# THE INFLUENCE OF CLIMATE CHANGE LITIGATION ON GOVERNMENTS AND THE PRIVATE SECTOR

### Brian J Preston<sup>1</sup>

#### Abstract

In recent years, the number of court cases around the world raising the issue of climate change has increased dramatically. In the absence of an international treaty and effective national responses to climate change, litigation provides an alternative path to encourage mitigation of the causes and adaptation to the effects of climate change. Much of the litigation, particularly the early climate change cases, has taken place in state courts or administrative tribunals, and has focused on applying existing legislation to require government decision-makers to consider future climate change associated risks in planning decisions. The effects of these cases have been wide reaching, leading to the revision or formulation of government policies on mining and coastal management. Other cases, particularly within federal courts, have been less successful, but have nonetheless highlighted areas in need of law reform. Recent high profile cases targeting major sources of greenhouse gas emissions including coalmines and power stations have raised novel arguments based on common law public nuisance grounds and the public trust doctrine. This article examines the extent to which climate change litigation has influenced government decision-makers, legislatures and polluters to curb emissions and adapt to the impacts of *climate change.* 

### I. INTRODUCTION

Over the past several years, the number of cases around the world raising the problem of climate change has increased dramatically and courts have become a critical forum in which the future of greenhouse gas (GHG) emission regulation and responsibility for adaptation to climate change are debated.<sup>2</sup>

Litigants have instituted judicial review and merits review proceedings to challenge administrative decisions or conduct relating to approval of development proposals. Many of these involve disputes over whether certain proposals for coal fired power plants or coalmines should be granted development consent, or the extent to which climate change induced hazards, such as projected sea-level rise, coastal erosion or flooding, need to be considered in coastal planning processes.<sup>3</sup> Because these cases, often taking place in state courts or administrative tribunals, aim to use existing environmental laws to force, block or modify specific government decisions at the local and state levels, plaintiffs have achieved varying degrees of success and the cases have been less intertwined with national policy debates surrounding climate change.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Chief Judge of the Land and Environment Court of New South Wales. This article is based on a paper presented to the workshop "Beyond a Carbon Price: A Framework for Climate Change Regulation in Australia", 11-12 August 2011, University of Melbourne. I gratefully acknowledge the assistance of Kylie Wilson in the research and writing of this article.

<sup>&</sup>lt;sup>2</sup> Hari Osofsky, *The Continuing Importance of Climate Change Litigation*, 1 Climate Law 3, at 4 (2010).

<sup>&</sup>lt;sup>3</sup> See eg., Australian Conservation Foundation v Latrobe City Council (2004) 140 LGERA 100; Gray v The Minister for Planning (2006) 152 LGERA 258; Walker v Minister for Planning (2007) 157 LGERA 124.

<sup>&</sup>lt;sup>4</sup> Osofsky, supra note 2, at 8.

In the Federal Court of Australia, plaintiffs have not been as successful because federal environmental laws have a narrower application to certain matters of national environmental significance, making the indirect impacts of GHGs from potential projects on matters of national environmental significance, such as the Great Barrier Reef, difficult to prove.<sup>5</sup> These cases have nonetheless highlighted areas in need of law reform. Unsuccessful cases have also provided a vehicle for the development of the law, allowing subsequent cases to build on the legal arguments and scientific evidence presented.<sup>6</sup>

Private litigants have brought civil actions to enforce statutory environmental laws to require major emitters to mitigate GHG emissions<sup>7</sup> or require government to take action to establish and enforce limits on GHG emissions on grounds of public trust.<sup>8</sup> Private litigants have also resorted to the common law actions of nuisance and negligence to seek compensation for loss and damage suffered by reason of climate change caused in part by GHG emissions.<sup>9</sup>

Climate change litigation has both direct and indirect effects on governmental regulatory decision-making, corporate behaviour, and public understanding of the issue of climate change.<sup>10</sup> Osofsky argues that both successful cases and those with little hope of succeeding have together helped to change the regulatory landscape at multiple levels of government by putting both legal and moral pressure on a wide range of individuals and entities to act.<sup>11</sup> In the climate change context, courts have moved beyond their primary function of resolving disputes between private individuals and are now being used by public interest litigants as vehicles for achieving social change by using courts as arenas for protest and political discourse.<sup>12</sup> Indeed, the goals of climate change litigation include indirect effects beyond the parties to the litigation and beyond the litigation's specific claims.<sup>13</sup>

The advantage of public interest litigation is that it can focus public attention on a particular issue through media exposure. Even unsuccessful cases can expose weaknesses in the law and highlight the need for law reform.<sup>14</sup>

This article examines the extent to which climate change litigation has influenced governmental decision-makers, legislatures and polluters to curb emissions and adapt to the impacts of climate change. It groups cases into three broad categories: (1) successful cases where courts have upheld climate change challenges and have therefore had a direct impact on governmental regulation and decision-making or development proposals; (2) ostensibly unsuccessful cases where courts have not upheld climate change challenges, but where the proceedings have nonetheless had an influence on governmental decision-making, legislative reform, and the investment and development choices of private entities; and (3) novel cases

<sup>&</sup>lt;sup>5</sup> See, Wildlife Preservation Society v Minister for the Environment and Heritage (2006) 232 ALR 510; Anvil Hill Project Watch Association Inc v Minister for the Environment and Water Resources (2007) 243 ALR 784.

<sup>&</sup>lt;sup>6</sup> Felicity Millner and Kirsty Ruddock, *Climate Litigation: Lessons learned and future opportunities* 36(1) Alternative Law Journal 27, at 27 (2011).

<sup>&</sup>lt;sup>7</sup> See, *Gray v Macquarie Generation* [2010] NSWLEC 34; *Gray v Macquarie Generation* (*No 3*) [2011] NSWLEC 3.

<sup>&</sup>lt;sup>8</sup> See the atmospheric trust litigation discussed below.

<sup>&</sup>lt;sup>9</sup> See, Brian J Preston, *Climate Change Litigation (Part 1)* (2011) 5(1) Carbon and Climate Law Review 3, at 4–9.

<sup>&</sup>lt;sup>10</sup> Osofsky, supra note 2, at 5.

<sup>&</sup>lt;sup>11</sup> Ibid., at 9.

<sup>&</sup>lt;sup>12</sup> Ibid., at 6-7.

<sup>&</sup>lt;sup>13</sup> Ibid., at 7.

<sup>&</sup>lt;sup>14</sup> Millner and Ruddock, supra note 6, at 27.

that have not yet been decided, but have the potential to influence governments to regulate GHG emissions or industry to mitigate GHG emissions.

II. SUCCESSFUL CASES WHERE COURTS HAVE UPHELD CLIMATE CHANGE CHALLENGES

The successful cases fall into three categories: (a) judicial review relating to mitigation of GHG emissions; (b) judicial review relating to no or inadequate adaptation to the consequences of climate change; and (c) merits review relating to no or inadequate adaptation to the consequences of climate change.

1. Judicial Review Relating to Climate Change Mitigation

A breakthrough came with the US Supreme Court's decision in *Massachusetts v EPA*.<sup>15</sup> The State of Massachusetts, together with 11 other States, three cities, two United States territories and several environmental groups sought review of the denial by the Environment Protection Agency (EPA) of a petition to regulate the emissions of four GHGs, including carbon dioxide, under s 202 (a)(1) of the *Clean Air Act*. Section 202 (a)(1) of the *Clean Air Act* requires that the EPA shall by regulation prescribe standards applicable to the emission of any air pollution from any class of new motor vehicles which, in the EPA's judgment, causes or contributes to air pollution reasonably anticipated to endanger public health or welfare.

The EPA's denial of the rule-making petition flowed from its non-acceptance that GHGs were air pollutants. But once litigation commenced, EPA also raised other procedural defences, including challenging the petitioners' standing. The US Supreme Court upheld the State of Massachusetts' standing to challenge the EPA's denial of their rule-making petition. The Supreme Court applied the three-part test for standing in *Lujan v Defenders of Wildlife*,<sup>16</sup> namely:

- (a) The plaintiff has suffered "an injury in fact" which is both concrete and particularised, and actual and imminent, as opposed to conjectural or hypothetical.
- (b) The injury is fairly traceable to the challenged action of the defendant.
- (c) There is a likelihood that the injury can be redressed by a favourable decision, as opposed to this being merely speculation.

The Supreme Court held that Massachusetts had suffered an injury in fact as owner of the State's coastal land which is and will be affected by climate change-induced sea level rise and coastal storms.<sup>17</sup> The fact that other States suffered similar injuries did not disqualify Massachusetts.<sup>18</sup>

In relation to causation, the EPA did not contest the link between GHG emissions and climate change. However, the EPA argued that its decision not to regulate GHG emissions from new motor vehicles contributes so insignificantly to the petitioners' injuries that it cannot be challenged in court.<sup>19</sup> The Supreme Court held against the EPA stating that:

<sup>&</sup>lt;sup>15</sup> Massachusetts v EPA 549 US 497, 127 S.Ct. 1438, 167 L.Ed.2d. 248 (2007).

<sup>&</sup>lt;sup>16</sup> 504 US 555, 112 S.Ct.2130, 119 L.Ed.2d 351 (1992).

<sup>&</sup>lt;sup>17</sup> Massachusetts v EPA, supra note 15, at 19–20.

<sup>&</sup>lt;sup>18</sup> Ibid., at 19.

<sup>&</sup>lt;sup>19</sup> Ibid., at 20.

Its argument rests on the erroneous assumption that a small, incremental step, because it is incremental, can never be attacked in a federal judicial forum. Yet accepting that premise would doom most challenges to regulatory action. Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop.<sup>20</sup>

The Supreme Court found that reducing domestic automobile emissions, a major contributor to GHG concentrations, is "hardly a tentative step".<sup>21</sup>

Having upheld the standing of Massachusetts, the Supreme Court found that the EPA's reading of the applicable statutory provision, s 202(a)(1) of the *Clean Air Act*, was erroneous. GHGs are "air pollutants" and the statutory provision authorised the EPA to regulate GHG emissions from new motor vehicles in the event that it formed the judgment that such emissions contribute to climate change.<sup>22</sup> The Supreme Court held that the EPA Administrator must determine whether or not emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.<sup>23</sup>

In relation to redressability, the Supreme Court held that while the remedy sought by the plaintiffs, regulating motor vehicle emissions, would not reverse global warming, it might slow down or reduce its effects.<sup>24</sup>

The Supreme Court's decision in *Massachusetts v EPA* can be seen to have had four influences. First, the decision authoritatively upheld the State of Massachusetts' standing to sue in relation to a climate change issue. Although the test to be applied was not in dispute, the decision demonstrated how the test could be applied in climate change litigation. The reasoning in the Supreme Court's decision in *Massachusetts v EPA* has been subsequently followed by lower courts in upholding standing for plaintiffs bringing common law actions, including in nuisance, for climate change induced harms causally connected to the defendants' conduct.<sup>25</sup> In particular, the decision was applied by the Supreme Court in the subsequent decision of *American Electric Power Co Inc v Connecticut*<sup>26</sup> to uphold the State of Connecticut's standing.

Secondly, the decision in *Massachusetts v EPA* has provided the basis for executive action as climate change legislation continues to stall in the US.<sup>27</sup> In response to the Supreme Court's ruling, in December 2009, the EPA Administrator signed and published two findings regarding GHGs under the *Clean Air Act*, first an endangerment finding and, second, a cause or contribute finding. The endangerment finding is that the current and projected atmospheric concentrations of six, key, well-mixed GHGs—carbon dioxide (CO<sub>2</sub>), methane

<sup>&</sup>lt;sup>20</sup> Ibid., at 21.

<sup>&</sup>lt;sup>21</sup> Ibid., at 21-22.

<sup>&</sup>lt;sup>22</sup> Ibid., at 25-26, 29-30.

<sup>&</sup>lt;sup>23</sup> Ibid., at 30-31.

<sup>&</sup>lt;sup>24</sup> Ibid., at 22.

<sup>&</sup>lt;sup>25</sup> See *Connecticut v American Electric Power Co* 582 F 3d 309 (2<sup>nd</sup> Cir 2009) and *Comer v Murphy Oil* 585 F.3d 855 (5<sup>th</sup> Cir 2009).

<sup>&</sup>lt;sup>26</sup> American Electric Power Co Inc v Connecticut U.S. No. 10-174 20 June 2011 (Slip Opinion). The Supreme Court was equally divided (4:4) and therefore affirmed the decision of the US Court of Appeals for the Second Circuit that Connecticut had standing: at 6.

<sup>&</sup>lt;sup>27</sup> Osofsky, supra note 2, at 7.

(CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)— "endanger the public health and welfare of current and future generations."<sup>28</sup> The cause or contribute finding is that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.<sup>29</sup>

On 7 May 2010, the EPA issued a Final Rule establishing greenhouse gas emission standards for light-duty vehicles, covering model years from 2012 to 2016.<sup>30</sup> On 13 May 2010, the EPA issued the final GHG Tailoring Rule, which specifies that beginning in 2011, projects that increase GHG emissions substantially will require a permit under the Clean Air Act. Covered facilities include power plants, industrial boilers and oil refineries and are responsible for 70 percent of the GHGs from stationary sources.<sup>31</sup> The EPA has formulated guidelines for state and local permitting authorities for the issuance of Clean Air Act permits to sources of GHG emissions.<sup>32</sup>

The EPA is currently developing the United States' greenhouse gas regulations for heavyduty engines and vehicles.<sup>33</sup> The Supreme Court's decision and the EPA's subsequent findings could lead to extensive regulation of greenhouse gas emissions over time if Congressional legislation does not overturn the decision.<sup>34</sup> Partly in response to *Massachusetts v EPA*, the Obama administration has crafted a National Fuel Efficiency Policy with the aim of harmonising state and federal vehicle emission standards by 2012.<sup>35</sup>

Thirdly, and following on from the second influence, the decision in *Massachusetts v EPA* that the Clean Air Act applied and authorised EPA regulatory action was held by the Supreme Court in *AEP v Connecticut* to displace the federal common law of nuisance.<sup>36</sup>

Fourthly, the decision in *Massachusetts v EPA* has provided a source of inspiration for other litigation in other jurisdictions, in particular the decision's recognition that GHGs are air pollutants. One case inspired by this finding currently before the Land and Environment Court of NSW is *Gray v Macquarie Generation*.<sup>37</sup>

 <sup>&</sup>lt;sup>28</sup> US Environmental Protection Agency, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act", 74(239) *Federal Register* (15 December 2009), 66496, available at http://epa.gov/climatechange/endangerment.html.
 <sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> US Environmental Protection Agency, "Light Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Standards; Final Rule", 75(88) *Federal Register* (7 May 2010), 25324, available at http://epa.gov/otaq/climate/regulations.htm.

<sup>&</sup>lt;sup>31</sup> US Environmental Protection Agency, "Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule", 75(106) *Federal Register* (3 June 2010), 31514, available at <

http://www.epa.gov/NSR/actions.html#may10 > (last accessed 13 October 2010).

<sup>&</sup>lt;sup>32</sup> See, US Environmental Protection Agency, *Clean Air Act Permitting for Greenhouse Gases*, http://www.enc.gov/agr/ab.gov/mitting.html (viewed 2 August 2011)

http://www.epa.gov/nsr/ghgpermitting.html (viewed 3 August 2011).

<sup>&</sup>lt;sup>33</sup> US Environmental Protection Agency, *EPA and NHTSA Propose First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles: Regulatory Announcement* (October 2010), http://epa.gov/otaq/climate/regulations/420f10901.htm (viewed 3 August 2011).

 <sup>&</sup>lt;sup>34</sup> The House of Representatives has passed a measure that would rescind the EPA's authority to regulate greenhouse gases, although it was blocked in the Senate: Osofsky, supra note 2, at 21.
 <sup>35</sup> The Whitehouse, *President Obama Announces National Fuel Efficiency Policy*, 19 May 2009,

 <sup>&</sup>lt;sup>35</sup> The Whitehouse, *President Obama Announces National Fuel Efficiency Policy*, 19 May 2009, http://www.whitehouse.gov/the-press-office/president-obama-announces-national-fuel-efficiency-policy.
 <sup>36</sup> American Electric Power Co Inc v Connecticut U.S. No. 10-174 20 June 2011 (Slip Opinion) at 9-15.

<sup>&</sup>lt;sup>37</sup> Gray v Macquarie Generation [2010] NSWLEC 34; Gray v Macquarie Generation (No 3) [2011]

NSWLEC 3 and see discussion on this case below.

The decision in *Massachusetts v EPA* to overturn the EPA's decision to deny the plaintiffs' rule making petition has also inspired other rule making petitions to be filed with state agencies throughout the US. On 4 May 2011, Kids vs Global Warming, a non-profit organisation, filed with the Iowa Department of Natural Resources a petition for rulemaking proposing that the Department adopt rules relating to CO<sub>2</sub> emissions.<sup>38</sup> On 5 May 2011, the Texas Environmental Law Centre filed a similar petition with the Texas Commission on Environmental Quality.<sup>39</sup> The petitions were filed in conjunction with the suite of legal actions brought in other states claiming that the public trust doctrine imposes an affirmative duty upon the states to protect and preserve the atmosphere.<sup>40</sup> Both petitions were denied and the non-profit organisations have commenced two separate proceedings against the Iowa Department of Natural Resources and the Texas Commission on Environmental Quality seeking judicial review of the denial of the petitions for rule making.<sup>41</sup>

One of the first judicial reviews relating to climate change in Australia was *Australian Conservation Foundation v Latrobe City Council.*<sup>42</sup> In that case, the Victorian Civil and Administrative Tribunal held that the environmental effects of GHG emissions that were likely to be produced by use of the Hazelwood Power Station were relevant to be considered in the proposed amendment to the planning scheme to facilitate mining the West Field coalfields to supply coal for the power station.<sup>43</sup>

The decision in the Hazelwood Power Station case has had at least two influences. First, it established the relevance of indirect or downstream GHG emissions to an environmental assessment of an amendment of a planning scheme.<sup>44</sup>

Secondly, it influenced the subsequent conduct of the operator of the power station and the Victorian government to reduce the GHG emissions from the Hazelwood Power Station. After the court decision, the operator of the Hazelwood Power Station entered into a Greenhouse Gas Reduction Deed with the Victorian government in return for a revised mining licence over the operator's West Field coal allocation. The Deed caps CO<sub>2</sub> emissions from the Hazelwood Power Station to 445Mt CO<sub>2</sub>e over the remaining life of the power station.<sup>45</sup> This represents a reduction of 34Mt over Hazelwood Power Station's existing pollution levels. The Deed has been criticised for being weak and unambitious in achieving

<sup>&</sup>lt;sup>38</sup> Iowa Department of Natural Resources, Denial of Petition for Rulemaking, 22 June 2011, available at http://www.ourchildrenstrust.org/sites/default/files/Iowa%20Denial%20OL.pdf.

<sup>&</sup>lt;sup>39</sup> Texas Commission on Environmental Quality, Decision of the Commission Regarding the Petition for Rulemaking Filed by the Texas Environmental Law Center, 23 June 2011, available at http://www.ourchildrenstrust.org/sites/default/files/Texas1.pdf

<sup>&</sup>lt;sup>40</sup> See the atmospheric trust litigation discussed below.

<sup>&</sup>lt;sup>41</sup> Our Children's Trust and Kids vs Global Warming, Press Release, Youth Sue State Agencies to Preserve the Future and Halt Climate Change, 21 July 2011, available at

http://www.ourchildrenstrust.org/sites/default/files/IA%20Press%20Release.pdf; Texas Environmental Law Center, Press Release, *Youth Sue TCEQ to Preserve the Future and Halt Climate Change*, 21 July 2011, available at http://www.ourchildrenstrust.org/sites/default/files/TX%20Press%20Release%20%281%29.pdf. <sup>42</sup> (2004) 140 LGERA 100.

<sup>&</sup>lt;sup>43</sup> Australian Conservation Foundation v Latrobe City Council (2004) 140 LGERA 100 at [43]-[47].

<sup>&</sup>lt;sup>44</sup> Charles Berger, *Hazelwood: A New Lease on Life for a Greenhouse Dinosaur, in* Climate Law in Australia, 161, at 170 (Tim Bonyhady & Peter Christoff, eds., 2007); Jacqueline Peel, *The Role of Climate Change Litigation in Australia's Response to Global Warming*, 24 Environmental and Planning Law Journal 90, at 97-98 (2007).

<sup>&</sup>lt;sup>45</sup> International Power GDF Suez, Frequently Asked Questions, available at http://www.ipplc.com.au/thecompany/assets/hazelwood-power-station-and-mine/hazelwood-west-field-project/frequently-asked-questions/ (accessed 26 August 2011).

GHG emission reductions for Australia's most pollution-intensive major power generating plant.  $^{\rm 46}$ 

The case of *Gray v Minister for Planning*<sup>47</sup> was a judicial review challenge to the Anvil Hill open cut coalmine in the Hunter Valley. The Land and Environment Court of NSW held that GHG emissions from downstream use (burning) of coal mined from the proposed coal mine were relevant matters to be considered in the environmental assessment of the mine<sup>48</sup> and in the Director-General's decision to accept the proponent's environmental assessment as adequately addressing the environmental assessment requirements of the Director-General.<sup>49</sup>

The applicant sought a declaration that the Director-General's view that the proponent's environmental assessment adequately addressed the Director-General's environmental assessment requirements was void and without effect. The applicants challenged the Director-General's opinion that the environmental assessment was adequate because he failed to take into account principles of ecologically sustainable development (ESD) including the precautionary principle and intergenerational equity.<sup>50</sup>

The Director-General specified in the environmental assessment requirements that the proponent address a number of issues including "a detailed greenhouse gas assessment". The assessment of greenhouse gases was conducted by the proponent's consultants principally in accordance with the World Business Council for Sustainable Development and the World Resources Institute GHG Protocol 2004, which refers to the assessment of scope 1, 2 and 3 emissions. Scope 1 and 2 emissions were assessed and included in the environmental assessment, but not scope 3 emissions.<sup>51</sup> Scope 3 emissions were an optional reporting category for indirect emissions occurring from sources not owned or controlled by the company.<sup>52</sup>

The applicant argued that the broad definition of "environment" in the *Environmental Planning and Assessment Act 1979* (NSW) (EPA Act) combined with a broad application of causation based on common sense, provided a legal principle which bound the Director-General so that he had to require that scope 3 emissions be provided in the environmental assessment because that is what the environmental assessment requirements required by "detailed GHG assessment".<sup>53</sup>

The Court considered that there was a "sufficiently proximate link" between the mining of a very substantial reserve of coal in NSW and the emission of GHGs, which is impacting on the NSW environment, to require assessment of that GHG contribution of the coal when burnt in an environmental assessment under Pt 3A.<sup>54</sup>

<sup>&</sup>lt;sup>46</sup> Berger, supra note 44, at 169; Hari Osofsky, Local Approaches to Transnational Corporate Responsibility: Mapping the Role of Subnational Climate Change Litigation, 20 Pacific McGeorge Global Business and Development Law Journal 143, at 147 (2007).

<sup>&</sup>lt;sup>47</sup> (2006) 152 LGERA 258.

<sup>&</sup>lt;sup>48</sup> Gray v Minister for Planning (2006) 152 LGERA 258 at [100], [125].

<sup>&</sup>lt;sup>49</sup> Ibid at [115], [126], [135].

<sup>&</sup>lt;sup>50</sup> Ibid at [101].

<sup>&</sup>lt;sup>51</sup> Ibid at [20].

<sup>&</sup>lt;sup>52</sup> Ibid at [19].

<sup>&</sup>lt;sup>53</sup> Ibid at [80].

<sup>&</sup>lt;sup>54</sup> Ibid at [100].

While Part 3A does not specify any limits on the discretion exercised by the Director-General in relation to the scope of the environmental assessment requirements and how these are applied in an environmental assessment, the Court considered that he must exercise that broad discretion in accordance with the objects of the EPA Act which include the encouragement of the principles of ecologically sustainable development (ESD).<sup>55</sup> The Court held that consideration of the principles of ESD, and in particular the principle of intergenerational equity and the precautionary principle, meant that the downstream, scope 3 emissions should have been included in the environmental assessment.<sup>56</sup> On that basis, the decision by the Director-General that the proponent's environmental assessment adequately addressed the environmental assessment requirements under s 75F of the EPA Act was void and of no effect.<sup>57</sup>

The decision in *Gray v Minister for Planning* has had at least three influences. The first is that the decision is part of a series of decisions evidencing a process of judicial reasoning by analogy in relation to the principles of ecologically sustainable development, each decision drawing on prior decisions and in turn influencing subsequent decisions. Incrementally, each decision develops the jurisprudence on principles of ESD and affirms their relevance and importance.<sup>58</sup> The decision applies the findings made in cases concerning development under Part 4 of the EPA Act, that decision-makers are required to consider the public interest in determining whether to grant development consent and the public interest includes the principles of ESD, and extends those findings to projects under Part 3A of the EPA Act.

Secondly, the decision augmented the approach in the Hazelwood Power Station case<sup>59</sup> of the relevance of downstream, scope 3 GHG emissions to an environmental assessment of new coal mining projects<sup>60</sup>

Thirdly, the decision prompted in part a legislative response. Subsequent to the decision in *Gray v Minister for Planning*, the New South Wales government introduced the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (SEPP) to ensure that indirect emissions from extractive industries are considered in the decision-making process. Clause 14 of the SEPP provides:

- (1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following:
  - (a) that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable,

<sup>&</sup>lt;sup>55</sup> Ibid at [115]. The Court's reliance on the objects of the EPA Act for its conclusion was disapproved by the Court of Appeal in *Minister for Planning v Walker* (2008) 161 LGERA 423 at [55].

<sup>&</sup>lt;sup>56</sup> Ibid at [125], [126]. [135].

<sup>&</sup>lt;sup>57</sup> Ibid at [145], [152].

<sup>&</sup>lt;sup>58</sup> Brian J Preston, *The Art of Judging Environmental Disputes*, 12 Southern Cross University Law Review 103, at 115–121 (2009).

<sup>&</sup>lt;sup>59</sup> Australian Conservation Foundation v Latrobe City Council (2004) 140 LGERA 100

<sup>&</sup>lt;sup>60</sup> David Farrier, *The limits of judicial review: Anvil Hill in the Land and Environment Court, in* Climate Law in Australia, 189 at 190, 199, 207 (Tim Bonyhady and Peter Christoff, eds, 2007); Peel, supra note 40, at 98-101.

- (b) that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable,
- (c) that greenhouse gas emissions are minimised to the greatest extent practicable.
- (2) Without limiting subclause (1), in determining a development application for development for the purposes of mining, petroleum production or extractive industry, 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.

### 2. Judicial Review Relating to Climate Change Adaptation

In *Walker v Minister for Planning*,<sup>61</sup> the Land and Environment Court of NSW held that climate change flood risk for a project for the subdivision and residential development of land near Sandon Point on a flood constrained coastal plain was a relevant matter to be considered by the Minister for Planning in determining to approve a concept plan for the project under Part 3A of the EPA Act.<sup>62</sup> The Court found that the public interest was an impliedly relevant matter to be considered and that ESD was an element of the public interest. Consideration of the principles of ESD in the circumstances of the case required consideration of the climate change flood risk to the coastal plain.<sup>63</sup>

One of the grounds of challenge was that the Minister had failed to take into account an implied mandatory consideration, namely, the principles of ESD and the impact of the proposal upon the environment in several respects, including whether the flooding impacts of the project would be compounded by climate change.<sup>64</sup> The Court undertook a careful review of the development of the concept of ESD, its adoption in international conferences and declaration, and its adoption in Australian inter-governmental agreements and strategies and also in Australian legislation and case law.

The Court held that, having regard to the subject matter, scope and purpose of the EPA Act and the gravity of the well-known potential consequences of climate change, in circumstances where neither the Director-General's report nor any other document before the Minister appeared to have considered whether climate change flood risk was relevant to this flood constrained coastal plain project, the Minister was under an implied obligation to consider whether it was relevant and, if so, to take it into consideration when deciding whether to approve the concept plan.<sup>65</sup>

On appeal, the New South Wales Court of Appeal reversed the Land and Environment Court's decision to void the Minister's decision to approve the concept plan. However, this was a result of the timing of the Minister's decision and the Court of Appeal's view of what the public interest encompassed at that time. The Court of Appeal accepted that the Minister

<sup>&</sup>lt;sup>61</sup> (2007) 157 LGERA 124.

<sup>&</sup>lt;sup>62</sup> Walker v Minister for Planning (2007) 157 LGERA 124 at [166].

<sup>63</sup> Ibid.

<sup>&</sup>lt;sup>64</sup> Ibid., at [2].

<sup>&</sup>lt;sup>65</sup> Ibid., at [166].

must consider the public interest in fulfilling functions under the EPA Act.<sup>66</sup> A critical question for the Court of Appeal was whether the concept of the public interest included the principles of ESD. In considering that question, the Court of Appeal drew a distinction between different functions under different parts of the EPA Act.

Under Part 4 of the EPA Act, consent authorities consider and determine development applications to carry out development on land. The Court of Appeal held that "in respect of a consent authority making a decision in accordance with s 79C of the EPA Act, and a court hearing a merits appeal from such a decision, consideration of the public interest embraces ESD".<sup>67</sup>

Under Part 3A of the EPA Act, which dealt with State significant development and critical infrastructure, the Minister considers and determines applications for approval of a concept plan for a project and applications for approval to carry out a project on land. The Court of Appeal drew a distinction between what the public interest involved in relation to applications for approval of a concept plan and applications for approval to carry out a project. In *Walker*, the Minister had only approved the concept plan for the project.

The Court of Appeal considered it a condition of validity that the Minister consider the public interest, even though that requirement is not explicitly stated in the EPA Act, on the basis that any attempt to exercise powers in which a Minister did not have regard to the public interest could not be a bona fide attempt to exercise his or her powers.<sup>68</sup> However, this requirement operates at a very high level of generality, and does not of itself require that regard be had to any particular aspect of the public interest.<sup>69</sup> The mandatory requirement that the Minister have regard to the public interest does not of itself make it mandatory that the Minister have regard to any particular aspect of the public interest, such as one or more of the principles of ESD.<sup>70</sup>

The Court of Appeal considered that at the time of the Minister's decision to approve the concept plan, in 2006, the public interest had not evolved to include the principles of ESD. Hence, the Minister's decision could not be voided for the failure of the Minister to consider the principles of ESD as an element of the public interest.<sup>71</sup> However, the Court of Appeal considered that the public interest was continuing to evolve and "that the principles of ESD are likely to come to be seen as so plainly an element of the public interest, in relation to most if not all decisions, that failure to consider them will become strong evidence of failure to consider the public interest and/or to act *bona fide* in the exercise of powers granted to the Minister, and thus become capable of avoiding decisions".<sup>72</sup> Hence, in the future, Ministerial decisions to approve concept plans may require consideration of the principles of ESD as an element of the public interest.

Moreover, the Court of Appeal considered that after approval of the concept plan, when an application is lodged seeking approval to carry out the project in accordance with the approved concept plan, the principles of ESD will need to be considered: "it is particularly

<sup>71</sup> Ibid., at [56].

<sup>&</sup>lt;sup>66</sup> Minister for Planning v Walker (2008) 161 LGERA 423 at [39].

<sup>&</sup>lt;sup>67</sup> Ibid., at [42].

<sup>68</sup> Ibid., at [39].

<sup>&</sup>lt;sup>69</sup> Ibid., at [41].

<sup>&</sup>lt;sup>70</sup> Ibid., at [44].

<sup>&</sup>lt;sup>72</sup> Ibid.

important that the consent authority and/or the Minister conscientiously address the principles of ESD in dealing with any development application, and not regard the approval of the concept plan as carrying any weight in this consideration. It may be that failure to do so could, having regard to the content of this judgment, be considered evidence of failure to take into account the public interest".<sup>73</sup>

The Court of Appeal agreed with the primary judge that consideration of the precautionary principle and inter-generational equity would have required consideration of long-term threats of serious or irreversible environmental damage, and that this almost inevitably would have involved consideration of the effect of climate change flood risk.<sup>74</sup> The Court commented that it was "surprising and disturbing" that the Director-General's report did not address these aspects of the principles of ESD.<sup>75</sup> Since these aspects of ESD were not addressed by the Minister in giving his approval to the concept plan, they would need to be addressed when development approval is sought.<sup>76</sup>

The decisions in *Walker* have had at least four influences. The first is that the Court of Appeal approved earlier decisions of the Land and Environment Court that a consent authority in determining a development application for development under Part 4 of the EPA Act, and a court hearing a merits appeal from such a determination, is required to consider the public interest and that the public interest embraces ESD.<sup>77</sup> The Court of Appeal also held that the Minister in approving both a concept plan and a project approval under Part 3A of the EPA Act must consider the public interest.<sup>78</sup> The public interest includes ESD for a project approval<sup>79</sup> and is likely in the future to include ESD for a concept plan.<sup>80</sup>

Secondly, the Court of Appeal's decision, particularly its comments that ESD would need to be considered at the project approval stage,<sup>81</sup> lead to the project proponent modifying the project to address additional information about the consequences of climate change on flooding.

Thirdly, when the proponent made an application to carry out the project, the principles of ESD and in particular the effect of climate change flood risk were conscientiously addressed by the Minister in determining to grant approval to carry out the project.

Fourthly, the Court of Appeal's decision, and the proponent's and Minister's responses, lead to further judicial review challenges regarding development at Sandon Point. The first challenge was to the project approval in *Kennedy v NSW Minister for Planning*<sup>82</sup> on the ground that the Minister had failed to consider the flooding impacts of the development. The Land and Environment Court held that at the time of making the determination, the Minister had numerous documents before her addressing the issue of climate change and flooding.<sup>83</sup>

<sup>&</sup>lt;sup>73</sup> Ibid., at [63].

<sup>&</sup>lt;sup>74</sup> Ibid., at [60].

<sup>&</sup>lt;sup>75</sup> Ibid., at [61].

<sup>&</sup>lt;sup>76</sup> Ibid., at [62]–[63].

<sup>&</sup>lt;sup>77</sup> Ibid., at [42], [43] approving *Telstra Corporation Ltd v Hornsby Shire Council* (2006) 67 NSWLR 256; 141 LGERA 10 at [121]–[124].

<sup>&</sup>lt;sup>78</sup> Ibid., at [39].

<sup>&</sup>lt;sup>79</sup> Ibid., at [63].

<sup>&</sup>lt;sup>80</sup> Ibid., at [56].

<sup>&</sup>lt;sup>81</sup> Ibid., at [63].

<sup>&</sup>lt;sup>82</sup> (2010) 176 LGERA 395.

<sup>&</sup>lt;sup>83</sup> Kennedy v NSW Minister for Planning (2010) 176 LGERA 395 at [86].

These documents included the proponent's environmental assessment that contained sections on flooding issues and ESD; the Director General's report that specifically addressed the Court of Appeal's comments in *Walker* and the independent expert advice received by the Department which reviewed the proponent's flood studies and climate change impact reports; and a report prepared by the Planning Assessment Commission who the Minister had requested review the reasonableness of the Director-General's report which concluded that the implications of climate change as related to rainfall intensity assessment and flooding risk had been dealt with adequately.<sup>84</sup> Accordingly, the Court rejected this ground of challenge.<sup>85</sup>

The next challenge was to the carrying out of the development pursuant to the project approval. The applicant has brought civil enforcement proceedings alleging breaches of the conditions of the Minister's project approval.<sup>86</sup> Judgment is currently reserved.<sup>87</sup>

Fifthly, there has been a legislative response to the Court of Appeal's decision in *Walker*. The Standard Instrument – Principal Local Environmental Plan (Standard Instrument LEP) was amended to insert a new clause 5.5 regarding development within the coastal zone. Two of the objectives of the clause are to implement the principles in the NSW Coastal Policy and to "recognise and accommodate coastal processes and climate change".<sup>88</sup> Under the Standard Instrument LEP development consent must not be granted to development on land that is wholly or partly within the coastal zone unless the consent authority is satisfied that: the proposed development will not be significantly affected by coastal hazards, or have a significant impact on coastal hazards, or increase the risk of coastal hazards in relation to any other land.<sup>89</sup> The Wollongong Local Environmental Plan 2009, which applies to the Wollongong local government area, including Sandon Point, now contains this provision.<sup>90</sup>

Sixthly, there has been an executive response. In November 2009, the NSW government issued a Sea Level Rise Policy Statement. The Policy Statement includes sea level planning benchmarks, which have been developed to support consistent consideration of sea level rise in land-use planning and coastal investment decision-making.

3. Merits Review Relating to Climate Change Adaptation

Merits review involves a court or tribunal re-exercising the power of the original governmental decision-maker. The court is not confined to the evidentiary material that was before the original-decision maker but may receive and consider fresh evidence in addition to or substitution of the original material.

Courts in merits review appeals have considered the effects a proposed development might have on climate change and the effects climate change might have on a proposed development.<sup>91</sup> A series of cases in Victoria as well as legislative and executive action addressing coastal impacts on climate change illustrate the interplay and respective influences between litigation and governmental policy and action.

<sup>&</sup>lt;sup>84</sup> Ibid., at [87]–[90].

<sup>&</sup>lt;sup>85</sup> Ibid., at [91].

<sup>&</sup>lt;sup>86</sup> Kennedy v Stockland Development Pty Ltd LEC No 40880 of 2010.

<sup>&</sup>lt;sup>87</sup> Judgment reserved on 8 June 2011.

<sup>&</sup>lt;sup>88</sup> Standard Instrument – Principal Local Environmental Plan, cl 5.5(1)(b)(iv).

<sup>&</sup>lt;sup>89</sup> Ibid., cl 5.5(3)(d).

<sup>&</sup>lt;sup>90</sup> Wollongong Local Environmental Plan 2009, cl 5.5(3)(d).

<sup>&</sup>lt;sup>91</sup> Many of the decisions in merits review appeals are summarised in Brian J Preston, *Climate Change Litigation* (*Part 2*), 5(2) Carbon & Climate Law Review 244, at 252–256 (2011).

In *Gippsland Coastal Board v South Gippsland Shire Council*,<sup>92</sup> the Victorian Civil and Administrative Tribunal held that the likely increase in severity of storm events and sea level rise due to the effects of climate change created a reasonably foreseeable risk of inundation of the land and proposed dwellings, which was unacceptable. The Tribunal recognised that the relevant planning provisions did not contain specific consideration of sea level rises, coastal inundation and the effects of climate change unlike in other States of Australia.<sup>93</sup> In this policy vacuum, the Tribunal applied the precautionary principle and refused to grant the permit for the development.<sup>94</sup>

Subsequently, a General Practice Note titled "Managing Coastal Hazards and Coastal Impacts of Climate Change" was introduced and incorporated into all of Victoria's planning schemes.<sup>95</sup> The amendments incorporated cl 15 into the State Planning Policy Framework, which requires decision makers to apply the precautionary principle to planning and management decisions when considering the risks associated with climate change. This provision, as well as the *Victorian Coastal Strategy 2008*, have influenced the outcome of subsequent merits decisions in the Tribunal.<sup>96</sup>

One significant aspect of these legislative and executive responses is acceptance of the proposition that climate change will have an impact on coastal areas and the consequential need to manage these impacts and coastal hazards. The onus is placed squarely upon proponents of developments or planning scheme amendments to establish, by way of a coastal vulnerability assessment, how the proposal is likely to be impacted by projected coastal hazards under climate change.<sup>97</sup> A number of Victorian cases have since relied upon these new policies.<sup>98</sup>

In *Myers v South Gippsland Shire Council (No 1)*,<sup>99</sup> the applicant sought approval for the subdivision of coastal land in a residential area into two lots. The Tribunal found that there was insufficient information before the Tribunal to adequately assess the impact of climate change on the proposed development and required the permit applicant to prepare a coastal hazard vulnerability assessment.<sup>100</sup> The Tribunal concluded:

The Practice Note advances the precautionary approach in coastal decision making. The site is adjacent to low lying areas susceptible to coastal hazards. It is clear that the impact of climate change has not been considered by any party in this matter including the

<sup>92 [2008]</sup> VCAT 1545 (29 July 2008).

<sup>&</sup>lt;sup>93</sup> Gippsland Coastal Board v South Gippsland Shire Council [2008] VCAT 1545 (29 July 2008) at [35].

<sup>&</sup>lt;sup>94</sup> Ibid., at [48].

<sup>&</sup>lt;sup>95</sup> Victoria Government Gazette, 'Notice of Approval of Amendment VC52 to Victoria Planning Provisions under *Planning and Environment Act* 1987 (Vic)', 18 December 2008, at 3043.

<sup>&</sup>lt;sup>96</sup> See discussion in Kevin Bell, *The precautionary principle: what is it and how do courts use it to protect the environment*? 15–16 (13 July 2010) (presentation to Environment Defenders Office Victoria Seminar Series 2010 "Precautionary Principle", Melbourne); Simon Molesworth, *The Extent to which Environmental Courts are Responding to Climate Change by Adopting a Precautionary Approach*, 15–22 (4 April 2010) (presentation to the 5<sup>th</sup> World Bar Conference, Sydney); Helen Gibson, *Climate Change and Low Lying Areas Considerations in VCAT* (20 October 2009) (a paper presented to the Planning and Climate Change Conference at Monash University, Melbourne).

<sup>&</sup>lt;sup>97</sup> Gibson, supra note 96, at 2.

<sup>&</sup>lt;sup>98</sup> Ibid., at 8–10.

<sup>&</sup>lt;sup>99</sup> [2009] VCAT 1022 (22 June 2009).

<sup>&</sup>lt;sup>100</sup> Myers v South Gippsland Shire Council (No 1) [2009] VCAT 1022 (22 June 2009) at [32].

responsible authority. Regard has not been had to clause 15.08 of the Planning Scheme, the recent Victorian Coastal Strategy or the General Practice Note.<sup>101</sup>

In *Myers v South Gippsland Shire Council (No 2)*,<sup>102</sup> the Tribunal considered the same development following the submission of the coastal hazard vulnerability assessment by the applicant. The assessment revealed that by the year 2100 without mitigation work, which neither the applicant nor the council was prepared to undertake, there would be no dune, no road and therefore no access and the site would be inundated by storm surges.<sup>103</sup> The Tribunal concluded that without a specific local policy or planning scheme in place to address such issues the project could not be approved, as to grant a permit in these circumstances would be to consent to a poor planning outcome that would unnecessarily burden future generations.<sup>104</sup>

# III. OSTENSIBLY UNSUCCESSFUL CASES WHERE COURTS HAVE NOT UPHELD CLIMATE CHANGE CHALLENGES

In some cases challenging governmental decisions on grounds relating to climate change, the applicants have been unsuccessful in terms of the outcome of the court's decision. Nevertheless, the cases may still have achieved some benefit in terms of affirming the need to integrate climate change issues in decision-making, highlighting areas in need of law reform or influencing project developers to redesign projects to better address climate change issues.

1. Cases Affirming the Need to Integrate Climate Change Issues in Administrative Decisions

In two cases in the Land and Environment Court of New South Wales, applicants challenged the grant of approvals to developments in coastal areas at risk of climate change induced erosion or flooding. In both cases, the judicial review challenges were unsuccessful, but the Court affirmed the legal requirement, established in earlier judicial decisions, for decisionmakers to take into account the potential impacts of coastal hazards on the proposed developments.

Aldous v Greater Taree City Council<sup>105</sup> involved an application for judicial review of the Greater Taree City Council's decision to grant consent to construct a new dwelling on a beachfront property at Old Bar. Old Bar is identified as one of the coastal areas in New South Wales most at risk from climate change induced coastal erosion. As in the *Walker* case, the Land and Environment Court was confronted with arguments regarding the relevance of future climate change effects for decision-making under the EPA Act.

One argument raised by the applicant was that the council had failed to take account of ESD principles by failing to provide for the risk of climate change induced coastal erosion. This was the same argument rejected by the Court of Appeal in the *Walker* case. However, in this case, the Land and Environment Court applied the reasoning of the Court of Appeal and came to the opposite conclusion on the facts.

<sup>&</sup>lt;sup>101</sup> Ibid., at [31].

<sup>&</sup>lt;sup>102</sup> [2009] VCAT 2414 (19 November 2009).

<sup>&</sup>lt;sup>103</sup> Myers v South Gippsland Shire Council (No 2) [2009] VCAT 2414 (19 November 2009) at [30].

<sup>&</sup>lt;sup>104</sup> Ibid., at [31].

<sup>&</sup>lt;sup>105</sup> (2009) 167 LGERA 13.

The Land and Environment Court applied that part of the Court of Appeal's judgment where they accepted that ESD principles will be an essential component of many decisions made in the 'public interest'. Justice Biscoe listed a number of major developments since his first decision in *Walker*, in climate change science, climate change litigation, and coastal flood risk management policy.<sup>106</sup> His Honour held that by reasons of the council's mandatory obligation to take into consideration the public interest, the council was obliged to take account of the principles of ESD, and in particular, climate change induced coastal erosion.<sup>107</sup> On the facts of that case, however, the Court found that the council had not failed in that duty of consideration. There was documentary evidence suggesting the council had paid attention to the threat.<sup>108</sup>

In *Kennedy v Minister for Planning (NSW)*,<sup>109</sup> the applicant challenged the validity of the project approval for the subdivision and residential development at Sandon Point, granted under s 75J of the EPA Act. Previous litigation opposing the development before the Land and Environment Court and the Court of Appeal in *Walker* focused on whether the Minister in granting a concept approval had failed to have regard to principles of ESD through his failure to consider whether the impacts of climate change would lead to an increased flooding risk on the proposed development site. Subsequent to that case, modifications were made to the project approval for the modified project. The applicant in *Kennedy* challenged the validity of the project approval on grounds including whether the Minister had failed to consider climate change induced potential flooding impacts. The Court found that the Court of Appeal's comments in *Walker* were taken into consideration by the Minister.<sup>110</sup>

2. Cases Influencing Law Reform

Cases in both Federal and New South Wales courts have lead to or prompted calls for law reform. In the Federal Court of Australia, two unsuccessful challenges to federal decisions on the ground of failure to consider the climate change impacts of the proposed projects on matters of national environmental significance have prompted calls for law reform.<sup>111</sup>

In Wildlife Preservation Society of Queensland v Minister for the Environment and Heritage,<sup>112</sup> the applicant brought proceedings in the Federal Court of Australia seeking judicial review of two decisions of the Commonwealth Minister of the Environment in relation to two proposals to develop new coalmines in the Bowen Basin in Queensland. In each instance, the Minister's delegate had decided that the proposal was not a "controlled action" under s 75 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) and therefore the proposals did not have to go through the Commonwealth approvals process.

In relation to the mines, the applicant argued that millions of tonnes of coal would be exported, and the subsequent production of greenhouse gases would impact on the Great

<sup>&</sup>lt;sup>106</sup> Aldous v Greater Taree City Council (2009) 167 LGERA 13 at [32]-[39].

<sup>&</sup>lt;sup>107</sup> Ibid., at [40].

<sup>&</sup>lt;sup>108</sup> Ibid., at [40]-[78].

<sup>&</sup>lt;sup>109</sup> (2010) 176 LGERA 395.

<sup>&</sup>lt;sup>110</sup> Ibid., at [86].

<sup>&</sup>lt;sup>111</sup> Kirsty Ruddock, *The Bowen Basin coal mines case: Climate law in the Federal Court, in* Climate Law in Australia, 173 at 173, 182, 185 (Tim Bonyhady and Peter Christoff, eds, 2007).

<sup>&</sup>lt;sup>112</sup> (2006) 232 ALR 510.

Barrier Reef World Heritage Area and the Wet Tropics World Heritage Area. The applicant submitted that consideration of the impacts of the action under s 75 of the EPBC Act must consider the potential impacts of GHG emissions from the burning of coal on global warming and the consequential impacts on matters of national environmental significance, including world heritage areas, protected under Pt 3 of the EPBC Act.<sup>113</sup>

The applicants claimed that the Minister's delegate failed to consider whether either project would have a significant impact upon any protected matter. However, the Federal Court found that the Minister's delegate did consider the issue of greenhouse gases and their potential indirect impacts on world heritage values.<sup>114</sup> The problem with the applicant's submission was that it focused on greenhouse gas emissions, leading to climate change, but it paid little or no attention to the actual effect on any identified protected matter.<sup>115</sup> The Minister's delegate concluded that the possibility of increased concentration of greenhouse gases in the atmosphere resulting from each project was speculative and merely "theoretically possible".<sup>116</sup> It was not suggested that in the absence of coal from these sources, less coal would be burnt.<sup>117</sup> The Minister's delegate also considered that if there were any such increase in emissions, the additional impact on protected matters would be very small and therefore not significant.<sup>118</sup>

The Federal Court rejected the applicants' reliance on the fact that the threats posed by the emission of GHGs are cumulative. The Court held that the EPBC Act required the Minister to address the impact of the proposed mines, "not the impact of the worldwide burning of coal."<sup>119</sup>

A similar challenge in *Anvil Hill Project Watch Association Inc v Minister for the Environment and Water Resources*<sup>120</sup> was also unsuccessful. In that case, the applicants sought judicial review of the Minister's determination that the proposed Anvil Hill coal mine in the Hunter Valley was not a controlled action under the EPBC Act. Subsequent to the decision in *Wildlife Preservation Society v Minister for the Environment and Heritage*, s 527E was inserted into the Act to define the term "impact". The section states that an event or circumstance is an "impact" of an action if it is a direct consequence of the action or an indirect consequence which is a "substantial cause of that event or circumstance". The Federal Court held that the Minister's delegate accepted that GHGs in the atmosphere caused climate change, but that the proposed mine would not be a substantial cause of climate change affecting matters protected under Part 3 of the EPBC Act.<sup>121</sup> The Federal Court held that the applicant's submissions were not distinguishable from those in the *Wildlife Preservation Society* case and they should be dismissed for the same reasons.<sup>122</sup>

Despite the applicants in these two cases not succeeding with their claims in the Federal Court, these cases highlighted that the EPBC Act's narrow focus makes it incredibly difficult

<sup>&</sup>lt;sup>113</sup> Wildlife Preservation Society v Minister for the Environment and Heritage (2006) 232 ALR 510 at [11].

<sup>&</sup>lt;sup>114</sup> Ibid., at [39]-[44].

<sup>&</sup>lt;sup>115</sup> Ibid., at [40].

<sup>&</sup>lt;sup>116</sup> Ibid., at [43].

<sup>&</sup>lt;sup>117</sup> Ibid.

<sup>&</sup>lt;sup>118</sup> Ibid.

<sup>&</sup>lt;sup>119</sup> Ibid., at [55].

<sup>&</sup>lt;sup>120</sup> (2007) 243 ALR 784.

<sup>&</sup>lt;sup>121</sup> Anvil Hill Project Watch Association Inc v Minister for the Environment and Water Resources (2007) 243 ALR 784 at [38].

<sup>&</sup>lt;sup>122</sup> Ibid., at [39].

for applicants to prove that GHG emissions from certain projects will cause significant impacts on specific matters of national environmental significance and the need for inclusion of a GHG emissions trigger in the EPBC Act so that a project which emits more than a prescribed amount of GHGs per year will be a matter of national environmental significance.<sup>123</sup> These issues were raised during the 2009 review of the EPBC Act. In the Final Report of the Federal Government's review of the EPBC Act, The Australian Environment Act: Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act (2009), issues raised included the need to improve the capacity and flexibility of the EPBC Act to respond to environmental pressures and the need to bring climate change considerations into decision-making. Submissions also called for greater use of landscape approaches to biodiversity protection to manage the impacts of climate change better. The Final Report proposed a greenhouse gas trigger of 500,000 tonnes of carbon dioxide equivalent, so that the operation of the EPBC Act would be triggered if the threshold would be exceeded by a proposed project.<sup>124</sup> The Final Report also recommended that the Minister, when making decisions under the EPBC Act, should be required to consider the reasonably foreseeable impacts of decisions on the ability of a protected matter to adapt to current and emerging threats, including the emerging threat of climate change.<sup>125</sup> Whether these recommendations will be implemented remains to be seen.

In New South Wales, a series of cases in the Land and Environment Court concerning responsibility for responding to climate change induced coastal erosion have also led in part to legislative reform. In the *Vaughan* cases,<sup>126</sup> the owners of a beachfront lot on Belongil Spit at Byron Bay attempted to rebuild an interim sandbag wall originally constructed by the local council, which had been destroyed by strong storms in May 2009 and elevated ocean water levels. The interim wall protected the owners of property from coastal erosion. The owners' intention was to rebuild the wall using rocks. The council sought an interlocutory injunction restraining the owners from rebuilding the wall.<sup>127</sup> The council argued that since 1988 it had had a policy of planned retreat.<sup>128</sup> The policy consisted of restricting development in some coastal areas within certain distances of the erosion escarpment and requiring that development be relocatable so that it could be removed as erosion moves landward, rather than preventing development altogether.<sup>129</sup> The council also relied on expert evidence that the structure would cause damage to other properties that were not protected, by exacerbating existing, cumulative, downdrift erosion impact, and that the structure would also impede public access to the beach.<sup>130</sup>

The owners, in turn, sought orders against the council to enforce the development consent that the council had issued to itself in 2001 to build the interim sandbag wall. The owners sought an order that the council rebuild the sandbag wall that had been destroyed.

<sup>&</sup>lt;sup>123</sup> Ruddock, supra note 107, at 183-184; Peel, supra note 40, at 102, 103.

<sup>&</sup>lt;sup>124</sup> The Australian Environment Act: Report of the Independent Review of Environment Protection and Biodiversity Conservation Act 1999, p 113.

<sup>&</sup>lt;sup>125</sup> Ibid at 237.

<sup>&</sup>lt;sup>126</sup> Byron Shire Council v Vaughan; Vaughan v Byron Shire Council [2009] NSWLEC 88 and Byron Shire Council v Vaughan; Vaughan v Byron Shire Council (No 2) [2009] NSWLEC 110.

<sup>&</sup>lt;sup>127</sup> Byron Shire Council v Vaughan; Vaughan v Byron Shire Council [2009] NSWLEC 88 at [1].

<sup>&</sup>lt;sup>128</sup> Ibid., at [4].

<sup>&</sup>lt;sup>129</sup> Ibid. Byron Shire Council's policies on coastal erosion are summarised in Jan McDonald, *The Adaptation Imperative: Managing the Legal Risks of Climate Change Impacts, in* Climate Law in Australia, 124 at 129–133 (Tim Bonyhady and Peter Christoff, eds., 2007).

<sup>&</sup>lt;sup>130</sup> Ibid., at [6].

The Land and Environment Court upheld the council's application for an interlocutory injunction that the owners cease rebuilding the interim wall.<sup>131</sup> The parties later agreed to vary the interlocutory injunction, so as to allow the owners to rebuild the wall using geobags and sand.<sup>132</sup> The case was ultimately settled and did not proceed to final hearing. In February 2010, the Court made consent orders declaring that the 2001 consent was a valid consent which applied to the owners' lands and approved interim beach protection works, that the terms of the 2001 consent obliged the council to monitor, maintain and repair the interim beach protection works it had erected, and that the owners were entitled to but not obliged to maintain, repair and restore the interim wall. The Court also ordered the council to restore the interim wall to its height and shape before the May 2009 storm.<sup>133</sup>

These cases, however, highlighted the need for legislative reform so as to address conflicts between coastal landholders and councils in managing climate change induced erosion. Partly in response to the Vaughan cases,<sup>134</sup> the Coastal Protection and Other Legislation Amendment Act 2010 (NSW), which commenced on 1 January 2011, introduced amendments to the Coastal Protection Act 1979 (NSW) for the management of emergency coastal protection works. The amendments provide that a person does not need regulatory approval for emergency coastal protection works for up to a period of 12 months if the works are authorised by a certificate.<sup>135</sup> An owner of land may apply to the relevant local council or to the Director-General for a certificate authorising the placement of emergency coastal protection works on the land.<sup>136</sup> New provisions also relate to the maintenance and removal of emergency coastal protection works. The coastal authority has the power to order the removal, alteration or repair of emergency coastal protection works or any other materials or structures deposited onto the beach if it: (1) causes or is likely to cause increased erosion of a beach or land adjacent to a beach; or (2) unreasonably limits or is likely to unreasonably limit public access to a beach or headland; or (3) poses or is likely to pose a threat to public safety.<sup>137</sup>

These amendments have been criticised for not addressing the issues in a holistic and strategic manner and providing neither support for permanent, long-term beach protection works nor support for policies of planned retreat.<sup>138</sup> It has been argued that the amendment creates an "ad hoc 'hotspot' approach, whereby the State government has sought to minimise its role in coastal management in favour of providing for the creation of a series of unrelated agreements between councils and landowners in vulnerable parts of the coast as that vulnerability increases over time".<sup>139</sup> Indeed, the amendments are unlikely to prevent future litigation in this area as landowners will still have to apply for development consent to erect permanent structures or keep emergency structures in place for longer than twelve months. This could lead to disputes where councils are opposed to permanent works. For example, in

<sup>&</sup>lt;sup>131</sup> Ibid., at [18].

<sup>&</sup>lt;sup>132</sup> Noted in Byron Shire Council v Vaughan; Vaughan v Byron Shire Council (No 2) [2009] NSWLEC 110 at
[6], [16].
<sup>133</sup> Rebecca Divon and Posemany Lyster. Protecting the Devolution of the Devolution o

<sup>&</sup>lt;sup>133</sup> Rebecca Dixon and Rosemary Lyster, *Protecting the Beach House from Rising Seas*, 49(1) Law Society Journal 49, at 50 (2011); Zada Lipman and Robert Stokes, *That sinking feeling: A legal assessment of the coastal planning system in New South Wales*, 28 Environmental and Planning Law Journal 182, at 190 (2011).

<sup>&</sup>lt;sup>134</sup> Lipman and Stokes, supra note 129, at 190.

<sup>&</sup>lt;sup>135</sup> Coastal Protection Act 1979 (NSW), ss 550, 55Q.

<sup>&</sup>lt;sup>136</sup> Ibid., s 55T(1).

<sup>&</sup>lt;sup>137</sup> Ibid., ss 55ZA and 55ZC.

<sup>&</sup>lt;sup>138</sup> Lipman and Stokes, supra note 129, at 192.

<sup>&</sup>lt;sup>139</sup> Ibid., at 193.

the *Vaughan* cases, it is unlikely that development consent would have been granted, given Byron Shire Council's policy of planned retreat.<sup>140</sup>

3. Cases Influencing Project Developers to Voluntarily Re-design Project Proposals

Other cases, although unsuccessful in setting aside approvals for projects on grounds relating to climate change, have nevertheless influenced the project developer to redesign the project to better address climate change issues raised in the litigation. As already noted, the developer of the residential development at Sandon Point redesigned the project to address the risk of climate change induced flooding raised in *Walker*.

In *Drake Brockman v Minister for Planning*,<sup>141</sup> the applicant challenged the Minister for Planning's approval of a concept plan for the redevelopment of the former Carlton United Breweries site at Broadway in central Sydney. One of the applicant's grounds of challenge was that the Minister failed to consider ESD, including the precautionary principle and intergenerational equity, when granting the approval. In particular, the applicant claimed that: (1) there was insufficient information about GHG emissions in connection with the redevelopment of the site to enable the Minister to carry out a careful evaluation to avoid serious or irreversible damage to the environment as a result of the redevelopment; (2) the Minister failed to treat the proponent as bearing the onus of proving that the redevelopment of the site would have no or negligible impacts on climate change; and (3) the Minister did not undertake a risk-weighted assessment of the various options for redevelopment of the site or consider alternatives that could reduce the impacts on climate change.<sup>142</sup> The appeal was dismissed on all grounds.

The Land and Environment Court found that there was no factual basis for suggesting that the Minister failed to give any consideration to ESD when approving the project or that the Minister failed to consider GHG emissions.<sup>143</sup> Whilst the Minister did not have detailed information about GHGs,<sup>144</sup> the EPA Act did not require the Minister to have information to that effect.<sup>145</sup> The Court distinguished the decision in *Gray v Minister for Planning*, as *Gray* turned on the alleged disjunction between the terms of the Director-General's environmental assessment requirements and the Director-General's acceptance of the adequacy of the proponent's environmental assessment.<sup>146</sup> *Gray* did not stand for a general proposition that Pt 3A of the EPA Act requires any particular form of assessment of GHG emissions for each and every project to which that Part applies.<sup>147</sup>

Nevertheless, due to the expert evidence that the applicant tendered in that case, disclosing that GHG emissions from the project would constitute 0.45% of the total GHG emissions from the City of Sydney local government area,<sup>148</sup> there was significant pressure on the developer to redesign the development's concept plan to address sustainability issues including GHG emissions. Under the new concept plan submitted in 2008, the developer, Frasers Property, claims the project will be:

<sup>146</sup>Ibid., at [131].

<sup>&</sup>lt;sup>140</sup> Ibid., at 192.

<sup>&</sup>lt;sup>141</sup> (2007) 158 LGERA 349.

<sup>&</sup>lt;sup>142</sup> Drake-Brockman v Minister for Planning (2007) 158 LGERA 349 at [7].

<sup>&</sup>lt;sup>143</sup> Ibid., at [129].

<sup>&</sup>lt;sup>144</sup> Ibid.

<sup>&</sup>lt;sup>145</sup>Ibid., at [132].

<sup>&</sup>lt;sup>147</sup> Ibid.

<sup>&</sup>lt;sup>148</sup> Ibid., at 382-383, [118].

the largest urban development in Australia to introduce on-site tri-generation (known as 'green transformers') for power, heating, and cooling... Together with other sustainability initiatives (including design efficiency, smart metering and solar powered lighting in public spaces), this will achieve substantial reductions in GHG emissions and Frasers is pro-actively investigating all available technologies and techniques to target 100 percent carbon neutrality in operation.<sup>149</sup>

Hence, although the litigation was unsuccessful in terms of the Court's judgment, it was successful in persuading the developer to adopt innovative sustainability initiatives, including striving for net zero GHG emissions ( $CO_2$  equivalent) for operational energy use.

### IV. NEW CASES ARGUING FOR NOVEL APPLICATIONS OF EXISTING LAWS

Several high-profile cases in the US and Australia have argued for the extension of existing common law principles to the problem of climate change. Whether or not these novel arguments are successful remains to be seen. If the law of public nuisance is extended to the impacts of climate change or the public trust doctrine is extended to include an atmospheric trust, courts could potentially hold corporations liable for their GHG emissions and force governments to regulate emissions rather than merely requiring decision-makers to consider the climate change impacts of individual developments (as most of the previous climate change cases have done). Even if the applicants do not succeed in court, these cases will contribute to the evolution of climate change jurisprudence and place public pressure on legislators and major emitters to reduce GHG emissions.

### 1. Pollution by GHG emissions

Two types of cases in the United States, namely the regulatory action *Massachusetts v EPA*<sup>150</sup> and nuisance actions such as *Connecticut v American Electric Power Co Inc*,<sup>151</sup> have inspired climate change litigation in Australia. In *Gray v Macquarie Generation*,<sup>152</sup> the applicants, who were two members of a climate change activist group, Rising Tide, brought proceedings in the Land and Environment Court of NSW pursuant to a legislative open standing provision to enforce pollution laws so as to require mitigation of GHG emissions from the coal-fired, Bayswater power station in the Hunter Valley. They claim that the operator of the power station, Macquarie Generation, in contravention of s 115(1) of the *Protection of the Environment Operations Act 1997* (NSW), wilfully or negligently disposed of waste, namely by emitting carbon dioxide into the atmosphere, in a manner likely to harm the environment, without lawful authority in the form of an environment protection licence authorising the disposal of such waste. Relying on the finding in *Massachusetts v EPA* that carbon dioxide is a pollutant, the applicants contended that the operator's licence did not expressly or impliedly

<sup>&</sup>lt;sup>149</sup> Central Park by Frasers Property: Project Overview, http://www.frasersbroadway.com.au/broadway/po.htm (viewed 1 August 2011); Central Park by Frasers Property: Sustainability,

http://www.frasersbroadway.com.au/broadway/sus2.htm (viewed 1 August 2011); Ecogeneration, *Old brewery site's sustainable revamp*, http://ecogeneration.com.au/news/old\_brewery\_sites\_sustainable\_revamp/011763/ (viewed 1 August 2011).

<sup>&</sup>lt;sup>150</sup> Massachusetts v EPA, supra note 15.

<sup>&</sup>lt;sup>151</sup> Connecticut v American Electric Power Co 406 F Supp 2d 265 (SDNY, 2005) vacated in Connecticut v American Electric Power Co 582 F 3d 309 (2<sup>nd</sup> Cir 2009) reversed in part and remanded in American Electric Power Co Inc v Connecticut U.S. No. 10-174 20 June 2011 (Slip Opinion).

<sup>&</sup>lt;sup>152</sup> [2010] NSWLEC 34

authorise the emission of carbon dioxide into the atmosphere and hence the operator did not have lawful authority to dispose of that form of waste.

Alternatively, the applicants contended that, even if the Court found that the operator's licence did authorise the emission of carbon dioxide, the licence did not authorise the emission of carbon dioxide in a manner that did not have reasonable regard and care for the interests of other persons and the environment.<sup>153</sup> This alternative argument may have been inspired by the nuisance actions brought against emitters of GHGs in the US, including in *Connecticut v American Electric Power*. However, the particular nuisance case on which the applicants relied was a New South Wales case, *Van Son v Forestry Commission of NSW*,<sup>154</sup> where the Supreme Court of NSW held that the statutory authority under the *Forestry Act 1916* (NSW) to carry out forestry activities did not permit the Forestry Commission to carry out its duties in a way which was unreasonable so as to permit nuisance.<sup>155</sup> The Supreme Court found the Commission's activities, which caused soil erosion and water pollution, were done in an unreasonable way and the Commission could not claim a statutory immunity from action arising out of the nuisance thus created.<sup>156</sup>

The respondent, Macquarie Generation, filed a motion for summary dismissal of the proceedings on the basis that no reasonable cause of action was disclosed. The Land and Environment Court dismissed the applicants' claim that carbon dioxide was waste not specifically authorised under the licence to be emitted.<sup>157</sup> However, on the alternative ground of the applicants' claim, the Court held it was not satisfied that the respondent had demonstrated that no reasonable cause of action existed and hence summary dismissal was not warranted.<sup>158</sup>

After the first decision in *Gray*, the Court granted the applicants leave to amend their claim to better plead their alternative ground.<sup>159</sup> The applicants recast their case, claiming that the standard of care for persons and/or the environment identified in *Van Son* is an implied limitation on the statutory authority conferred by the licence and/or under the *Protection of the Environment Operations Act*.<sup>160</sup> The dismissed claim in the first *Gray* decision had revolved around whether Macquarie Generation had lawful authority under its licence to emit *any* CO<sub>2</sub> from the power station, whereas the new claim was directed at the extent of the lawful authority, so that although some of the CO<sub>2</sub> emitted from the power station might be authorised by the licence, the rest of the CO<sub>2</sub> emitted in excess of the implied limitation would exceed the lawful authority and be in breach of the Act.<sup>161</sup> The proceedings have been stayed while Macquarie Generation appeals the Court's decision to grant of leave to the applicant to amend their claim to the NSW Court of Appeal.

### 2. Public Nuisance

In 2004, eight US states including Connecticut, three land trusts, and the City of New York commenced two proceedings against five power generation companies, including American

<sup>&</sup>lt;sup>153</sup> Ibid at [41].

<sup>&</sup>lt;sup>154</sup> (1995) 86 LGERA 108.

<sup>&</sup>lt;sup>155</sup> Van Son v Forestry Commission of NSW (1995) 86 LGERA 108 at 129.

<sup>&</sup>lt;sup>156</sup> Ibid., at 130.

<sup>&</sup>lt;sup>157</sup> Gray v Macquarie Generation [2010] NSWLEC 34 at [58], [60].

<sup>&</sup>lt;sup>158</sup> Ibid., at [62]-[67].

<sup>&</sup>lt;sup>159</sup> Gray v Macquarie Generation (No 3) [2011] NSWLEC 3.

<sup>&</sup>lt;sup>160</sup> Ibid., at [30], [62], [64], [68].

<sup>&</sup>lt;sup>161</sup> Ibid., at [62], [66], [69].

Electric Power Co, which generate ten percent of United States GHG emissions from all domestic human sources, and 2.5 percent of all anthropogenic emissions globally.<sup>162</sup> The plaintiffs alleged that the companies' contribution to climate change through carbon dioxide emissions constitutes public nuisance under both US federal common law and state common law.<sup>163</sup> The plaintiffs sought injunctive relief, capping the carbon dioxide emissions of each defendant, and then reducing them by a specified percentage annually. The District Court for the Southern District of New York dismissed the case on the grounds that the issue in dispute was a non-justiciable political question.<sup>164</sup> The Court of Appeals for the Second Circuit reversed that decision, holding that the suits were not barred by the political question doctrine and that the plaintiffs had standing to bring the action under federal common law.<sup>165</sup> The defendants appealed the decision to the United States Supreme Court.

The difficulty for the plaintiffs was that the litigation commenced before the ruling in *Massachusetts v EPA* and at the time of the Second Circuit's decision, the EPA had not yet issued any rule regulating GHGs under the Clean Air Act. However, subsequent to the decision in *Massachusetts v EPA*, the EPA began phasing in requirements that new or modified major GHG emitting facilities use the best available technology. The EPA had therefore begun occupying the field of regulation.

The Supreme Court affirmed, by an equally divided court (4:4), the plaintiffs' standing and that the actions were not barred by the political question doctrine.<sup>166</sup> However, the Supreme Court held that the Clean Air Act and the EPA actions it authorises, "displace any federal common law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired power plants."<sup>167</sup> *Massachusetts v EPA* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the Act.<sup>168</sup>

The Supreme Court did not consider whether, in the absence of the Clean Air Act and the EPA actions the Act authorises, the plaintiffs could state a federal common law claim for curtailment of greenhouse gas emission because of their contribution to global warming.<sup>169</sup> The Supreme Court also did not decide any pre-emptive effect of the federal Clean Air Act or otherwise the availability of the claim under state nuisance law. The issue was therefore left open for determination on remand.<sup>170</sup>

3. Atmospheric Trust Litigation

In May 2011, a suite of public trust cases, organized by a non-profit organisation called Our Children's Trust, were filed in state courts in Alaska, Arizona, California, Colorado, Minnesota, Montana, New Mexico, Oregon and Washington and in a federal court in California. More proceedings are expected to be commenced against other states.<sup>171</sup> The applicants are seeking declarations that the states hold the atmosphere in trust for their

<sup>&</sup>lt;sup>162</sup> American Electric Power Co Inc v Connecticut U.S. No. 10-174 20 June 2011 (Slip Opinion) at 4.

<sup>&</sup>lt;sup>163</sup> Connecticut v American Electric Power Co 406 F Supp 2d 265, at 267 (SDNY 2005).

<sup>&</sup>lt;sup>164</sup> Connecticut v American Electric Power Co 406 F Supp 2d 265 (SDNY 2005).

<sup>&</sup>lt;sup>165</sup> Connecticut v American Electric Power Co 582 F. 3d 309, at 349 (2<sup>nd</sup> Cir., 2009).

<sup>&</sup>lt;sup>166</sup> American Electric Power Co Inc v Connecticut U.S. No. 10-174 20 June 2011 (Slip Opinion) at 6.

<sup>&</sup>lt;sup>167</sup> Ibid., at 10.

<sup>&</sup>lt;sup>168</sup> Ibid.

<sup>&</sup>lt;sup>169</sup> Ibid., at 9.

<sup>&</sup>lt;sup>170</sup> Ibid., at 15-16.

<sup>&</sup>lt;sup>171</sup> Mathew Brown, *Climate Activists Target all 50 States, DC with Legal Actions to Establish "Atmospheric Trust*", Associated Press Newswires, 5 May 2011.

respective present and future citizens. These cases seek to extend the doctrine of the public trust to the atmosphere. The applicants contend that the public trust doctrine imposes an affirmative duty upon the states to protect and preserve the atmosphere, including establishing and enforcing limitations on the levels of GHG emissions necessary to mitigate anthropogenic climate change.

On 15 June 2011, the Montana Supreme Court dismissed the petition on the basis that the case did not involve purely legal questions and it incorporated factual claims, such as the role of Montana in the global problem of climate change and how emissions created in Montana ultimately affect Montana's climate, which would need to be determined by a normal trial court, followed by the normal appeal process.<sup>172</sup> Although similar cases are pending in other jurisdictions, the Montana case was the only one seeking to sidestep the trial court level entirely and have a state's highest appellate court rule. Therefore, this outcome will not follow in other jurisdictions.

The atmospheric trust litigation closely parallels the litigation in the *American Electric Power v Connecticut* case.<sup>173</sup> However, in that case the Supreme Court only held that the Clean Air Act overrode federal common law. It did not decide on the issue of whether the Clean Air Act also pre-empts state common law. Therefore, the outcome of the atmospheric trust litigation may not necessarily follow the outcome in *American Electric Power v Connecticut*.

## V. CONCLUSION

Judicial review in planning cases concerning climate change mitigation and adaptation seem only to have had marginal success in requiring specific development proposals to take into account their greenhouse gas or sea-level rise implications. However, they have had an impact on executive decision-making processes more broadly. Amendments to legislation, and the introduction of new, planning instruments, have extended the influence of these cases so that climate change associated risks are now required to be taken into account in almost all planning decisions. Even where the applicants have not won their cases, the issues and evidence elucidated in these proceedings have influenced project developers to voluntarily redesign proposed developments. Ostensibly unsuccessful cases have also highlighted areas in need of law reform and provided a platform for the evolution of legal arguments and jurisprudence on climate change.

<sup>&</sup>lt;sup>172</sup> Barhaugh v The State of Montana No. OP 11-0258 at 2 (Montana 15 June 2011).

<sup>&</sup>lt;sup>173</sup> Barringer F, *Suit Accuses US Government of Failing to Protect Earth for Generations Unborn*, New York Times, 5 May 2011, p 22.