewhat unpredictable and sufficiently flexible to allow the judiciary to develop different remedial approaches.⁸⁷ They conclude:⁸⁸

... the New Zealand experience shows that the only certainty is that *some* judicial innovation under such instruments will occur, but just *how much* and to *what ends* is deeply uncertain.

Likewise, whether and to what extent New Zealand or Australian courts might apply human rights principles in a similar way as the Hague Court of Appeal remains uncertain. It is plausible that a New Zealand or Australian court that made similar factual findings as the Hague District Court and Court of Appeal would strive to find an innovative remedy, potentially based on human rights, to address the dire consequences of government inaction.

Tim Baxter has recently made an insightful and intriguing argument that *Urgenda*-style litigation has promise in Australia if the remedy sought is not damages but an injunction to prevent future harm.⁸⁹ His analysis draws heavily on the remarkable recent decision of Bromberg J in *Plaintiff S99/2016 v Minister for Immigration and Border Protection*.⁹⁰ In that case, the applicant, a refugee, had been detained trying to enter Australia by boat and taken, under Australia’s offshore processing regime, to Nauru. There, while

85 See generally Andrew Geddis and MB Rodriguez Ferrere, “Judicial innovation under the New Zealand Bill of Rights Act – Lessons for Queensland?” (2016) 35 University of Queensland Law Journal 251.

86 Human Rights Act 2004 (ACT); and Charter of Human Rights and Responsibilities Act 2006 (Vic). See Geddis and Rodriguez Ferrere, above n 85, at 252.

87 Geddis and Rodriguez Ferrere, above n 85, at 281-282.

88 At 282 (emphasis in original).

89 Tim Baxter “Urgenda-Style Climate Litigation Has Promise in Australia” (2017) 32 AER 70.

90 *Plaintiff S99/2016 v Minister for Immigration and Border Protection* [2016] FCA 483, (2016) 243 FCR 17.

in detention, she was raped and fell pregnant. On her request, the Australian authorities agreed to procure an abortion for her. She was taken to Papua New Guinea for the proposed abortion. She applied to restrain that from occurring due to both the legal and medical risks associated with it in Papua New Guinea. Bromberg J held that a novel duty of care existed and granted an injunction quia timet to restrain an apprehended commission of the tort of negligence and required Australia to obtain a safe and lawful abortion for her.

Jacqueline Peel, Hari Osofsky and Anita Foerster, writing recently of the “next generation” of climate change litigation in Australia, agree with Baxter that *Plaintiff S99/2016* breathes fresh life into a *Urgenda*-style case in Australia.⁹¹ We also agree.

The suite of cases in the atmospheric trust litigation in the United States is another example of an ambitious attempt to develop the law.⁹² *Juliana v United States* is a ground-breaking atmospheric trust litigation currently moving through the United States court system.⁹³ The plaintiffs in that case include 21 youths, aged between eight and 18 when the case commenced in 2015. They claim that the United States Government’s fossil fuel policies have produced an atmosphere with dangerous levels of GHGs, thereby violating the federal public trust doctrine and their federal constitutional rights to due process and equal protection. In refusing to dismiss the claim, the United States District Court found a constitutional right to a stable climate system, and determined that the public trust doctrine was an implicit part of due process and enforceable through the United States Constitution’s due process clause.⁹⁴ The United States Supreme Court recently dismissed an application for a stay, and the matter proceeded to trial on 29 October 2018.⁹⁵ Whether the claim ultimately succeeds or not, the ambition is patent.

The ambition in those cases, more than the precise legal principles they rely upon, is the lesson for Australian and New Zealand lawyers when thinking of the opportunities for future climate litigation, including common law claims.⁹⁶

Of course, future common law claims against governments, companies and individuals for climate change in Australia and New Zealand undoubtedly face many obstacles. While climate change has the capacity to cause extraordinary losses, these losses are the result of the cumulative emissions of GHGs from human activity around the globe spanning several

91 Jacqueline Peel, Hari Osofsky and Anita Foerster “Shaping the ‘Next Generation’ of Climate Change Litigation in Australia” (2017) 41 MULR 793 at 818–825.

92 See Randall S Abate “Atmospheric Trust Litigation in the United States: Pipe Dream or Pipeline to Justice for Future Generations?” in Randall S Abate (ed) *Climate Justice: Case Studies in Global and Regional Governance Challenges* (Environmental Law Institute, Washington, 2016) 543; and Michael C Blumm and Mary Christina Wood “‘No Ordinary Lawsuit’: Climate Change, Due Process, and the Public Trust Doctrine” (2017) 67 AM U L Rev 1.

93 *Juliana v United States* 217 F Supp 3d 1224 (D Ore 2016). See also Blumm and Wood, above n 92; and “Juliana v US – Climate Lawsuit” Our Children’s Trust <www.ourchildrenstrust.org>.

94 *Juliana v United States*, above n 93, at 1250 per Aiken DCJ.

95 See “Juliana v US – Climate Lawsuit”, above n 93.

96 For a discussion of increasing ambition, see Peel, Osofsky and Foerster, above n 91.

centuries. This makes it effectively impossible to attribute specific damage to individual contributions from a particular source. The climate change problem, therefore, crosses borders and requires collective solutions. This combination of features fits uneasily with the present state of both statute law and the common law.

But judges, by and large, are very practical people. Faced with a problem, they try to solve it to the best of their ability within the constraints of the legal system. The extent of those constraints depends in part on the imagination and ingenuity of the judges. While they cannot work miracles, they try their best to solve the problems that come before them.

Causation is the Holy Grail of climate litigation and a central issue that future litigation will grapple with.⁹⁷ Liability under the common law, including the principles of causation, varies across jurisdictions,⁹⁸ and are heavily affected by statutory schemes such as the New Zealand accident compensation scheme⁹⁹ and the Australian civil liability reforms.¹⁰⁰

However, despite the differences in jurisdictions and statutory schemes, a common principle is that where two or more causes combine to bring about harm, an act is legally causative if it materially contributes to the harm. As McHugh J said in *Henville v Walker*:¹⁰¹

If the defendant's breach has "materially contributed"¹⁰² to the loss or damage suffered, it will be regarded as a cause of the loss or damage, despite other factors or conditions having played an even more significant role in producing the loss or damage. As long as the breach materially contributed to the damage, a causal connection will ordinarily exist even though the breach without more would not have brought about the damage.

The facts in *Buller Coal* and *Adani Mining* illustrate projects that can logically be said to "materially contribute" to the harm of climate change. While the GHG emissions from burning the coal occur overseas, the facts of where the projects are located and where the harm is felt logically links the facts of claims to Australia and New Zealand. This is sufficient to allow litigation under the common law in these countries.

Granting relief for harm caused by climate change is no great leap from the present state of the law, and no grand *Donoghue v Stevenson*-esque decision is required.¹⁰³ Current principles of causation in tort around the liability of manufacturers of dangerous goods are readily applicable to companies that mine, sell or burn fossil fuels such as coal. Coal and other

97 Nicola Durrant *Legal Responses to Climate Change* (The Federation Press, Sydney, 2010) at ch 18.

98 See, for example, *Graham Barclay Oysters Pty Ltd v Ryan* [2002] HCA 54, (2002) 211 CLR 540; and *Body Corporate No 207624 v North Shore City Council [Spencer on Byron]* [2012] NZSC 83, [2013] 2 NZLR 297.

99 See, for example, *Accident Compensation Corporation v Ambros* [2007] NZCA 304, [2008] 1 NZLR 340 at [24]–[46] per Glazebrook, Arnold and Ellen France JJ.

100 Enacted through, for example, the Civil Liability Act 2002 (NSW) and the Civil Liability Act 2003 (Qld).

101 *Henville v Walker* [2001] HCA 52, (2001) 206 CLR 459 at [106] (footnotes in original).

102 *Bonnington Castings Ltd v Wardlaw* [1956] AC 613 (HL) at 620 per Lord Reid.

103 See *Donoghue v Stevenson* [1932] AC 562 (HL).

fossil fuels are, in many ways, equally dangerous as asbestos or cigarettes. If manufacturers of asbestos and cigarettes can be liable under the common law for the harm their products do,¹⁰⁴ why would producers of coal and other fossil fuels not be held similarly liable?

A lesson from cases such as *Buller Coal* and *Adani Mining* is that the reality of climate change is rarely challenged in court cases. Instead, large polluters seek to avoid legal liability for their contribution to climate change via various forms of mental gymnastics. One such form of mental contortion currently used by coal miners in Australia is the drug dealers' defence. Mental gymnastics that ignores reality tends to have a short shelf life — just as the High Court of Australia overturned the racist fiction that Australia was *terra nullius* (land belonging to no one) in the *Mabo v Queensland (No 2)* decision,¹⁰⁵ the drug dealers' defence for coal mines will, we expect, not escape gravity (or standard economic principles of supply and demand) forever.

Another lesson from recent litigation is that the Carbon Budget provides a convenient frame of reference to establish that the emissions produced by the coal produced by companies such as those in *Buller Coal* and *Adani Mining* are not de minimis or so small as to be insignificant in their contribution to the harm caused by climate change.

In short, cases such as *Buller Coal* and *Adani Mining* have not shut the door on successful claims in the future for the harm caused by climate change. Litigation about climate change is learning and evolving. We should expect it to continue to learn and evolve in the future to the point where governments, companies and individuals that authorise, produce and use large amounts of fossil fuels are held liable under the common law for the harm they cause.

Extending the Common Law in International Litigation

Before concluding, we note, as an exciting extension of common law litigation for climate change, another arena for ambitious future climate litigation involving Australia and New Zealand is in international forums such as the International Court of Justice (ICJ). Christina Voigt recently noted:¹⁰⁶

Under customary international law, states are under the obligation to not inflict damage on or violate the rights of other states. In environmental law, this obligation has been translated into the obligation to not cause harm to the environment of other states and to areas beyond any

104 See, for example, *Fairchild v Glenhaven Funeral Services Ltd* [2002] UKHL 22, [2003] 1 AC 32; *Barker v Corus (UK) Ltd* [2006] UKHL 20, [2006] 2 AC 572; *Orica Ltd v CGU Insurance Ltd* [2003] NSWCA 331, (2003) 59 NSWLR 14; and *Alcan Gove Pty Ltd v Zabic* [2015] HCA 33, (2015) 257 CLR 1.

105 *Mabo v Queensland (No 2)* [1992] HCA 23, (1992) 175 CLR 1.

106 Christina Voigt "The potential roles of the ICJ in climate change-related claims" in Daniel A Farber and Marjan Peeters (eds) *Climate Change Law* (Edward Elgar, Cheltenham (UK), 2016) 152 at 158–159.

jurisdiction. The ICJ in its 1996 advisory opinion in *Nuclear Weapons* and *Gabcikovo-Nagymaros* confirmed the “general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment”. The ICJ further elaborated on the no-harm rule in the *Pulp Mills* case, deciding that “[a] State is thus obligated to use all the means at its disposal in order to avoid activities which take place in its territory, or any other area under its jurisdiction, causing significant damage to the environment of another State”.

...

A state is obligated to use all the means at its disposal. In this regard, the concept of *due diligence* would be the standard of care to evaluate the conduct that is required of a state.

The parallels of customary international law to the common law is obvious, but how can Australia and New Zealand be sued for breaching these obligations, for instance by approving large coal mines such as the mines at the centre of the *Buller Coal* and *Adani Mining* cases?

While, generally, only countries that have accepted the compulsory jurisdiction of the ICJ can sue or be sued in it, both Australia and New Zealand have accepted the compulsory jurisdiction of the ICJ.¹⁰⁷ In addition, numerous countries that will be heavily impacted by climate change, such as the Marshall Islands, have also accepted the compulsory jurisdiction of the ICJ. Australia and New Zealand have accepted the compulsory jurisdiction of the ICJ subject to some exceptions, including disputes “in regard to which the parties have agreed or shall agree to have recourse to some other method of peaceful settlement”.¹⁰⁸ A dispute under customary international law over whether Australia and New Zealand are contravening the *no harm* principle through their climate and energy policies does not appear to come within the exceptions for which they have excluded the ICJ’s compulsory jurisdiction.

Ironically, Australia and New Zealand’s successful litigation in 2014 in the ICJ against Japan for whaling illustrates the potential for future litigation for breach of international obligations around climate change.¹⁰⁹ In that case, Australia and New Zealand relied on scientific evidence to establish that Japan’s whaling practices contravened art 8 of the International Convention for the Regulation of Whaling.¹¹⁰

It seems that a country such as the Marshall Islands could reverse the tables on Australia and New Zealand and bring a claim in the ICJ against them for breaching the *no harm* principle of customary international law due to their actions and policies contributing materially to climate change. This is an area ripe for future litigation.

107 See International Court of Justice “Declarations recognizing the jurisdiction of the Court as compulsory” <www.icj-cij.org>.

108 See International Court of Justice, above n 107.

109 *Whaling in the Antarctic (Australia v Japan: New Zealand intervening)* [2014] ICJ Rep 226.

110 International Convention for the Regulation of Whaling 161 UNTS 72 (signed 2 December 1946, entered into force 10 November 1948).

V CONCLUSION

We disagree with the pessimism and narrowing of legal and political imagination that infects legal scholars, judges and the political discourse on climate change.

The response of the common law to people seeking remedies for the harm they suffer from climate change cannot be like the myth of an ostrich, burying its head in the sand to avoid a danger that it does not wish to confront.¹¹¹ Our view is that the necessity of responding to plaintiffs seeking remedies for harm due to climate change will inevitably mean that judges use the inherent, creative element of the common law to mould remedies to provide relief.

Granting relief for harm caused by climate change is no great leap from the present state of the law. Current principles on causation and tort around the liability of manufacturers of dangerous goods are readily applicable to companies that mine, sell or burn fossil fuels. If manufacturers of asbestos and cigarettes can be liable under the common law for the harm their products do, why would producers of coal and other fossil fuels not be held similarly liable?

The question remains: is the common law up to the task of attributing liability for the harm caused by climate change? The common law is, of course, not a substitute for strong legislative and policy action by the Government, but it can provide some measure of compensation for people who suffer loss due to climate change. We, therefore, should expect to see the common law evolve to meet this challenge as it has in the past.

111 Contrary to common belief, it is a myth that ostriches bury their head in the sand, though they may appear to do so. See San Diego Zoo "Ostrich *Struthio camelus*" <<http://animals.sandiegozoo.org>>.