

## Journal of Energy & Natural Resources Law



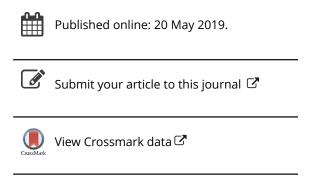
ISSN: 0264-6811 (Print) 2376-4538 (Online) Journal homepage: https://www.tandfonline.com/loi/rnrl20

# The Rocky Hill decision: a watershed for climate change action?

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**To cite this article:** Lesley Hughes (2019): The Rocky Hill decision: a watershed for climate change action?, Journal of Energy & Natural Resources Law, DOI: 10.1080/02646811.2019.1600272

To link to this article: <a href="https://doi.org/10.1080/02646811.2019.1600272">https://doi.org/10.1080/02646811.2019.1600272</a>





#### COMMENTARY

# The Rocky Hill decision: a watershed for climate change action?

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(Received 10 March 2019; final version received 20 March 2019)

A ruling by the New South Wales Land and Environment Court to refuse consent to a proposed coal mine has been hailed as a landmark in the fight to limit dangerous climate change. The judgment rested heavily on scientific expert testimony, especially with regard to the carbon budget concept, taking both direct and indirect (or downstream) emissions into account with regard to their impact on both the local environment and global climate change. While the case does not set a formal legal precedent, the central arguments used are likely to have broad applicability to other cases, and represent a significant milestone in the growing field of climate change litigation.

**Keywords:** climate change; coal mining; development consent; greenhouse gas emissions; Scope 3 emissions

Nestled in a picturesque valley under a range of rolling hills called the Bucketts, the town of Gloucester on the New South Wales (NSW), Australia, mid-north coast seems an unlikely location for a climate change revolution. Gateway to the World Heritage-listed Barrington Tops National Park, the town has a population of fewer than 3,000 people and derives most of its income from tourism, timber, beef and dairy. But beneath the fertile farmland lies a rich coal resource and the fight to mine it could have far-reaching implications for fossil fuel mining the world over.

#### 1. Coal exploration and mining in the Gloucester Basin

The multiple coal seams of the geological Gloucester Basin are about 30 metres thick, occurring at depths of 200–700 metres. The total coal resource is reported to be about

JH Hodgkinson and others, 'Coal and Coal Seam Gas Resource Assessment for the Gloucester Subregion. Product 1.2 for the Gloucester Subregion from the Northern Sydney Basin Bioregional Assessment' (Department of the Environment, Bureau of Meteorology, CSIRO and Geoscience Australia, Australia 2014) www.bioregionalassessments.gov.au/assessments/12-resource-assessment-gloucester-subregion accessed 15 February 2019.



440 million tonnes, of which 83 million tonnes are estimated to be mineable given current economic and technological conditions.<sup>2</sup>

Open cut coal mining at the Stratford mine to the north of Gloucester began in 1995, employing about 120 people.<sup>3</sup> This operation ceased in 2014. The Stratford Extension Project was given State and Federal approval in 2015 but operations covered by this approval have not started. The second open cut operation, the Duralie mine, began in 2003 and is still operational. Duralie is one of the largest coking coal mines in the world, with an annual production of about five million tonnes;<sup>4</sup> the mine is scheduled to cease operations in 2019. Both mines are fully owned by Yancoal Pty Ltd.

In 2006, Gloucester Resources Ltd (GRL), a wholly owned subsidiary of GRL Holdings Pty Ltd, a privately owned Australian registered company, was formed. GRL was granted three exploration licences in the Gloucester district; the areas covered by these licences surround the town on two sides. In 2013, GRL applied for planning permission to develop a new open cut mine at Rocky Hill in the north of the Gloucester Basin. GRL estimated that up to 60 jobs would be created during the mine construction, and 110 in operations. An estimated 2.5 million tonnes of run-of-mine (ROM) coal could be extracted per year with 21 million tonnes of product coal over the life of the mine, 95 per cent of which would be used in steel production.

In 2013, GRL lodged a Development Application (DA) as required under the NSW Environmental Planning and Assessment Act 1979 (EP&A Act 1979),<sup>8</sup> the principal legislation regulating land use in NSW. The Act is administered by the NSW Department of Planning and Environment, with the NSW Minister for Planning having overall responsibility. The development proposal included four separate and/or contiguous open cut pits, a coal handling and preparation plant, an overland conveyor and a rail loading facility. The proposed site was 3.5–7 kilometres southeast of the Gloucester central urban area on freehold land largely owned by GRL, covering 856 hectares.<sup>9</sup>

The proposal was declared to be a State significant development in accordance with the State Environmental Planning Policy 2011. Under the EP&A Act 1979, any development likely to have significant impacts on the environment is considered a Designated Development, and requires an Environmental Impact Statement (EIS) to be submitted with the DA. The EIS noted that GRL's objectives included maximising coal recovery and efficiency of mining and processing operations; undertaking these activities in 'an environmentally responsible manner'; eventual creation of a

Gloucester Coal Ltd, 'Explanatory Booklet Registered by the Australian Securities and Investments Commission' (ASIC, Australian Stock Exchange 2012) www.asx.com.au/asxpdf/20120627/pdf/4272nqylrdqg69.pdf accessed 15 February 2019.

<sup>3</sup> Stratford Coal www.stratfordcoal.com.au/page/about accessed 15 February 2019.

<sup>4</sup> Yancoal www.yancoal.com.au/page/en/assets/mine-sites accessed 15 February 2019.

<sup>5</sup> Groundswell Gloucester www.groundswellgloucester.com/coal/rocky-hill.html accessed 15 February 2019.

<sup>6</sup> Hodgkinson and others (n 1).

<sup>7</sup> Rocky Hill Coal Project www.rockyhillproject.com.au accessed 15 February 2019.

<sup>8</sup> Environmental Planning and Assessment Act 1979 No 203 www.legislation.nsw.gov.au/#/view/act/ 1979/203 accessed 15 February 2019.

<sup>9</sup> RW Corkery & Co, 'Environmental Impact Statement Executive Summary, Gloucester Resources Limited, Rocky Hill Coal Project, Report No. 806/03' (2013) https://majorprojects.accelo.com/public/ 25dac6310d36e472e1a6bb8d1c679038/11.%20Rocky%20Hill%20Coal%20Project%20EIS%20-%20 Executive%20Summary.pdf accessed 15 February 2019.

<sup>10</sup> *Ibid*.

rehabilitated area 'suitable for grazing activities and nature conservation'; providing iobs: and stimulating the local economy. 11

#### 2. The local campaign

There was an immediate outcry against the proposed mine. A total of 1,700 submissions on the proposal were received by the NSW Planning Assessment Commission (PAC), including 13 from government agencies, 18 from special interest groups, and approximately 570 from individuals in the Gloucester area. Many of the submissions were coordinated by Groundswell Gloucester, a community action group previously formed to oppose expansion of coal mining in the valley.

Objections to the proposed mine were wide-ranging, noting its proximity to residential areas, schools, the hospital and nursing homes. Negative impacts cited included those on health, surface and groundwater, visual amenity, noise, biodiversity, Aboriginal cultural sites, greenhouse gas emissions (GHGs) and the local economy via effects on tourism. Following these objections, GRL amended the DA, exhibiting the new EIS in 2016. 2 Amendments included removal of the rail loading facility and the on-site coal handling and preparation plant, and reduction of the estimated volume of ROM coal to two million tonnes per year. As an alternative to the rail loading facility and preparation plant, the amended application proposed that the coal would be transported by truck to the Stratford Mining Complex before being loaded on to trains bound for the port of Newcastle.

The amended EIS elicited an even greater number of submissions than the original 2013 submission – 2,570 in total, of which 2,308 were from individuals opposing the development.<sup>13</sup>

In December 2017, the NSW PAC refused consent for the mine, finding that the social and economic benefits would be outweighed 'by the detriment to the quality of life for residents near the mine site'. <sup>14</sup> Citing disturbance to agricultural land and significant visual impacts, the Commission found that '[i]n balancing both the benefits and adverse impacts, ... the project is not in the public interest'. The Commission's judgment made no mention of GHGs or climate impacts.

#### 3. NSW Land and Environment Court appeal

An appeal against the NSW Planning Minister's refusal of consent was lodged in the NSW Land and Environment Court in December 2017, with the Minister as the

<sup>11</sup> RW Corkery & Co. (n 9).

<sup>12</sup> Gloucester Resources Limited, 'Rocky Hill Coal Project' (Presentation to NSW Planning Assessment Commission, 2017) www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2017/10/rocky-hillcoal-project/applicants-presentations/grl-amended-project-presentation-to-pac-1-november-2017-pac. pdf accessed 15 February 2019.

<sup>13</sup> RW Corkery & Co, 'Gloucester Resources Limited Amended Rocky Hill Coal Project, Response to Submissions, Report No. 806/15' (2017) www.rwcorkery.com.au/Portals/0/80615 response-tosubmissions-section-1-june-2017 060717015302.pdf accessed 15 February 2019.

<sup>14</sup> NSW Planning Assessment Commission Determination, 'Rocky Hill Coal Project (SSD 5156), Stratford Extension Project MOD 1 (SSD 4966 MOD 1), Summary Fact Sheet' (2017) www.ipcn.nsw.gov.au/ resources/pac/media/files/pac/projects/2017/10/rocky-hill-coal-project/determination/fact-sheet-rockyhill-coal-project-final.pdf accessed 21 February 2019.

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defendant. This news was only made public at a meeting of GRL's Community Consultative Committee on 2 February 2018. The revelation alarmed the anti-mine campaigners, who noted that such an opportunity was routinely denied to opponents of mining. Lawyers for Groundswell Gloucester also condemned the decision, noting that the right to appeal gave the miner 'a second bite of the cherry', and that '[i]t reflects a total imbalance in the system and a troubling inconsistency in the application of the law with respect to mining projects in this state'. Jeremy Buckingham, representing the NSW Greens, went as far as describing the Minister's move as 'an act of bastardry' motivated by limiting political fallout in the marginal electorate should the mine proceed.

#### 4. The case against the mine

In April 2018, the Court ordered that Groundswell Gloucester be joined as a party to the appeal proceedings, pursuant to s 8.15(2) of the EP&A Act 1979. As in the original submission to the PAC, the Minister and Groundswell Gloucester raised issues of the incompatibility of the proposed mine to the land and people in the vicinity, including visual and noise impacts. Arguments were also made as to the uncertainty of the economic benefits.

Groundswell Gloucester also presented extensive arguments that the Rocky Hill project should be refused on the basis that the GHGs resulting from the project would 'adversely impact upon measures to limit dangerous anthropogenic climate change'. Groundswell Gloucester argued that activities from the mine site itself, as well as the burning of extracted coal 'are inconsistent with existing carbon budget and policy intentions to keep global temperature increases to below 1.5° to 2° Celsius (C) above pre-industrial levels and would have a cumulative effect on climate change effects in the long term'. <sup>21</sup>

Groundswell Gloucester's arguments were heavily reliant on the expert testimony of Emeritus Professor Will Steffen, an Earth System scientist at the Australian National University, Senior Fellow of the Stockholm Resilience Centre and Member of the Climate Council of Australia. Steffen's testimony drew on both global and Australian publications, including reports from the Intergovernmental Panel on Climate Change, the Australian Bureau of Meteorology and the Commonwealth Scientific and Industrial

<sup>15</sup> Anne Keen, 'GRL Appeals for Rocky Hill Mine Project' (Manning River Times, 5 February 2018) www. manningrivertimes.com.au/story/5209360/grl-appeals-for-rocky-hill-mine-project accessed 21 February 2019.

<sup>16</sup> Peter Hannam, "Preferential Treatment": Rejected Coal Miner Granted Unusual Legal Rights' (Sydney Morning Herald, 3 February 2018) www.smh.com.au/national/nsw/preferential-treatment-rejected-coal-miner-granted-unusual-legal-rights-20180203-h0t23d.html accessed 21 February 2019.

<sup>17</sup> Ibid.

<sup>18</sup> Gloucester is in the NSW electorate of Upper Hunter. This electorate is held by a member of the National Party, Michael Johnsen, by only 2.2 per cent, based on the results of the previous NSW state election in 2015. It is considered highly marginal, ie, at risk of changing representation in the election, subsequently held on 23 March 2019.

<sup>&</sup>lt;sup>19</sup> Land and Environment Court of NSW, Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7 para 23 www.caselaw.nsw.gov.au/decision/5c59012ce4b02a5a800be47f accessed 21 February 2019.

<sup>20</sup> Ibid, para 422.

<sup>21</sup> *Ibid*.

Research Organisation (CSIRO), Australia's premier scientific research organisation.<sup>22</sup> Steffen summarised climate trends observed over the past few decades, including increases in surface and ocean temperatures, changed rainfall patterns, and increases in the frequency and intensity of severe weather events, including wildfires, droughts, heatwayes, floods and storms. He noted that Australia was particularly vulnerable to climate change impacts, and that these impacts will be felt with increasing severity over at least the next few decades.

A critical part of Professor Steffen's testimony was his explanation of the use of the carbon budget approach 'based on the well-proven relationship between the cumulative anthropogenic emissions of GHGs and the increase in global average surface temperature'. <sup>23</sup> Applying the carbon budget approach indicates that to have a 66 per cent probability of restricting temperature increase to no more than 2°C, the remaining budget that 'can be spent' is 215 GtC.<sup>24</sup> The rate of emissions reductions needed will be strongly affected by the year in which global emissions peak and then start to decline. Delaying the peaking year increases the rate at which emissions need to be reduced to achieve the goal of zero net emissions.<sup>25</sup> Steffen noted that 2020 is likely to be the earliest year when emissions can peak and warned that delaying the peak for just five years 'would create a subsequent emission reduction trajectory that would be impossible to follow economically or technologically'.<sup>26</sup>

Professor Steffen then went on to explain that applying the carbon budget approach leads to the inevitable conclusion that '[m]ost of the world's existing fossil fuel reserves - coal, oil and gas - must be left in the ground, unburned' and that it is 'an obvious conclusion that no new fossil fuel developments can therefore be allowed'. <sup>27</sup> Steffen specifically noted a 2015 analysis of the geographic distribution of fossil fuel reserves showing that to meet the targets of the Paris Agreement, over 90 per cent of Australia's existing coal reserves cannot be burned. 28 Steffen emphasised therefore that development of new fossil fuel reserves, including the proposed Rocky Hill project, was inconsistent with the need to stabilise the Earth's climate, and with Australia's commitment to the Paris accord.<sup>29</sup>

<sup>22</sup> Sources cited by Professor Will Steffen included: Sarah Perkins and Lisa Alexander, 'On the Measurement of Heat Waves' (2013) 26 Journal of Climate 4500; CSIRO and Bureau of Meteorology, 'Climate Change in Australia - Technical Report' (2015); National Oceanic and Atmospheric Administration (NOAA), 'Global Climate Report - Annual 2017' (2018); Intergovernmental Panel on Climate Change, 'Summary for Policymakers' in V Masson-Delmotte and others (eds), Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (World Meteorological Organization 2018) 6; Kevin E Trenberth, 'Climate Change Caused by Human Activities Is Happening and It Already Has Major Consequences' (2018) 36 Journal of Energy and Natural Resources Law 463; Bureau of Meteorology and CSIRO, 'State of the Climate' (2018).

<sup>23</sup> Land and Environment Court of NSW (n 19) para 439.

<sup>24</sup> Corinne Le Quéré and others, 'Global Carbon Budget 2017' (2018) Earth System Science Data Discussions www.earth-syst-sci-data.net/10/405/2018.

<sup>&</sup>lt;sup>25</sup> Christiana Figueres and others, 'Three Years to Safeguard Our Climate' (2017) 546 Nature 593.

<sup>&</sup>lt;sup>26</sup> Land and Environment Court of NSW (n 19) para 422.

<sup>28</sup> Christophe McGlade and Paul Ekins, 'The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2°C' (2015) 517 Nature 187.

<sup>&</sup>lt;sup>29</sup> Land and Environment Court of NSW (n 19) para 449.

#### 5. The case for the mine

GRL acknowledged the relationship of GHGs and climate change and that reduction of anthropogenic global emissions was needed to achieve the goals of the Paris Agreement, but argued that the Agreement does not specify exactly where the emissions reductions should be made. Specifically, GRL argued that Scope 3 ('downstream') emissions – those arising from the burning of fossil fuels in a different country from where they had been mined – should not be considered in determining the merits of the application.<sup>30</sup>

Second, GRL argued that the carbon budget approach should only be applied to mines in general, rather than the Rocky Hill project specifically, noting that the emissions from Rocky Hill would represent only a small fraction of global emissions. Third, GRL proposed that the necessary emissions reductions could be achieved via means other than stopping new coal mines, such as changes in land use, improvements in energy efficiency, and implementation of technologies such as carbon capture and storage. Finally, GRL argued that while the use of thermal coal can be substituted from other sources, that of coking coal – such as would be mined at Rocky Hill – has limited alternatives. In addition, if the mine was disallowed, poorer quality coal could likely be sourced from other mines and from other countries, where lower regulatory standards might apply. The specific assertions regarding both substitutability and demand for coking coal were challenged by Tim Buckley, an energy economics and financial analyst called by Groundswell Gloucester. Buckley noted that a number of emerging technological innovations will reduce the demand for coking coal in steel production and that there was sufficient existing production in Australia to supply current global market needs.

#### 6. The judgment

Following a review of a range of decisions in Australia and the United States, and the *Urgenda Foundation* decision in the Netherlands,<sup>37</sup> the Hon Justice Brian Preston SC, Chief Judge of the Land and Environment Court of NSW, dismissed the appeal by GRL on 8 February 2019, thus refusing consent for the Rocky Hill project. The concluding paragraph of the judgment was both succinct and forceful:

In short, an open cut coal mine in this part of the Gloucester valley would be in the wrong place at the wrong time. Wrong place because an open cut coal mine in this scenic and cultural landscape, proximate to many people's homes and farms, will cause significant planning, amenity, visual and social impacts. Wrong time because

<sup>30</sup> *Ibid*, para 453.

<sup>31</sup> *Ibid*, para 454.

<sup>32</sup> Ibid, paras 451-459.

<sup>33</sup> *Ibid*, paras 460–467.

<sup>34</sup> Ibid, para 484.

<sup>35</sup> Ibid, paras 468-477.

<sup>&</sup>lt;sup>36</sup> *Ibid*, paras 478–479.

<sup>37</sup> The Dutch Court of Appeal upheld the 2015 decision of The Hague District Court in the case of *Urgenda Foundation v Kingdom of the Netherlands*, ruling that the State (ie, the Kingdom of the Netherlands) has a duty of care under Arts 2 and 8 of the European Convention on Human Rights to its citizens to reduce greenhouse gases by at least 25 per cent, relative to the 1990 emission level www.urgenda.nl/en/themas/climate-case accessed 27 February 2019.

the GHG emissions of the coal mine and its coal product will increase global total concentrations of GHGs at a time when what is now urgently needed, in order to meet generally agreed climate targets, is a rapid and deep decrease in GHG emissions. These dire consequences should be avoided. The Project should be refused.<sup>38</sup>

Justice Preston found that exploitation of the coal resources at Rocky Hill would be unsustainable, causing substantial environmental and social harm that would not be outweighed by economic or public benefits and that the project would 'cause distributive inequity, both within the current generation and between the current and future generations'. <sup>39</sup> He also noted that the NSW government had endorsed the Paris Agreement and 'set itself the goal of achieving net zero emissions by 2050'. 40

Justice Preston rejected all the central arguments of the GRL case. He essentially took a holistic view on emission sources, finding that both direct and indirect GHGs, including downstream Scope 3 emissions, needed to be considered when determining impacts. He also held that while the emissions produced as a result of the mine would be a small fraction of global emissions, they would nonetheless contribute to cumulative global warming, and should therefore be considered by the consent authority. In making this point, Justice Preston reiterated that tackling a global problem cannot be divorced from the need for specific local actions:

It matters not that this aggregate of the Project's GHG emissions may represent a small fraction of the global total of GHG emissions. The global problem of climate change needs to be addressed by multiple local actions to mitigate emissions by sources and remove GHGs by sinks. As Professor Steffen pointed out, 'global greenhouse gas emissions are made up of millions, and probably hundreds of millions, of individual emissions around the globe. All emissions are important because cumulatively they constitute the global total of greenhouse gas emissions, which are destabilising the global climate system at a rapid rate. Just as many emitters are contributing to the problem, so many emission reduction activities are required to solve the problem'.4

Justice Preston found the argument that emissions from the mine would be offset was 'both speculative and hypothetical'. <sup>42</sup> The argument that the coal would be provided from less regulated or poorer quality sources elsewhere (which some have referred to as the 'drug dealer's defence') also carried no weight. Justice Preston also rejected the argument that coking coal should be treated differently from thermal coal, noting that existing and approved mines in Australia had sufficient production to meet foreseeable demands. 43

#### 7. Reactions to the decision

Reactions to the judgment were swift. From Groundswell Gloucester and climate action advocates there was both jubilation and relief.<sup>44</sup> Lawyers from the Environmental

<sup>38</sup> Land and Environment Court of NSW (n 19) para 699.

<sup>&</sup>lt;sup>39</sup> *Ibid*, paras 688–696.

<sup>40</sup> *Ibid*, para 526.

<sup>41</sup> *Ibid*, para 515.

<sup>42</sup> *Ibid*, para 530.

<sup>43</sup> *Ibid*, para 536.

<sup>44</sup> See video from The Climate Council of Australia www.youtube.com/watch?v=1YAoWNNdRBk accessed 25 February 2019.

Defenders Office (EDO) of NSW who had represented the group dubbed it a 'once in a generation case'. 45

The Chief Executive Officer of GRL, Brian Clifford, noted his disappointment with the ruling and that the company would consider its next steps. Stephen Galilee, chief of lobby group, the NSW Mineral Council, said 'we don't believe this is in any way a landmark case, given the Department of Planning had already recommended against the project'<sup>46</sup> and later stated that '[i]f the intention of the judgement is to make developments contribute to emissions reductions beyond Australia's national targets, there will be dire consequences for a range of industries, including agriculture, manufacturing and transport, which are all major emitters'. Ar Reinhold Schmidt, the Chief Executive of Yancoal, one of Australia's largest coal mining companies, drew a similarly long bow saying that 'the court's ruling was not just about mining, and could have ramifications across other industries. If it is taken to its full extent, you can look at airports, highrise developments, any other industrial development, even agriculture'. Tania Constable, CEO of the Australian Minerals Council said the decision would 'reverberate across the country'.

Reactions from state and federal politicians varied according to party. Adam Bandt, for the federal Greens, called the ruling 'a game changer'. The NSW Labor Party simply noted that the ruling was 'potentially extremely important for future planning'. The NSW Minister for Planning, Anthony Roberts, noted that 'these decisions are made on a case-by-case basis' and that the court's decision must be respected. Depart Hunter National Party MP, Michael Johnsen, stated that the decision 'puts the economy at risk', condemning the 'judicial activism' represented by the ruling.

The Rocky Hill ruling is the first by an Australian court rejecting consent on the basis of the contributions of a specific coal mine to total global GHGs. The ruling might thus be viewed as robbing mining companies of a key defence against their responsibility for climate change in future litigation. According to Professor Rosemary Lyster, Professor of Environment and Law at the Sydney Law School, University of Sydney, the decision does not set a binding precedent as it was based on a merits appeal, which does not review the legality of an earlier decision.<sup>54</sup> She noted,

<sup>45</sup> Peter Hannam, "We Won": Landmark Climate Ruling as NSW Court Rejects Coal Mine' (Sydney Morning Herald, 8 February 2019) www.smh.com.au/environment/climate-change/we-won-landmark-climate-ruling-as-nsw-court-rejects-coal-mine-20190207-p50wer.html accessed 27 February 2019.

<sup>46</sup> Peter Hannam, 'Mine Ban over Climate Change' (Sydney Morning Herald, February 2019).

<sup>47</sup> Ian Kirkwood, 'Upper Hunter MP Michael Johnsen Says Rocky Hill Verdict Puts Economy at Risk' (Newcastle Herald, 11 February 2019) www.theherald.com.au/story/5896172/company-nationals-mpminerals-council-question-rocky-hill-decision accessed 25 February 2019.

<sup>48</sup> Brad Thompson, 'Yancoal Raises Wider Alarm over NSW Court's Call on Mining and Climate Change' (Australian Financial Review, 26 February 2019) www.afr.com/business/yancoal-raises-wider-alarm-over-nsw-courts-call-on-mining-and-climate-change-20190226-h1bqxc accessed 26 February 2019.

<sup>49</sup> James Thornhill, 'Coal's Perfect Storm Hits \$70 Billion Australian Projects' (Sydney Morning Herald, 27 February 2019) www.smh.com.au/business/the-economy/coal-s-perfect-storm-hits-70-billion-australian-projects-20190227-p510ha.html?cspt=1551349884|970e862223715421d735822af6b975e8 accessed 1 March 2019.

<sup>50</sup> Adam Bandt https://adam-bandt.greensmps.org.au accessed 27 February 2019.

<sup>51</sup> Hannam (n 45).

<sup>52</sup> *Ibid*.

<sup>53</sup> Kirkwood (n 47).

<sup>54</sup> Thornhill (n 49).

however, that the decision had 'persuasive power' and that similar cases could use the same reasoning.

Several commentators have also noted that Justice Preston's reputation and seniority, as the Chief Judge of the Land and Environment Court, and having sat as a judge in the NSW Supreme Court of Appeal, mean his decision will be highly influential beyond this particular case. Further, the comprehensiveness of the judgment with regard to climate change impacts and its heavy reliance on authoritative scientific publications and expert testimony represent considerable hurdles to any future appeal.<sup>55</sup> It remains to be seen whether the NSW government might take legislative or policy steps regarding how Scope 3 emissions are to be assessed in the future but commentators have pointed out that for any government to take action to diminish the chances of similar future rulings would be to 'have to lean against [public] sentiment, 56

The ruling has given heart to climate action advocates fighting other proposed new coal developments in Australia, most notably the Carmichael mine proposed by the Adani group in the Galilee Basin of Central Queensland.<sup>57</sup> At full production, this mine would produce 15 million tonnes of coal per year<sup>58</sup> and the campaign against it has seen an unprecedented advocacy campaign.

A briefing document compiled by Clayton Utz, one of Australia's premier law firms, noted that

[n]ew greenfield mining projects that will create greenhouse gas emissions (and significant modifications to existing mining operations) may now face a higher bar for approval in NSW, and will require much more robust evidence about the impact of their Scope 3 emissions.<sup>59</sup>

Lawyers at another of Australia's largest firms, Corrs Chambers Westgarth, noted that 'the decision will have wide-reaching consequences and will likely affect the viability of coal and other fossil fuel-dependent industries in Australia'. 60 Martijn Wilder at Baker McKenzie informed clients that '[t]he decision does not necessarily mean the end of any new coal mine approvals in NSW because it was specific to the particular facts of this application, but obtaining approval does not mean it will be financed'. Furthermore, he added' ... a proponent of any new mine in NSW would be well advised to arrange some means to mitigate the impacts from any greenhouse gas emissions prior to seeking approval for the project'. 61

<sup>55</sup> Peter Hannam, 'Mine Ban over Climate Change' (Sydney Morning Herald, February 2019).

<sup>56</sup> *Ibid*.

<sup>57</sup> Stop Adani www.stopadani.com accessed 27 February 2019.

<sup>58 &#</sup>x27;Joint Report to the Land Court of Queensland on "Climate Change - Emissions": Adam Mining Pty Ltd (Adani) v Land Services of Coast and Country Inc & Ors' http://envlaw.com.au/wp-content/uploads/ carmichael14.pdf accessed 27 February 2019.

<sup>&</sup>lt;sup>59</sup> Clayton Utz, 'New Decision Rejects Long-Standing Arguments Concerning Greenhouse Gas Emissions' (Briefing, 2 February 2019) www.claytonutz.com/knowledge/2019/february/new-decision-rejects-longstanding-arguments-concerning-greenhouse-gas-emissions?utm source=Alert&utm medium=email& utm\_campaign=Alert\_PPEAL\_20190212 accessed 27 February 2019.

<sup>60</sup> Peter Hannam, 'The Little Case That Could' (Sydney Morning Herald, 17 February 2019).

<sup>61</sup> *Ibid*.

This advice is already being tested. In the wake of the Rocky Hill ruling, Kepco, a South Korean company behind a proposed open cut coal mine in the Bylong Valley in NSW, has made a fresh submission to the NSW Independent Planning Commission, claiming the mine will make a 'negligible contribution' to global climate change. The 18-page 'voluntary' submission argues that Scope 3 emissions from the mine (estimated to be over 197 tonnes carbon dioxide equivalent over 23 years, about five times those for Rocky Hill) would be a matter for South Korea under its Paris targets, rather than being considered in Australia. Climate advocates and the NSW EDO say it is clear that Kepco's new submission is a response to the Rocky Hill judgment, showing that mining companies are already alert to the potential for Rocky Hill to influence future planning approvals.

The Rocky Hill decision is a notable addition to the growth industry of climate litigation, both in Australia and worldwide. A number of jurisdictions are exploring ways in which barriers to litigation could be lowered to assist third parties using the courts to either block new coal mines or seek climate-related damages. In the Australian Capital Territory (ACT), for example, Shane Rattenbury, a senior member of the Labor–Greens government, has stated that having the ACT sue fossil fuel companies including in the energy sector 'is one of the options we should explore'. In his introduction to a Special Issue of the *Australian Law Journal* dedicated to climate change and the law, guest editor Martijn Wilder notes that the 'mainstreaming' of climate change law is gaining momentum<sup>66</sup> as the existential threat of climate change to the global environment, economy and society becomes ever more obvious.

The Grantham Research Institute on Climate Change and the Environment in the United Kingdom has now compiled more than 1,000 cases globally in which litigants have or are currently pursuing climate change-related cases. <sup>67</sup> The majority of these cases (77 per cent) deal with emissions reductions, with corporations representing the single largest group of plaintiffs (40 per cent). Fossil fuel proponents will, of course, fight on. Delaying tactics are common, such as those being used in the case

<sup>62</sup> Lisa Cox, 'Korean Company Planning Bylong Valley Mine Dismisses Climate Threat' (*The Guardian Australia*, 6 March 2019) www.theguardian.com/environment/2019/mar/06/korean-company-planning-bylong-valley-mine-dismisses-climate-threat accessed 7 March 2019.

<sup>63</sup> Hansen Bailey Environmental Consultants, 'Bylong Coal Project: Relevant Information for the IPC's Consideration in Relation to Greenhouse Gas Emissions' www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2018/10/bylong-coal-project/additional-information-from-kepco/bylong-coal-project-scope-3-ghg-emissions.pdf accessed 7 March 2019.

<sup>64</sup> Peter Hannam, 'ACT Seeks Climate Litigation Advice as Court Action Gathers Momentum' (Sydney Morning Herald, 2 December 2018) www.smh.com.au/environment/climate-change/act-climate-litigation-court-rattenbury-canberra-20181201-p50jk4.html accessed 26 February 2019.

<sup>65</sup> *Ibid*.

<sup>66</sup> Special Issue of the Australian Law Journal (2018) 92(10) http://sites.thomsonreuters.com.au/journals/2018/10/30/australian-law-journal-update-vol-92-pt-10-special-issue-climate-change-and-the-law accessed 1 March 2019. This issue includes papers on international climate change law and the Paris Agreement, a history of climate law in Australia, geoengineering and the obligations on companies to address climate change as part of their fiduciary duties, climate finance and financial markets. Of most significance to the Rocky Hill decision, the Hon Justice Preston SC is the author of a paper in the Special Issue that maps international climate change litigation, touching on many issues that subsequently informed his ruling in the Rocky Hill project.

<sup>67</sup> Grantham Research Institute on Climate Change and the Environment, 'Policy Brief, Global Trends in Climate Change Legislation and Litigation: 2018 Snapshot' www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/04/Global-trends-in-climate-change-legislation-and-litigation-2018-snapshot-3. pdf accessed 27 February 2019.

of Juliana v United States, in which 21 young people and climate scientist James Hansen are suing the US government on behalf of future generations.<sup>68</sup>

#### Some final thoughts

As a scientist who has spent more than 20 years researching the impacts of anthropogenic climate change on species and ecosystems, I find the ruling of the NSW Land and Environment Court on the Rocky Hill project extremely welcome. By placing an understanding of the rapidly dwindling carbon budget at the core of the argument against the mine, it would seem that the law, at least in this case, has caught up with the scientific understanding of global climate change. Emissions from fossil fuels, and the impacts they cause, do not respect country or jurisdictional boundaries – a notion that would be obvious to anyone with the only the barest understanding of this global issue. As such, it seems extraordinary that this is the first case in Australia, and one of only a handful in the world, in which this simple fact has been at the core of a legal judgment.

The momentum for change is accelerating. It is worth noting that the Rocky Hill ruling came in the same month that Angela Merkel confirmed that Germany would exit coal-fired power generation by 2038;<sup>69</sup> that Glencore, one of the world's largest coal mining companies announced that it would cap its global coal production at current levels and pivot towards minerals used in renewables after pressure from activist shareholders; 70 and that China suspended Australian coal imports at several ports in a bid to boost its domestic market.<sup>71</sup>

Let us hope that Rocky Hill will open the floodgates to similar judgments – there is simply no time to lose. Future generations will no doubt look back on this and similar decisions and wonder, 'What on earth took them so long'?

**Postscript:** Gloucester Resources Ltd filed a notice of intention to appeal the *Rocky Hill* judgment with the New South Wales Court of Appeal on 5 March 2019. The company has three months from the date of the original decision (8 February 2019) to lodge the appeal.<sup>72</sup>

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#### Acknowledgments

I am grateful to Will Steffen and Martijn Wilder for commenting on the manuscript.

<sup>68</sup> Sophie Yeo, 'Will the Juliana Climate Case Ever Go to Court?' https://psmag.com/environment/will-thejuliana-youth-climate-case-ever-go-to-court accessed 1 March 2019.

<sup>69</sup> Chris Gallagher, 'Germany's Merkel Signals Support for 2038 Coal Exit Deadline' (Reuters, 5 February www.reuters.com/article/us-germany-energy-coal/germanys-merkel-signals-support-for-2038coal-exit-deadline-idUSKCN1PU0BV accessed 1 March 2019.

<sup>70</sup> Glencore, 'Furthering Our Commitment to a Low Carbon Economy' (20 February 2019) www.glencore. com/media-and-insights/news/Furthering-our-commitment-to-the-transition-to-a-low-carbon-economy accessed 1 March 2019.

<sup>71</sup> Olivia Ralph, 'China Restricts Australian Coal Imports at Its Ports in a Bid to Boost Domestic Market' (NSW Country Hour, 18 February 2019) www.abc.net.au/news/rural/2019-02-18/china-restrictsaustralian-coal-imports-to-boost-own-market/10812098 accessed 1 March 2019.

<sup>72</sup> Anne Keen, 'GRL Lodges Intent to Appeal the Land and Environment Court Decision against Rocky Hill Mine' (Gloucester Advocate, 11 March 2019) www.gloucesteradvocate.com.au/story/5944634/ grl-lodges-notice-to-appeal-against-rocky-hill-mine-decision accessed 20 March 2019.