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Legal opinion – gaps in the Environment Protection and Biodiversity Conservation Act and other federal laws for protection of the climate

Report for the Climate Council

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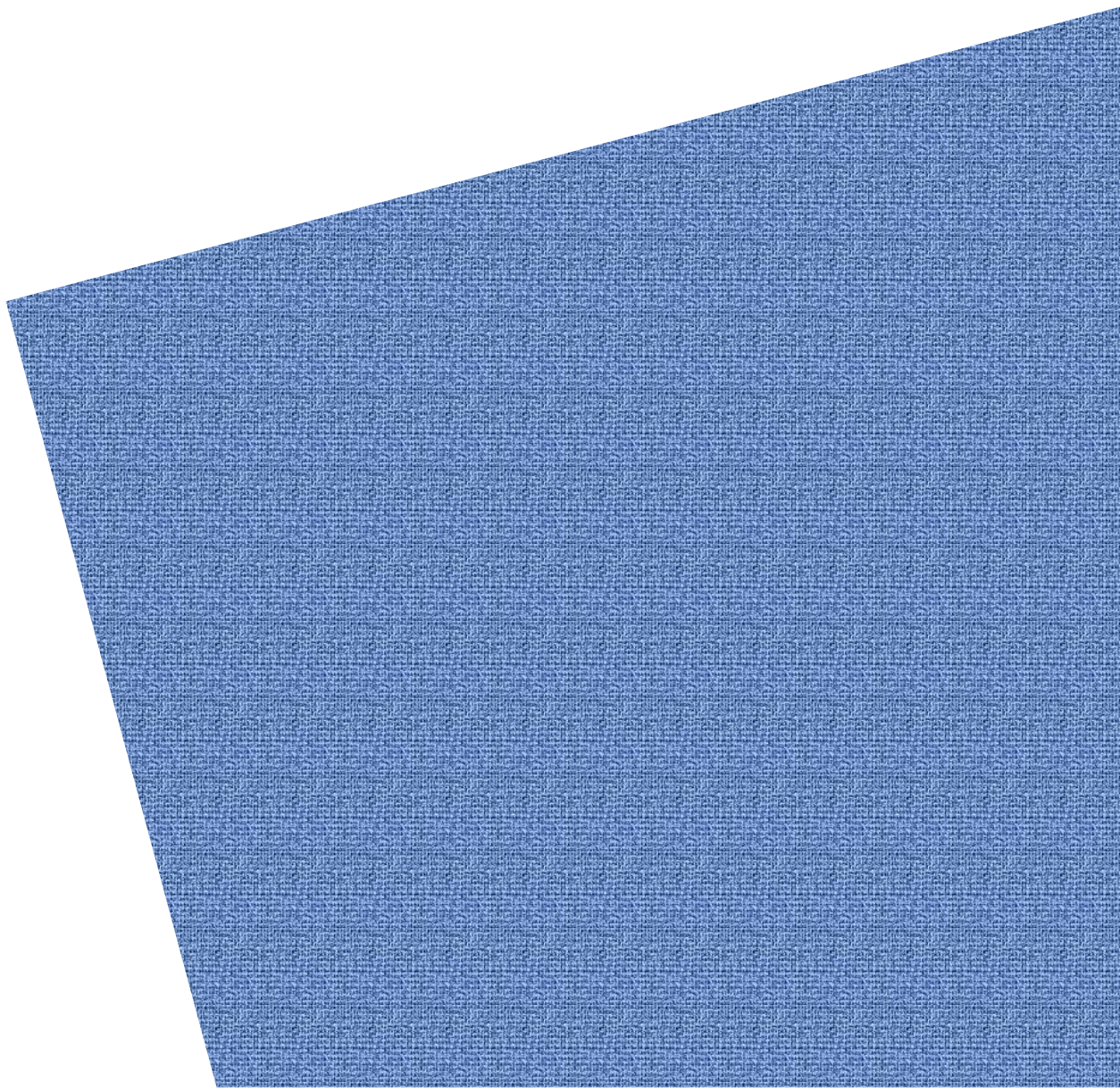


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About the author

Professor Jacqueline Peel is a professor of environmental and climate law at the Melbourne Law School and Director of Melbourne Climate Futures, the University of Melbourne's multidisciplinary climate research initiative.

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Professor Peel has served as a member of the Australian Panel of Experts on Environmental Law (APEEL), as a Co-Chair of the American Society of International Law's Signature Initiative on Climate Change and as a Lead Author in Working Group III (Mitigation) for the Intergovernmental Panel on Climate Change for its most recent Sixth Assessment Report.

Her excellence in environmental law research and interdisciplinary studies of sustainability has been recognised through awards such as a Fulbright Scholarship, the Morrison Publication Prize, the Mahla Pearlman Oration in Environmental Law and election as a Fellow of the Academy of the Social Sciences in Australia.

Background

The Australian Government has identified that the nation’s primary environmental law, the Environment Protection and Biodiversity Conservation Act 1999 (‘EPBC Act’) is in need of “fundamental reform” (DCCEEW 2022). Under its *Nature Positive Plan: Better for the Environment, Better for Business* published in December 2022, the government committed to the “comprehensive remaking of national environmental law” (DCCEEW 2022), based on the 2020 recommendations of the second Independent Review of the EPBC Act led by Professor Graeme Samuel (‘Samuel Review’).

While the proposed reforms to the EPBC Act outlined in the *Nature Positive Plan* include some relating to better inclusion of climate adaptation considerations and improved disclosure of project-based greenhouse gas (‘GHG’) emissions, questions remain over whether the reform process will lead to more comprehensive coverage of climate change and GHG emissions under Australian law.

To better understand this issue, Professor Jacqueline Peel has been engaged by the Climate Council to provide a legal opinion on the extent of gaps in the existing EPBC Act and other Australian federal laws as regards protection of the environment against climate change. The report is not intended to provide a comprehensive assessment of the wider deficiencies of the existing EPBC Act as regards climate change. Instead, it focuses on the question of the extent to which the EPBC Act requires consideration of the climate harms of fossil fuel projects, as well as whether other aspects of the Australian government’s legislative framework adequately deal with GHG emissions.

Specifically, the report provides:

- An explanation of the current coverage gap for climate change under the EPBC Act and how this has affected the assessment of projects with likely significant climate impacts as a result of their GHG emissions;
- An analysis of whether other Australian federal laws—such as the Climate Change Act 2022 and the amended Safeguard Mechanism—provide coverage for the regulation of projects with material GHG emissions;
- Reflections on how the EPBC Act currently defines the concept of ‘impact’ and whether this is adequate for addressing climate harms associated with GHG emissions from projects covered by the EPBC Act, including consideration of alternative approaches to understanding impact arising in other Australian jurisdictions and/or under court precedents;
- Reflections on the so-called ‘market substitution’ argument raised in several cases and decisions in Australia as the basis for limiting consideration of climate impacts and whether it provides an appropriate basis for decision-making, including with reference to court precedents in Australia that have considered this argument; and
- Discussion of examples from other jurisdictions which have moved towards explicit coverage of climate change or GHG emissions in environmental laws similar to the EPBC Act.

The report introduces the EPBC Act and current reform proposals and presents key findings in respect of the areas outlined above.

Executive Summary

The conclusions of the report's analysis of the gaps in the existing EPBC Act and other Australian federal laws as regards protection of the environment against climate change are as follows.

The EPBC Act does not explicitly address the climate change impacts of greenhouse gas-intensive projects

- It is well-accepted that, presently, the EPBC Act does not provide a specific or explicit regime for climate change or the regulation of greenhouse gas emissions.
- While there have been several proposals for a climate or greenhouse 'trigger' over time, these have never been progressed.
- Current proposals to enhance transparency in reporting of projects' greenhouse gas emissions and alignment with national emissions targets, as well as to extend the scope of the water trigger, do not address the current lack of a specific or explicit regime for climate change or the regulation of greenhouse gas emissions in the EPBC Act.
- Although previous litigation has sought to argue that the EPBC Act can apply to greenhouse gas-intensive projects based on their indirect impacts on other protected matters, such past arguments have had limited success. To date, the climate impacts of such projects have generally escaped scrutiny in EPBC Act assessment and approval processes.

Greenhouse gas emissions are not comprehensively regulated under other federal climate laws

- Australia's domestic emissions reduction targets under the Climate Change Act apply only to territorial emissions and not exported emissions from the combustion of fossil fuels extracted in Australia but exported to other countries. Hence exported emissions—the most significant component of Australia's overall carbon footprint—are unregulated by the Climate Change Act.
- Reforms to the Safeguard Mechanism tighten the emissions baselines for safeguard facilities that include many large coal mines and gas extraction facilities and impose an overall 'hard cap' on emissions through to 2030 but covered emissions are limited to facilities' scope 1 (direct) greenhouse gas emissions.
- The Safeguard Mechanism hence captures only one category of overall emissions from safeguard facilities in the coal mining and oil and gas extraction sectors, noting that scope 3 emissions generally comprise the majority of emissions from these facilities.
- Amendments in the Safeguard Mechanism reform legislation to include a 'pollution trigger' in the Climate Change Act create a relationship between the EPBC Act approval process for projects with significant scope 1 greenhouse gas emissions and a process for amendment of the rules under the Safeguard Mechanism. Given the Safeguard Mechanism's hard cap on emissions and rolling carbon budget requirements, this may require the Minister to decide between imposing stricter greenhouse gas emissions reduction requirements on existing industries or blocking new projects.
- The sequential nature of the process created by the pollution trigger reforms could produce the result of a new coal or gas project proceeding through the EPBC Act to the point of approval but then triggering a substantial safeguard liability and stringent baseline requirements due to its scope 1 emissions.
- The new 'pollution trigger' provisions do not ensure climate impacts are fully considered as there is no effect on the Environment Minister's decision-making under the EPBC Act at a project level.

Arguments are often made for implicit coverage of climate impacts under the EPBC Act's definition of indirect impact

- On a broad reading of the EPBC Act's provisions on likely significant impacts on matters of national environmental significance ('MNES'), it is possible to construct an interpretation that could bring projects with significant scope 3 greenhouse gas emissions, like export-oriented coal mines, within the ambit of the EPBC Act's assessment and approval regime.
- Lack of success in past judicial review challenges to coal mines before the Federal Court suggests that an 'indirect impacts' argument represents a less clear route to securing assessment of greenhouse gas-intensive projects under the EPBC Act than would be the case if the legislation included explicit requirements to consider climate impacts from greenhouse gas emissions directly.
- The requirement in section 527E of the EPBC Act for a project to be a "substantial cause" of the indirect consequences that adversely affect a MNES has been interpreted by the Minister in recent decisions to exclude coal projects with "very small" emissions compared to overall global greenhouse gas emissions. In the Federal Court's judgment in *Environment Council of Central Queensland Inc v Minister for the Environment and Water (No 2)* ('*Living Wonders* case')—delivered on 11 October 2023—the Court found that "that reasoning was open to the Minister

and reveals no [judicially reviewable] error on her part in misunderstanding the substantial cause requirement of s 527E.”

- Precedents in other jurisdictions, such as the *Gloucester Resources* decision of the NSW Land and Environment Court, demonstrate an alternative approach to a project’s indirect, downstream emissions that recognises these emissions contribute cumulatively to the climate problem and brings these emissions within the scope of environmental assessment and decision-making.

There appears to be a ‘turning of the tide’ against the market substitution argument in recent court decisions

- The market substitution argument has been applied in several Queensland cases finding that large coal mine projects will have no net adverse climate impacts despite their significant overall greenhouse gas emissions. It was also recently raised by the federal Environment Minister in decisions on requests for her to reconsider coal mining projects under the EPBC Act.
- Commentators have criticised the application of the market substitution argument, with the strongest rationale for its rejection being on the basis of a rigorous factual assessment that challenges economic evidence of a continuing ‘demand-driven’ market for fossil fuels in a rapidly changing global policy environment.
- Judicial decisions in the *Gloucester Resources* (NSW) and *Waratah Coal* (Qld) cases suggest a ‘turning of the tide’ against uncritical acceptance of the market substitution argument in challenges brought to coal mining proposals under State law.
- Success in displacing the market substitution argument seems most likely where challengers have access to merits review proceedings that facilitate a full re-examination of the evidence, including economic evidence, but merits review is not currently available under the EPBC Act. The decision in the *Living Wonders* case illustrates the limitations of judicial review actions brought under the EPBC Act in questioning the particular reasoning approach applied by the Minister in her decision-making.

Scope 3 emissions and greenhouse pollution are a growing focus in other environmental laws

- Environmental laws, guidance and court precedents in other jurisdictions provide alternative models for federal environmental regulation of climate change and greenhouse gas emissions.
- One potential model, seen for example in the United States, extends the consideration of impacts under environmental impact assessment laws to cover indirect, cumulative and scope 3 emissions expressly.
- In the United States and, more recently, in New South Wales, a direct regulatory model for greenhouse gas emissions as an environmental pollutant is emerging. Taking this approach, regulated projects and proponents have pollution licences that specify requirements for the reduction of their greenhouse gas emissions.

Introduction

1. The federal Environment Protection and Biodiversity Conservation Act 1999 ('EPBC Act') is Australia's principal national environmental law. It was legislated by the Howard Government in 1999 with the intention of incorporating a wide range of environmental issues within a single legislative framework. The EPBC Act replaced and repealed five separate previous federal environmental laws, including the Environment Protection (Impact of Proposals) Act 1974.
2. The primary focus of the EPBC Act, which is most relevant for the purposes of this report, concerns its provisions regarding the protection of 'matters of national environmental significance' ('MNES'). The MNES 'triggers' as they are often referred to effectively circumscribe the scope of environmental protection offered by the legislation. In particular, the EPBC Act requires approval by the federal Environment Minister for an action that has, will have or is likely to have a significant impact on a MNES (referred to as a 'controlled actions' – s.75 EPBC Act).
3. There are currently nine MNES specified in the EPBC Act (see Box 1 below), with the potential to add additional MNES by way of amendment of the legislation or through regulations under the Act.

Matters of National Environmental Significance under the EPBC Act

- Declared World Heritage properties – in particular, the world heritage values of such properties (s. 12).
- National Heritage places – in particular, the national heritage values of such places (s. 15B).
- Declared Wetlands of international importance ('Ramsar wetlands') – in particular, the ecological character of such wetlands (s. 16).
- Listed threatened species and ecological communities (s. 18).
- Listed migratory species (s. 20).
- Nuclear actions (including uranium mines) (s. 21).
- Commonwealth marine areas (s. 23).
- The Great Barrier Reef Marine Park (s. 24B).
- A water resource, in relation to coal seam gas development and large coal mining development (s. 24D) (known as the 'water trigger').

In addition to protecting MNES, the EPBC Act also regulates matters involving the Commonwealth or Commonwealth land, protecting (i) the environment, for actions taken on Commonwealth land or by the Commonwealth and Australian Government agencies, (ii) the environment on Commonwealth land for actions taken outside such land and (iii) the environment in overseas Commonwealth Heritage places listed under the EPBC Act for actions taken outside Australia by persons to whom the Act applies.

Box 1: Current MNES under the EPBC Act

4. The EPBC Act, including its coverage of environmental issues under the MNES triggers, has been the subject of several inquiries and independent reviews conducted over the past 25 years. The most recent review was the Samuel Review, which released its final report in October 2020. While there have been various proposals for explicit inclusion of a climate or GHG-related MNES in the EPBC Act over time (Macintosh 2007), no such trigger has been introduced into the legislation. This has given rise to persistent concerns that the principal federal environmental legislation in Australia ignores one of the greatest environmental challenges affecting the efficacy of national environmental protection, namely, climate change.
5. The Samuel Review did not recommend broadening the environmental matters that the EPBC Act specifically deals with, for instance, by including a new climate trigger. Instead, the Samuel Review noted that "successive Commonwealth Governments have elected to adopt specific mechanisms and laws to implement their commitments to reduce greenhouse gas emissions" and advised that "[t]he EPBC Act should not duplicate the Commonwealth's framework for regulating [GHG] emissions" (Samuel Review 2020). This recommendation, along

with the other recommendations of the Samuel Review, was accepted by the present Australian Government. Accordingly, the *Nature Positive Plan* outlining the government's proposed reforms to the EPBC Act does not propose to introduce a new climate-related MNES.

6. Since election of the Albanese Labor government in May 2022, the federal Parliament has passed additional laws relating to climate change. The principal pieces of legislation in this regard are the Climate Change Act 2022 and laws passed in April 2023 to amend the Safeguard Mechanism operating under the National Greenhouse and Energy Reporting Act 2007.
7. This legislative framework for national environmental protection in Australia raises two main issues, considered further in this report:
 - To what extent are climate change and/or GHG emissions explicitly covered under the EPBC Act?
 - To what extent are project-based GHG emissions covered under other federal laws such as the Climate Change Act and amended Safeguard Mechanism?
8. These central issues raise further ancillary issues dealt with in this report such as:
 - Are climate change and/or GHG emissions implicitly covered under the EPBC Act, for example, through the nature of the 'impact' on MNES that can be considered in assessing a particular project, such as a coal mine or new gas development?
 - Where climate change and/or GHG emissions are relevant for environmental decision-making in Australia, to what extent can consideration of those matters be displaced by arguments that stopping a particular GHG-intensive project will not have any net benefit in addressing climate change as it will be replaced by another such project elsewhere in the world to meet market demand (the so-called 'market substitution' argument)?
 - Are there examples of laws similar to the EPBC Act in other jurisdictions that take a different approach to the inclusion of climate change and/or GHG emissions?

1. The EPBC Act does not explicitly address climate change

Summary

- It is well-accepted that, presently, the EPBC Act does not provide a specific or explicit regime for climate change or the regulation of GHG emissions.
- While there have been several proposals for a climate/GHG trigger over time, these have never been progressed.
- Current proposals to enhance transparency in reporting of projects' GHG emissions and alignment with national emissions targets, as well as to extend the scope of the water trigger, do not address the current lack of a specific or explicit regime for climate change or the regulation of GHG emissions in the EPBC Act.
- Although previous litigation has sought to argue that the EPBC Act can apply to GHG-intensive projects based on their indirect impacts on other MNES, such past arguments have had limited success meaning that, to date, the climate impacts of such projects have generally escaped scrutiny in EPBC Act assessment and approval processes.

9. This section of the report provides an explanation of the current lack of explicit coverage for climate change in the EPBC Act and how this has affected the assessment of projects with likely significant climate impacts as a result of their GHG emissions.

1.1. Climate impacts alone do not trigger EPBC Act assessment

10. As outlined in Box 1 above, climate change and/or GHG emissions are not presently included in the EPBC Act as a listed MNES or other protected matter that would directly trigger the need for federal approval for actions with actual or likely significant climate impacts.
11. The reason for this exclusion does not appear to be due to concern that there is a lack of constitutional power on the part of the federal Parliament to legislate for a climate-related MNES in the EPBC Act. The external affairs power under the Constitution, along with other federal powers, are widely regarded – following several High Court rulings – as providing the Commonwealth with substantial power to make laws in relation to the environment (Crawford 1991).
12. Many of the MNES that are included in the EPBC Act are based on domestic implementation of Australia's obligations under international conventions relating to the environment. This includes the World Heritage MNES (implementing the *Convention Concerning the Protection of the World Cultural and Natural Heritage* 1972), the Ramsar Wetlands MNES (implementing the *Convention on Wetlands of International Importance especially as Waterfowl Habitat* 1971), the Threatened Species MNES (implementing the *Convention on Biological Diversity* 1992) and the Listed Migratory Species MNES (implementing the *Convention on the Conservation of Migratory Species of Wild Animals* 1979).
13. Australia also has international obligations pursuant to climate treaties, including the United Nations Framework Convention on Climate Change 1992 ('UNFCCC'), the Kyoto Protocol 1997 and the Paris Agreement 2015. Over time, other federal legislation has been enacted to implement these international climate obligations in Australian law. However, this has not included legislation introducing a specific requirement to designate climate change or GHG emissions as an MNES under the EPBC Act.

1.2. There have been many proposals to put climate into the EPBC Act

14. In the lead up to introduction of the EPBC Act in 1999, the Council of Australian Governments ('COAG') reached a 'Heads of agreement on Commonwealth and State roles and responsibilities for the Environment' which identified 30 possible MNES including "[r]educing emissions of greenhouse gases and protecting and enhancing greenhouse sinks" in order to meet Australia's obligations under the UNFCCC (COAG 1997). In the EPBC Act as enacted, however, only six of these matters were included, along with a trigger for proposals on Commonwealth land, with climate change/GHG emissions not being covered as a MNES under the legislation.
15. Over the history of the EPBC Act, proposals for introduction of a climate or 'greenhouse trigger' have been considered on several occasions but have never been progressed (see further Box 2 below).

History of proposals for a climate/greenhouse trigger under the EPBC Act

- 1998 Labor and Greens amendments to EPBC Bill to include greenhouse trigger after strong advocacy for a climate MNES from environmental groups in public consultations for the new legislation.
- 1999 Government Consultation Paper on possible application of a greenhouse trigger under the EPBC Act as a means for addressing Australia’s international responsibilities under the Kyoto Protocol.
- 1999 Senate Environment, Communications, Information Technology and Arts Reference Committee Inquiry into the progress and adequacy of Australia’s policies to reduce global warming recommends greenhouse trigger for the EPBC Act.
- 2000 Environment Australia release of details of preferred greenhouse trigger option.
- 2000 Labor, Greens and Democrats table greenhouse trigger amendments to Environmental Legislation Amendment Bill (No. 1) 2000.
- 2000 Draft regulations for introducing a greenhouse trigger in the EPBC Act published by Environment Australia.
- 2009 Hawke Review recommends an interim greenhouse trigger to sunset with finalisation of the Carbon Pollution Reduction Scheme.
- 2011 Australian government response to the Hawke Review rejects recommendation for an interim greenhouse trigger given plans for carbon price (introduced under Clean Energy Act 2011).
- 2020 Proposals for a climate specific MNES considered by Samuel Review but not recommended by its report.
- 2022 Albanese government announces proposed EPBC Act reforms, accepting Samuel Review recommendation not to introduce a climate-specific MNES in the EPBC Act.

Box 2: History of proposals for climate/greenhouse trigger under EPBC Act

16. For example, a consultation paper was released by the Howard government in 1999 canvassing “options for applying a Commonwealth greenhouse trigger under the [EPBC Act] in relation to new projects that would be likely to be major emitters of greenhouse gases” (Macintosh 2007). Draft regulations for such a trigger were published in November 2000 ahead of then Environment Minister, Senator Robert Hill, heading to that year’s UNFCCC Conference of the Parties meeting. However, opposition within Cabinet, coupled with the Howard government’s decision not to ratify the Kyoto Protocol, meant this proposal was not progressed (Macintosh 2007).
17. In 2009, the first Independent Review of the EPBC Act led by Allan Hawke (‘Hawke Review’) recommended in its report an ‘interim’ greenhouse trigger designed to ‘sunset’ with commencement of the Rudd government’s proposed emissions trading scheme known as the Carbon Pollution Reduction Scheme (‘CPRS’). However, this trigger proposal was rejected by the Australian government in its 2011 response to the Hawke Review, citing consultations at that time underway under the Gilliard government to legislate a carbon price (Australian Government 2011).
18. In the second Independent Review of the EPBC Act led by Professor Graeme Samuel, the issue of a greenhouse/climate trigger was again raised. As highlighted earlier, the Samuel Review recommended no changes to MNES to include a specific climate change matter, a recommendation which was accepted by the Australian government in its latest reform proposals for the EPBC Act (DCCEE 2022).

1.3. Disclosure of GHG emissions alone does not address explicit coverage gap

19. While the Samuel Review did not recommend amendment to include a climate/greenhouse trigger in the EPBC Act, it did support transparent disclosure by project proponents of the “full emissions profile of the development” and recommended that the EPBC Act “should also require that development proposals explicitly consider the

effectiveness of their actions to avoid, mitigate or offset impacts on nationally protected matters under specified climate change scenarios” (Samuel Review 2020).

20. The Australian government’s *Nature Positive Plan* (DCCEEW 2022) echoes aspects of this approach. It provides:

The government supports the recommendation of the review that proponents be required to publish their expected Scope 1 and 2 emissions. Further, proponents will be required to disclose how their project aligns with Australia’s national and international obligations to reduce emissions. The changing climate will also be a mandatory consideration in environmental planning approaches.
21. This proposal does not equate to explicit coverage of climate change/GHG emissions in a way that would be equivalent to including such matters as the subject of a new MNES.
22. In particular, the proposal is based on enhancing public transparency about the operational GHG emissions of projects assessed under the EPBC Act and their alignment with national emissions reduction targets and Australia’s international commitments **but without any direction that such emissions or alignment are considered in the assessment of projects under the EPBC Act or the issuing of approvals by the Minister**. Potentially, the Minister might consider this information when, for example, applying the principles of ecologically sustainable development (‘ESD’) as part of her approval decision but this is a discretionary rather than a mandatory consideration.
23. By contrast, if the legislation included a climate/greenhouse MNES, or other explicit directions to consider GHG emissions, the EPBC Act would mandate the Minister’s consideration of these matters in her decision-making process. To ensure that this consideration influenced the outcome of decision-making, this change would likely need to be paired with further reforms to the EPBC Act.
24. In addition, publication of projects’ expected emissions is limited under the proposal to Scope 1 and Scope 2 emissions. These represent a project’s operational emissions i.e. the direct emissions from an activity (Scope 1) and its emissions from electricity use (Scope 2). This excludes the project’s indirect Scope 3 emissions, which generally are the largest share of emissions from GHG-intensive developments like coal mines or new gas extraction projects (GeoScience Australia 2023).
25. By contrast, the disclosure of material scope 3 emissions is proposed for reporting entities (with a one-year grace period) under proposed new federal climate-related financial disclosure standards (Treasury 2023). Reporting requirements will apply to large listed companies and financial institutions. This raises the prospect that large Australian fossil fuel companies or their financial institution backers will be subject to annual disclosure requirements for material scope 3 emissions but that the same fossil fuel company undertaking a project that increases scope 3 emissions exposure would not be required to publish estimates of those emissions as part of the amended EPBC Act process.
26. Other changes to existing MNES triggers of the EPBC Act, proposed to be taken forward by the Australian government as part of its *Nature Positive Plan* reforms, also will not lead to explicit coverage of climate change or GHG emissions under the legislation.
27. In particular, expansion of the water trigger to cover all forms of unconventional gas, alongside coal seam gas and large coal mining developments is limited by the focus of the water trigger. This MNES is concerned not with safeguarding the climate or reducing GHG emissions from targeted projects but rather with minimising their impacts on water resources. Hence this reform proposal can only be regarded as, at most, indirect regulation of the potential climate impacts of unconventional gas, coal seam gas and large coal mining developments.

1.4. Lack of explicit coverage for climate poses challenges in assessing projects with large greenhouse gas emissions

28. The lack of explicit and discrete consideration of climate or GHG emissions in the EPBC Act limits the scope for consideration of a project’s GHG emissions and contribution to climate change as part of the legislation’s assessment and approval process. If climate impacts are considered, this occurs only as part of an assessment of whether a project has likely, significant impacts on another non-climate MNES.
29. For a project with significant likely climate impacts as a result of its GHG emissions profile, the course of argument typically proceeds along the following lines.

- The project will generally amount to an “action” potentially covered by the EPBC Act.
 - On referral, the project will be assessed by the Environment Department/Minister to determine if there are any adverse impacts the action has, will have or is likely to have on protected matters/MNES. If the Minister concludes such impacts arise, the action will be a “controlled action” requiring federal approval.
 - A project with significant GHG emissions (scopes 1, 2 or 3) and the potential to contribute adversely to climate change, will not be considered a controlled action on the basis of those emissions and impacts alone because neither climate change nor GHG emissions are MNES triggers under the legislation.
 - In the controlled action assessment, other MNES might be identified as potentially impacted by the project, for example, listed threatened species and ecological communities,¹ declared Ramsar wetlands,² World Heritage listed areas or the Great Barrier Reef Marine Park.
 - For a project’s GHG emissions or contribution to climate change to make it a controlled action in relation to non-climate MNES like the Great Barrier Reef which are not proximate to the project area, the Minister (or Federal Court on judicial review) must accept that adverse impacts on the MNES extend beyond the direct impacts of the project on the protected area to include its likely, significant indirect impacts.
 - Specifically, the Minister or Court must accept, on the evidence, that GHG emissions from the project will give rise to climate change which: (1) will have an adverse impact on another non-climate related MNES making them a relevant consideration in decision-making; and (2) give rise to a likely significant impact on that non-climate related MNES.
 - Given that the majority of GHG emissions from coal and gas projects take the form of downstream (scope 3) emissions when the extracted fossil fuel is combusted for energy, this assessment generally also requires accepting that a project’s scope 3 GHG emissions are a relevant consideration in decision-making under the EPBC Act and give rise to likely significant impacts on non-climate related MNES.
30. The question of whether the EPBC Act’s controlled action decision-making provisions can be interpreted in a way to bring GHG-intensive projects within the legislation’s ambit, despite the lack of a climate/GHG trigger, has been considered in the academic literature (e.g. McGrath 2006; Godden & Peel 2007; McGinness & Raff 2020).
31. In previous research, the author, together with Professor Lee Godden, argued that there is scope for interpretation of the EPBC Act in this way based on precedents such as the *Booth* case (which recognised the potential for activities culling spectacled flying foxes outside the Daintree World Heritage Area to have a significant impact on the world heritage values of that Area) and the *Nathan Dam* case (which recognised that the ‘impacts’ covered by the legislation can extend to a project’s indirect, downstream effects, even if resulting from activities not carried out by the project proponent) (Godden & Peel 2007). This issue is explored further in section 3 of the report, below.
32. Nonetheless, past cases challenging decisions made by previous federal Environment Ministers on large coal mining projects in Queensland, such as *Australian Conservation Foundation (ACF) v Minister for the Environment* (‘*Carmichael Coal Mine* case’) and the earlier case of *Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch v Minister for the Environment and Heritage* (‘*Wildlife Whitsunday* case’), illustrate the practical difficulties of extending the remit of the EPBC Act in this way (see Box 3 below) and evidence a lack of clarity as to how the EPBC Act deals with the climate consequences of projects.³ Both cases before the Federal Court were unsuccessful in overturning the Minister’s decisions regarding the mines at issue although other subsequent developments such as changing economic conditions, financing constraints and further litigation have constrained actual mine operation (Environmental Law Australia 2023).
33. It is notable that since the outcome in the *Carmichael Coal Mine* case, environmental groups have pursued different strategies in litigation aiming to challenge projects with a significant GHG footprint. For example, while

¹ In *Mackay Conservation Group v Commonwealth* (1st Carmichael mine challenge), the Minister’s approval of the mine was set aside by consent. The Federal Court issued a statement that the parties agreed that the federal Environment Minister had failed to consider approved conservation advices for two listed threatened species, the Yakka Skink and the Ornamental Snake. The Minister later reapproved the mine under the EPBC Act. The University of Melbourne maintains a comprehensive database of Australian climate cases at <https://law.app.unimelb.edu.au/climate-change/index.php>. See also the Appendix to this report for a list of relevant case law.

² Where the impacts of a fossil fuel project on these other non-climate MNES are considered to be significant this can be a basis for an assessment leading to refusal of a project. See, e.g., the case of *Waratah Coal* upholding the federal Environment Minister’s decision to refuse a project based on its impacts on a Ramsar wetland and Commonwealth heritage listed place. Notably in this case it was the direct potential impacts of rail and port infrastructure associated with the coal mine proposal that led to the Minister’s refusal of the project for its unacceptable environmental impacts.

³ See also the *Anvil Hill Project Watch Association* case, a judicial review decision of Justice Stone, finding that the likelihood and extent of adverse impacts on matters protected under the EPBC Act was not significant enough to trigger its application.

the ACF has pursued further cases relating to the Carmichael coal mine, these have focused on the water trigger rather than seeking to tie the project's scope 3 emissions to indirect impacts on the Great Barrier Reef.⁴

In *Wildlife Whitsunday*, decided in 2006 before later reforms to the EPBC Act's definition of 'impact', the Wildlife Preservation Society argued that proposals for two new coal mines had to be assessed as controlled actions under the EPBC Act, because they were likely to have significant (and adverse) impacts on the Great Barrier Reef as a World Heritage listed area. The plaintiff argued that the GHG emissions produced from burning the coal harvested from the mines would contribute to climate change, in turn causing damage to the Reef. The Federal Court rejected the application for judicial review and did not accept that the ground alleging that there had been a failure by the Minister to consider GHG emissions was made out by ACF. Justice Dowsett commented that the EPBC Act required the Minister to consider the impact of the proposed mines on the Reef as a World Heritage area, "not the impact of the worldwide burning of coal."

Ten years later, the case of *ACF v Minister for the Environment* encountered similar difficulties with an argument that the federal Minister failed to comply with the EPBC Act in approval decisions by excluding consideration of the impact of the Adani Carmichael Coal mine's scope 3 emissions on the climate, and the Great Barrier Reef World Heritage area. The judicial review application was dismissed by the primary judge, with that decision upheld on appeal to the Full Federal Court.

Box 3: Previous EPBC Act cases unsuccessfully challenging coal mines

34. Similarly, cases challenging large offshore gas projects—which are subject to a special approval regime under the EPBC Act—have focused on consultation failures.⁵ However, ACF's current case against Woodside Energy regarding the Scarborough Gas project is arguing that EPBC Act approval is required for the project—despite existing approvals under the offshore petroleum regulatory regime—because of the project's GHG emissions. The ACF contends that the project will have a significant impact on the world heritage and national heritage values of the Reef.⁶ At the time of writing this matter was before the courts.
35. There are also the 'Living Wonders' requests seeking to have the Environment Minister reconsider the risk assessment and controlling provisions for 19 coal and gas projects pending EPBC Act approval, raising new information regarding their climate and flow-on impacts for MNES. None of these requests have yet yielded a decision by the Minister to reconsider a project and potentially refuse it due to its climate impacts, although four of the projects targeted have since been shelved or withdrawn by the proponents (Living Wonders 2023).
36. In February 2023 the Federal Environment Minister, Tanya Pilbersek, refused approval for the Clive Palmer-backed Styx Coal Project in Central Queensland, one of the mines challenged in the Living Wonders requests. While much celebrated as the first ever refusal of a coal mine in the history of the legislation, the decision does not appear to indicate a change of approach (Bell-James 2023). The Minister's refusal was issued on the basis of potential harms to the Great Barrier Reef due to impacts on freshwater, groundwater and species but not on climate grounds.
37. In October 2023, the Federal Court issued its decision in the case of *Environment Council of Central Queensland Inc v Minister for the Environment and Water (No 2)* ('Living Wonders case') which concerned an application for judicial review of the Environment Minister's decisions reconsidering and reconfirming the scope of original controlled action decisions for the Narrabri Coal and MACH Energy coal mine proposals in NSW. Again, both mines form part of the Living Wonders requests. The Court dismissed the judicial review application of the Environment Council emphasising that the Court was "not concerned with the merits of the Minister's decision" given its more "limited" function in a judicial review proceeding (para. 5). The Court went on to conclude that:

... none of the review grounds are made out and each proceeding must be dismissed. It was legally open to the Minister to weigh and assess the applicant's material and submissions cognisant of the potentially catastrophic effects of climate change on MNES. The Minister in discharging what is clearly a heavy responsibility was not obliged to reason in the manner contended by the applicant. Ultimately, the applicant's arguments, anchored by

⁴ See, e.g., *Australian Conservation Foundation Incorporated v Minister for the Environment* [2021] FCA 550.

⁵ E.g., 2020 case of *The Wilderness Society (South Australia) Inc v National Offshore Petroleum Safety and Environmental Management Authority* which was discontinued after the proponent withdrew its plans. In the Federal Court decision of *Cooper v National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) (No 2)*—issued on 28 September 2023—the Court found that the NOPSEMA did not have authority to make a decision accepting Woodside Energy's plan for seismic blasting for its Scarborough Gas Project in circumstances where NOPSEMA was not reasonably satisfied that required consultations with Traditional Owners had taken place.

⁶ *Australian Conservation Foundation v Woodside Energy* (2022).

the extensive scientific material relied on, raise matters for Parliament to consider whether the Minister's powers must be exercised to explicitly consider the anthropogenic effects of climate change in the manner the applicant submits they must (para. 7).

38. While this decision in the *Living Wonders case* may yet be appealed, it reinforces the complexity of the task for applicants challenging Ministerial decision-making under the EPBC Act in judicial review proceedings raising arguments based on the indirect climate impacts of GHG-intensive projects on non-climate related MNES. It also suggests that explicit consideration of climate impacts in the assessment of such projects under the EPBC Act will depend on legislative reform by Parliament, rather than judicial scrutiny in a review proceeding.
39. The most prominent example of litigants trying a new legal strategy to circumvent existing limitations of the EPBC Act for the assessment of projects with climate impacts is the 2021 case of *Sharma v Minister for Environment*. In *Sharma*, the children plaintiffs argued that the Federal Environment Minister owed them a novel duty of care in the common law of negligence when exercising her approval powers under the EPBC Act for a coal mine extension in New South Wales. Although this claim was originally upheld by Justice Bromberg in the Federal Court, in March 2022 the Full Court of the Federal Court allowed an appeal by the Minister and overturned the primary judge's finding of a novel duty of care. A new private member's Bill put forward by Senator David Pocock has proposed legislating a federal government duty of care requirement in respect of climate harms (Cox 2023).
40. These case law developments, to date, show that past avenues for challenging GHG emissions-intensive projects for coal or gas extraction on the basis of their climate impacts were not successful. Lack of success in previous judicial review challenges before the Federal Court to Ministerial decision-making on coal mines indicates that a more explicit inclusion of climate/GHG emissions in the EPBC Act's decision framework would increase certainty and address in a more straightforward way the assessment of GHG-intensive projects under the EPBC Act.

2. Greenhouse emissions are not comprehensively regulated in other federal laws

- Australia’s domestic emissions reduction targets under the Climate Change Act apply only to territorial emissions and not exported emissions from the combustion of fossil fuels extracted in Australia but exported to other countries. Hence exported emissions—the most significant component of Australia’s overall carbon footprint—are unregulated by the Climate Change Act.
- Reforms to the Safeguard Mechanism tighten the emissions baselines for safeguard facilities that include many large coal mines and gas extraction facilities and impose an overall ‘hard cap’ on emissions through to 2030 but covered emissions are limited to facilities’ scope 1 (direct) GHG emissions.
- The Safeguard Mechanism is likely to capture only one category of the overall emissions from safeguard facilities in the coal mining and oil and gas extraction sectors given that scope 3 emissions generally are the majority of emissions from these facilities.
- Amendments in the Safeguard Mechanism reform legislation to include a ‘pollution trigger’ in the Climate Change Act create a relationship between the EPBC Act approval process for projects with significant scope 1 GHG emissions and a process for amendment of the rules under the Safeguard Mechanism. Given the Safeguard Mechanism’s hard cap on emissions and rolling carbon budget requirements, this may require the Minister to decide between imposing stricter GHG emissions reduction requirements on existing industries or blocking new projects.
- The sequential nature of the process created by the pollution trigger reforms could produce the result of a new coal or gas project proceeding through the EPBC Act to the point of approval but then triggering a substantial safeguard liability and stringent baseline requirements due to its scope 1 emissions.
- The new ‘pollution trigger’ provisions do not ensure climate impacts are fully considered as there is no impact on the Environment Minister’s decision-making under the EPBC Act at a project level.

41. This section of the report looks to other federal laws, such as the Climate Change Act 2022 and reformed Safeguard Mechanism, to assess whether they provide an alternative source of regulation applicable to the GHG emissions of projects with significant potential climate impacts.

2.1. Climate Change Act 2022 sets targets but contains no assessment powers

42. The Climate Change Act was enacted in September 2022 and forms the centrepiece of the Australian government’s climate change regulation. It includes several references to the Paris Agreement and to Australia’s Nationally Determined Contribution(s) (‘NDC’) submitted under the Paris Agreement, which indicate that this legislation was enacted to implement Australia’s international commitments under that treaty. In addition, the first object of the Climate Change Act—introduced following amendment—is “to advance an effective and progressive response to the urgent threat of climate change drawing on the best available scientific knowledge” (s 3aa).

43. The aim of the Paris Agreement is “to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty” (Art. 2.1). This is to be achieved by, among other things, “[h]olding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change” (Art. 2.1(a)) – known as the “temperature goal”). Article 3 provides that “all Parties”—which includes Australia—through their NDCs “to the global response to climate change”, “are to undertake and communicate ambitious efforts” under the Agreement’s provisions relating to mitigation, adaptation and other enabling activities “with the view to achieving the purpose” of the

Paris Agreement set out in Article 2. Article 4.1—the first paragraph of the provisions in the Paris Agreement on mitigation obligations—reinforces the relationship between the Agreement’s temperature goal and parties’ collective emissions reduction efforts. It provides:

In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.

44. These provisions of the Paris Agreement point to the wider global climate change response and efforts to meet the Agreement’s temperature goal to which Australia is responding through its NDC(s) and associated emissions reduction targets. Article 4.1 has been refined in subsequent decisions of the UNFCCC Conference of the Parties (‘COP’) to clarify its focus on achieving ‘net zero emissions’. To be consistent with meeting the Paris Agreement’s temperature goal, net zero emissions would need to be achieved by 2050 or earlier (IPCC 2023).
45. Notwithstanding this broader context, the effective scope of the Climate Change Act is narrower. The principal purpose of the Act is to “set out” Australia’s emissions reduction targets “which contribute to the global goals of: (i) holding the increase in the global average temperature to well below 2°C above pre-industrial levels; and (ii) pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.”
46. Section 10 of the Climate Change Act provides that Australia’s present GHG emissions reduction targets are: (a) 43% below 2005 levels by 2030; and (b) reducing Australia’s GHG emissions to net zero by 2050.
47. It has been argued in several scientific reports that the 43% target for 2030 does not represent a ‘fair share’ of Australia’s “global response to climate change” needed to meet the Paris Agreement temperature goal. For example, a Climate Targets Panel report in 2021 found that a “fair share” on a 2°C consistent pathway would require a 50% reduction below 2005 levels or a 74% reduction below 2005 levels on a 1.5°C consistent pathway. The Panel’s report sought to update the Climate Change Authority’s ‘Targets and Progress Review’ completed in 2014 in anticipation of conclusion of the Paris Agreement. The Authority’s Review recommended “a trajectory range for emissions reductions of between 40 and 60 per cent below 2000 levels by 2030,” which is more stringent than the 43% target due to the lower 2020 baseline used (CCA 2014).
48. The Climate Change Authority is currently working on advice to the government on emissions reduction targets for Australia’s next Nationally Determined Contribution (‘NDC’) due in accordance with Australia’s obligations under the Paris Agreement by 2025.
49. In accordance with international climate law accounting rules, a country’s GHG emissions cover only emissions produced or removed within a nation’s territory. Consequently, scope 3 emissions from fossil fuel extraction projects taking place in Australia are not accounted for as part of Australia’s GHG emissions if they arise from the combustion of those fuels outside territorial limits, e.g. if Australian coal or gas is exported.
50. In 2020-1, Australia exported around 90% of its coal production and 74% of its natural gas production according to the most recent reports produced by GeoScience Australia (GeoScience Australia 2023). Analysis by Climate Analytics in 2019 showed that while domestic use of fossil fuels in Australia contributed about 1.4% of global fossil fuel combustion emissions in 2017, this contribution rose to about 5% if the country’s fossil fuel exports were included (Climate Analytics 2019).
51. As the emissions reduction targets under the Climate Change Act relate to emissions that Australia reports under its UNFCCC obligations, they apply only to GHG emissions occurring in Australia i.e. scope 1 and scope 2 emissions, but not scope 3 emissions taking place outside Australia’s territory. Australia reported net GHG emissions—i.e. emissions produced less those removed e.g. in forest ‘sinks’—of 464.8 million tonnes (Mt) of carbon dioxide equivalent (CO_{2-e}) in 2020–21 in its most National Inventory Report 2023. Emissions associated with fossil fuel exports are not reported but expert estimates suggest they are around double the amount of Australia’s domestic emissions and five times the amount of the projected annual emissions cuts under the 43% reduction target (ESD 2022).

52. The Climate Change Act provides that where Australia prepares and communicates a new NDC or adjusts its existing submitted NDC under the Paris Agreement, that new or adjusted NDC must reflect progression and enhanced ambition (s 10(5) and (6)). While this is likely to lead to a ratcheting up of Australia's emissions reduction targets over time towards the net zero by 2050 target, those successive targets will still only regulate domestic emissions, leaving exported emissions unregulated.
53. There is some potential that the reporting obligations included in the Climate Change Act might shed light on the gap in effectiveness of Australia's climate regulation created by the exclusion of non-territorial emissions. Under section 12, an annual climate change statement is to be tabled in Parliament by the responsible Minister covering "the effectiveness of the Commonwealth's policies in contributing to the achievement of Australia's greenhouse gas emissions reduction targets and reducing emissions in the sectors covered by those policies". Advice from the Climate Change Authority provides input into that statement and there is some measure of accountability in relation to the Minister's treatment of that advice in that the Minister must table a statement of reasons in Parliament if s/he decides not to accept one or more "material aspects" of that advice.
54. The *Safeguard Mechanism (Crediting) Amendment Act 2023*, discussed further below, amended the Climate Change Act in April 2023 to include a so-called 'pollution trigger' in section 15A. This provision applies where the Environment Minister grants an approval under the EPBC Act to a new or expanded safeguard facility. It requires the Environment Minister, in these circumstances, to provide any estimate of the associated scope 1 GHG emissions to the Climate Change Minister, Department Secretary and the Climate Change Authority. The implications of this provisions for the operation of the Safeguard Mechanism are discussed in the next section but do not widen the regulatory scope of the Climate Change Act as regards projects with significant potential climate impacts.
55. Overall, the Climate Change Act is a short and focused piece of legislation designed to put Australia's international emissions reduction targets into law but not to regulate Australia's GHG emissions more comprehensively or their wider contribution to global climate change stemming from the country's exported fossil fuel emissions.
56. In particular, the Climate Change Act imposes no requirements for the assessment and approval of projects that might contribute to Australia's overall carbon footprint and the legislation has no compliance or in-built review mechanisms that might facilitate judicial or merits review of decisions made under the legislation.

2.2. Reformed Safeguard Mechanism regulates emissions but does not assess or approve projects

57. The reformed Safeguard Mechanism forms the other major limb of Australia's federal climate law framework. Whereas the Climate Change Act legislates national emissions reduction targets, the reformed Safeguard Mechanism is currently the key measure for achieving those targets.
58. The Safeguard Mechanism has been in place in Australian law since 1 July 2016 under the National Greenhouse and Energy Reporting Act 2007 ('NGER Act'). It is a mechanism designed to ensure Australia's highest GHG emitting facilities—those emitting more than 100,000 tonnes CO_{2-e} in a financial year—keep their emissions below a set emissions limit or baseline. Safeguard facilities that exceed their baselines must manage their excess emissions or face liability for a pecuniary penalty. Many large coal mines or gas extraction facilities qualify as safeguard facilities.
59. Reforms to the Safeguard Mechanism were legislated in early 2023 and came into effect from 1 July 2023. Whereas in previous financial years, baselines under the Safeguard Mechanism were set at business-as-usual emissions levels and remained relatively consistent over time, the reforms introduced stricter requirements for covered facilities. From 1 July 2023, covered safeguard facilities are required to reduce their emissions in line with Australia's GHG emissions reduction targets.
60. The 2023 reforms also introduce a hard cap on overall 'net safeguard emissions' through to 2030. Amendments to the NGER Act specify an overall carbon budget of 1,233 million tonnes of CO_{2-e} for the decade between 1 July 2020 and 30 June 2030, and limit emissions for the financial year beginning 1 July 2029 to 100 million tonnes CO_{2-e}. The reforms also set a cap of net zero tonnes CO_{2-e} for any financial year beginning after 30 June 2049. In addition, the 5-year rolling average safeguard emissions for each financial year after 30 June 2024 must be lower than the past 5-year rolling average safeguard emissions for that financial year.

61. In assessing the extent to which the reformed Safeguard Mechanism regulates the GHG emissions of projects with likely significant climate impacts it is important to note the scope of the mechanism. In particular, the Safeguard Mechanism only applies to the 'covered emissions' of safeguard facilities defined in s 22XI of the NGER Act as scope 1 emissions of GHGs. Although the reforms introduce the term 'net safeguard emissions', the definition of this term inserted into section 7 of the NGER Act retains the reference to 'covered emissions,' i.e. scope 1 GHG emissions only. Accordingly, the Safeguard Mechanism only addresses one category of overall emissions from safeguard facilities in the coal mining and oil and gas extraction sectors, excluding scope 3 emissions that generally constitute the majority of emissions from these facilities (Button et al 2023).
62. Potentially the 'pollution trigger' amendments incorporated in the Climate Change Act and NGER Act as part of the Safeguard Reforms may have more significant implications for new or expanded facilities approved under the EPBC Act which have a large carbon footprint, at least if this arises due to the facility's scope 1 emissions.
63. Under s15A of the Climate Change Act, as discussed above, there is now a requirement for the Environment Minister to give an estimate of the scope 1 emissions of an action approved under the EPBC Act which is an existing safeguard facility, or likely to become subject to the Safeguard Mechanism, to the Minister for Climate Change, the Climate Change Secretary and the Climate Change Authority. Section 14(1A) also introduces new requirements about the advice given to the Climate Minister by the Climate Change Authority relating to the preparation of an annual climate change statement under the Climate Change Act. That must include advice about whether emissions of covered facilities are declining consistently with Australia's emission reduction targets and requirements relating to the hard emissions cap and rolling 5-year carbon budgets, and, if that is not the case, whether amendments to the Safeguard Mechanism rules are required.
64. If the Minister receives such advice from the Climate Change Authority, there is a further obligation placed on the Minister to undertake a public consultation in relation to whether amendments to the Safeguard Mechanism rules are required and to make those amendments if satisfied they are needed to achieve the legislated 'safeguard outcomes' for declining emissions from covered facilities (NGER Act, s 22XS(1C)). Equally, if the Department Secretary receives an estimate of the scope 1 emissions of a new or expanded safeguard facility approved under the EPBC Act from the Environment Minister and is satisfied this requires amendment to the safeguard rules, s/he must so advise the Climate Minister, again triggering a requirement for public consultation (NGER Act, s 22XS(1D)).
65. While it is uncertain how these provisions will operate in practice, these amendments create a relationship between the EPBC Act approval process for projects with significant scope 1 GHG emissions and a process for amendment of the rules under the Safeguard Mechanism, which may involve tightening of baselines among covered facilities or other recalibrations such as limiting facilities' use of Australian Carbon Credit Units ('ACCUs') to offset emissions above their baselines or imposing conditions on new entrants. Given the Safeguard Mechanism's hard cap on emissions and rolling carbon budget requirements, this may require the Minister to decide between imposing stricter GHG emissions reduction requirements on existing industries or blocking new projects.
66. The sequential nature of the process created by the pollution trigger reforms could produce the unusual result of a new coal or gas project proceeding through the EPBC Act to the point of approval only then to trigger a substantial safeguard liability and stringent baseline requirements due to its scope 1 emissions that might make the project, as originally approved, infeasible. This potentially adds to regulatory burdens for proponents and produces inefficiencies in the government decision-making process for these projects.
67. Regardless of these potential effects, it remains the case that the new provisions do not ensure climate impacts from GHG emissions are fully considered in Australia's climate laws as there is no impact on the Environment Minister's decision-making under the EPBC Act at a project level and no legislative regime is created for the assessment of climate impacts at a project level.

3. Arguments are often made for implicit climate coverage via definitions of impact

- On a broad reading of the EPBC Act provisions on likely significant impacts on MNES it is possible to construct an interpretation that could bring projects with significant scope 3 GHG emissions, like export-oriented coal mines, within the ambit of the EPBC Act's assessment and approval regime.
- Lack of success in past judicial review challenges to coal mines before the Federal Court suggests that an 'indirect impacts' argument represents a less clear route to securing assessment of GHG-intensive projects under the EPBC Act than would be the case if the legislation included an explicit requirement to consider climate impacts from GHG emissions directly.
- The requirement in s 527E of the EPBC Act for a project to be a "substantial cause" of the indirect consequences that adversely affect a MNES has been interpreted by the Minister in recent decisions to exclude coal projects with "very small" emissions compared to overall global greenhouse gas emissions. In the Federal Court's October 2023 judgment in *Environment Council of Central Queensland Inc v Minister for the Environment and Water (No 2)* ('Living Wonders case'), the Court found that "that reasoning was open to the Minister and reveals no [judicially reviewable] error on her part in misunderstanding the substantial cause requirement of s 527E."
- Precedents in other jurisdictions, such as the *Gloucester Resources* decision of the NSW Land and Environment Court, demonstrate an alternative approach to a project's indirect, downstream emissions that recognises these emissions contribute cumulatively to the climate problem and brings these emissions within the scope of environmental assessment and decision-making.

68. In the absence of explicit coverage of climate/GHG emissions in the EPBC Act, and with other federal climate laws having limitations in respect of their coverage of GHG emissions-intensive projects, this section of the report returns to the question of whether climate change or GHG emissions are implicitly covered under the EPBC Act through the legislation's concept of a project's 'impact' on MNES.

3.1. The interpretation of indirect climate impacts on other EPBC Act protected matters is contested

69. As section 1 of this report outlined, the assessment and approval processes of the EPBC Act are triggered by 'controlled actions', that is projects or activities with actual or likely significant impacts on MNES listed under the Act. With no explicit climate or GHG emissions MNES, projects with material GHG emissions or significant climate consequences will only be caught under the legislation if their impacts extend to other MNES such as World Heritage Areas, Ramsar wetlands, listed threatened species and so on.
70. When enacted, the EPBC Act contained no definition of the notion of 'impact' or what might be considered a 'significant' impact. Early litigation brought under the legislation tested those concepts with some cases producing expansive interpretations. This included the *Booth* case where a significant impact on a World Heritage Area was found in relation to an activity taking place outside the boundaries of the Area.
71. Further broadening was suggested by the *Nathan Dam* decision of the Full Federal Court which held that the notion of 'impact' under the EPBC Act: "can readily include the "indirect" consequences of an action and may include the results of acts done by persons other than the principal actor." The Full Federal Court went on to find that the impacts of an action on MNES include "effects which are sufficiently close to the action to allow it to be said, without straining the language, that they are, or would be, the consequences of the action on the protected matter."
72. In the circumstances of the *Nathan Dam* case, involving a dam proposal in Queensland designed to increase agricultural productivity, the Full Federal Court indicated that the 'adverse impacts' that had to be assessed by the

Minister in making a controlled action decision “includes each consequence which can reasonably be imputed as within the contemplation of the proponent of the action, whether those consequences are within the control of the proponent or not.” Nevertheless, the Court stressed that it was inappropriate to essay an exhaustive definition of ‘adverse impacts’ as that was a matter for case-by-case assessment by the Minister.

73. Following these cases, the Australian government introduced guidelines to assist applicants in assessing whether projects had a ‘significant impact’ on MNES. The *Significant Impact Guidelines* (2013 edition) defines a ‘significant impact’ in terms that follow the judgment of Justice Branson in the *Booth* case.⁷ Namely, a ‘significant impact’ is:

... an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts.

74. The guidelines also clarify that a ‘likely’ significant impact on MNES does not require “a greater than 50% chance of happening; it is sufficient if a significant impact on the environment is a real or not remote chance or possibility.”
75. In addition, the EPBC Act requires application of the precautionary principle in the controlled action decision if scientific uncertainty arises and potential impacts are serious or irreversible (s 391). The guidelines provide that “a lack of scientific certainty about the potential impacts of an action will not itself justify a decision that the action is not likely to have a significant impact on the environment.”
76. Further clarification on the meaning of ‘impact’ in the EPBC Act is provided by section 527E of the legislation, inserted by the Environment and Heritage Legislation Amendment Act [No 1] 2006 (Cth) following the Full Federal Court’s *Nathan Dam* decision. In 2013, the Department also developed a Policy Statement on the interpretation of ‘indirect consequences’ under s 527E. The definition provided in s 527E clarifies that an event or circumstance is an ‘impact’ of an action whether it is a direct or indirect consequence of the action. However, for indirect consequences to be impacts, the action concerned must be a “substantial cause.”
77. Section 527E(2) further qualifies the circumstances in which indirect consequences arising from the activities of third parties who are not acting at the “direction or request” of the project proponent can be considered impacts for the purpose of the legislation. In essence, the proponent’s project must facilitate to a “major extent” the third party’s action and that latter action and the events or circumstances to which it gives rise must be within the contemplation of the project proponent or a reasonably foreseeable consequence.⁸
78. The definition of impact in section 527E introduces into the EPBC Act a torts-style analysis in considering whether a project has indirect impacts on MNES that can be assessed under the legislation. It is arguably more restrictive in its inclusion of indirect impacts than the *Nathan Dam* ruling on which it was ostensibly based (Godden & Peel 2007).
79. It is possible to construct an interpretation of the EPBC Act provisions on likely significant impacts on MNES that could bring projects with significant scope 3 GHG emissions—like export-oriented coal mines—within the ambit of the Act’s assessment and approval regime. For such a project, it might be argued that it has important indirect consequences on non-climate MNES by virtue of its contribution to climate change that in turn adversely impacts the MNES ‘with a real or not remote chance of occurrence’, especially when the edicts of the precautionary principle not to postpone action due to scientific uncertainty are taken into account.
80. Arguments of this kind have indeed been put forward by environmental groups challenging decisions of the Environment Minister under the EPBC Act regarding large coal mining proposals, including the *Carmichael Coal Mine* case brought by ACF summarised in Box 3 above. Arguments in the *Carmichael Coal Mine* case did not result in the Federal Court overturning the Minister’s decision (see Box 4 below).

⁷ Justice Branson held in *Booth*, para. 99, that a ‘significant impact’ requires an impact “that is important, notable or of consequence having regard to its context or intensity”. This interpretation was endorsed by the Full Court in *VicForests v Friends of Leadbeater’s Possum Inc*, para. 62.

⁸ The ‘substantial cause’ language appears in s 527E(1) but not in s 527E(2). Section 527E(1)(b) provides that for an event or circumstance that is an indirect consequence of an action, the action must be a substantial cause of that event or circumstance to be an ‘impact’ but qualifies that this is ‘subject to subsection (2)’. Accordingly, there may be alternative constructions of s 527E that do not require establishing ‘substantial cause’ in all cases.

81. While this lack of success in the Carmichael case might be attributed to other factors—not least the restricted nature of review of Ministerial decisions under the EPBC Act, which is limited to judicial review on procedural grounds (McGrath 2008)—it is undoubtedly the case that the ‘indirect impacts’ argument represents a more difficult route to securing assessment of GHG-intensive projects under the EPBC Act than would be the case if the legislation included an explicit requirement to consider GHG emissions impacts directly.

In the *Carmichael Coal Mine* case, the ACF challenged the Minister’s decision authorising the mine under the EPBC Act. In his original decision, the Minister had concluded that the project would not have an unacceptable impact on the Great Barrier Reef. This was based on consideration of a range of variables including uncertainties over the mine’s scope 3 emissions and the difficulty of drawing conclusions about the contribution of the mine’s emissions to global temperature rises.

The ACF’s arguments in response alleged that the Minister erred in characterising scope 3 emissions from the mine as “not a direct consequence of the proposed action, without applying the test in section 527E of the EPBC Act” and also in failing to consider and apply the precautionary principle in concluding that it was difficult to identify the relationship between the mine and relevant MNES.

These arguments were dismissed by the Federal Court at first instance which accepted that the ‘variables’ affecting the Minister’s decision meant that it was difficult to “identify the necessary relationship between the taking of the action and any possible impacts.” On appeal to the Full Federal Court, ACF focused on the scope 3 emissions issue but the Court upheld the primary judge’s decision. Its response indicated the limits of judicial review challenges to Ministerial decision-making under the EPBC Act. The Full Federal Court stated:

There may be good grounds for disagreeing with the Minister’s decision, but that is not our concern in an appeal limited to the lawfulness of that decision. We see no justification for the assertion that he did not take into account the possible impacts of the overseas emissions on the level of greenhouse gases in the atmosphere, the consequences thereof and their impact on the Reef and on the protected matters.

Box 4: Carmichael Coal Mine case and indirect impacts

82. Summarising the limitations of the EPBC Act in respect of coal projects and climate impacts following this and other related decisions, Victoria McGinness and Murray Raff state:

With respect to assessment and approval decisions under the EPBC Act, there are two systemic areas of weakness in respect of GHG emissions and climate change: first, the emission of GHGs in significant volumes is not yet a matter of national environmental significance requiring assessment and approval despite potential constitutional power following from the UNFCCC; and secondly, the absence of merits review of assessment and approval decisions under the EPBC Act means that the Minister’s limited factual assessment of GHG emissions will be deemed lawful in judicial review, despite evidence that with respect to the merits a project would have significant environmental impacts (McGinness & Raff 2020, p. 117).

83. The current Environment Minister has maintained a similar position to that held in these past cases, in response to the Living Wonders requests. The Environment Minister’s May 2023 statements of reasons issued in respect of her decisions on the Living Wonders reconsideration requests regarding the risk assessment of Whitehaven’s Narrabri coal mine expansion, MACH Energy’s Mount Pleasant Optimisation Project, and Idemitsu’s Ensham coal mine extension further illustrate the challenges of using the EPBC Act to obtain assessment of the climate impacts of GHG-intensive projects.
84. In the case of the Narrabri coal mine expansion—which the proponent advised would have total lifetime scope 1, 2 and 3 emissions of 475.03 Mt CO_{2-e} with 435.17 Mt CO_{2-e} being exported scope 3 emissions—the Minister determined that any impacts of the project on World Heritage Areas like the Reef “are, if anything, *indirect consequences* of the proposed action: they are events or circumstances that are removed in time and distance from the taking of the action, which is the extraction of coal” (para. 104).
85. Moreover, the Minister determined that the project would not be a “substantial cause” of climate change leading to adverse effects on remote World Heritage Areas like the Reef. Here, the Minister relied on the ‘market substitution’ argument, discussed further in the next section of the report, as well as finding that “any contribution from the proposed action to global GHG emissions would be very small” (para. 106).
86. In her reasons, the Minister cited the estimated percentage of annual global GHG emissions resulting from the proposed project (0.043%) and the estimated likely increase in global temperature arising from its estimated total

GHG emissions (0.00021°C) in justifying her decision (paras. 121, 122). Accordingly, she concluded that the “proposed action would not be a ‘substantial’ cause of the physical effects of climate change on World Heritage properties” (para. 124).

87. These decisions in respect of the Narrabri and Mount Pleasant mines were the subject of judicial review litigation before the Federal Court, decided at first instance by Justice McElwaine in a judgment issued on 11 October 2023 (the *Living Wonders* case). His Honour noted that the Environment Minister “did not dispute that greenhouse gas emissions associated with the extraction and burning of coal unequivocally has contributed to climate change with severe consequences for our climate” nor that many MNES “have been or will be affected by climate change and its effects” (para. 2).
88. Nonetheless, the Court in the *Living Wonders* case rejected all judicial review grounds argued by the Environment Council of Central Queensland as the applicant. In this regard, a key finding of the Court was that the EPBC Act does not compel the Minister to reason in any particular way in carrying out the factual enquiry required by her assessment tasks, including in determining whether an action is a ‘substantial cause’ of indirect impacts on MNES. The Court stressed that if Parliament had intended to prescribe how the Minister is to undertake this assessment then the Act would expressly so provide (see especially paras 73-74, 79, 140, 144, 155).
89. While the applicant in the *Living Wonders* case may yet seek to appeal the decision to the Full Federal Court, the Federal Court’s ruling serves to emphasise the difficulties of using the ‘indirect impact’ pathway to secure assessment of the climate impacts of fossil fuel projects under the EPBC Act. It also again highlights the limitations of a judicial review forum—as opposed to one authorised to conduct merits review—to ensure scrutiny of the reasoning process and the factual consideration of climate change effects undertaken by the federal Environment Minister when assessing such projects.

3.2. There are alternative and emerging precedents for understanding climate impacts

90. The Minister’s assessment of the likely climate effects of Whitehaven’s Narrabri coal mine expansion illustrates a commonly encountered issue in climate litigation, which has been referred to as the “drop in the ocean problem” (Peel 2011).
91. In essence, arguments are raised by proponents and/or accepted by decision-makers that the GHG emissions of a particular project or activity are ‘too small’ to be considered significant or substantial in the context of overall global GHG emissions that cumulatively cause rising global average temperatures and associated climate impacts. The result is that these projects then escape scrutiny under environmental impact assessment and approval laws despite their very large volumes of GHG emissions—especially scope 3 exported emissions—and the cumulative effects of GHG emissions in contributing to the climate problem.
92. Under the EPBC Act, the definition of impact as including the “indirect consequences” of an action when the action is a “substantial cause” of those consequences facilitates deployment of the ‘drop in the ocean’ argument. For instance, the *Living Wonders* case found there was no legal basis—in a judicial review context—on which to challenge the Environment Minister’s process of reasoning, concluding that the challenged coal mining proposals’ contributions to global GHG emissions were “very small”. However, precedents in other jurisdictions have demonstrated alternative approaches to understanding a project’s impacts that could be used to overcome this problem.
93. An Australian example is the case of *Gloucester Resources v Minister for Planning* rejecting a new coking coal mine in the Hunter Valley region of NSW. In the decision of Chief Judge Preston of the NSW Land and Environment Court—which was not appealed—his Honour found that:
 - The mine’s scope 3 emissions were a relevant matter to be considered in assessing the proposal despite being indirect, downstream emissions (citing *Nathan Dam*, decisions of State courts and tribunals and US precedents).
 - Both the direct and indirect GHG emissions of the mine project would contribute cumulatively to the global total GHG emissions.
 - The mine’s Scope 1, 2 and 3 emissions over the life of the project—estimated as at least 37.8 MtCO_{2-e}—constituted “a sizeable individual source of GHG emissions” but regardless it was not the relative size of the project’s emissions compared with the global total of GHG emissions that was critical but recognition of GHG

pollution as a cumulative impact problem needing to “be addressed by multiple local actions to mitigate emissions by sources and remove GHGs by sinks.”

- Many courts, including international precedents, such as the *Massachusetts v EPA* case in the US and the *Urgenda* case in the Netherlands, recognise “this point that climate change is caused by cumulative emissions from a myriad of individual sources, each proportionally small relative to the global total of GHG emissions, and will be solved by abatement of the GHG emissions from [this] myriad of individual sources.”
 - There was a “causal link” between the project’s cumulative GHG emissions and climate change and its consequences because the project’s “cumulative GHG emissions will contribute to the global total of GHG concentrations in the atmosphere and “[t]he global total of GHG concentrations will affect the climate system and cause climate change impacts.”
 - The project’s cumulative GHG emissions were therefore likely to contribute to the future changes to the climate system and the impacts of climate change” and “likely to have indirect impacts on the environment, including the climate system, the oceanic and terrestrial environment, and people.”
94. This approach to assessing the environmental impacts of GHG-intensive projects and activities is arguably representative of best practice in climate-related decision-making. It “allows a refocusing of the assessment process away from the size of a particular coal project or the mitigation contribution of any one individual action, towards a more holistic consideration of how individual actions link together to produce the overall climate change problem and its consequences” (Peel 2022).

4. There is a ‘turning of the tide’ against the market substitution argument

- The market substitution argument (MSA) has been applied in several Queensland cases finding that large coal mine projects will have no net adverse climate impacts despite their significant overall GHG emissions.
- The MSA was recently raised by the federal Environment Minister in decisions on requests for her to reconsider coal mining projects under the EPBC Act.
- Commentators have criticised the application of the MSA, with the strongest rationale for its rejection being on the basis of a rigorous factual assessment that challenges economic evidence of a continuing ‘demand-driven’ market for fossil fuels in a rapidly changing global policy environment.
- Judicial decisions in the *Gloucester Resources* (NSW) and *Waratah Coal* (Qld) cases suggest a ‘turning of the tide’ against uncritical acceptance of the MSA in challenges brought to coal mining proposals under State law.
- Success in displacing the MSA argument seems most likely where challengers have access to merits review proceedings that facilitate a full re-examination of the evidence, including economic evidence, but merits review is not currently available under the EPBC Act. The decision in the *Living Wonders* case illustrates the limitations of judicial review actions brought under the EPBC Act in questioning the particular reasoning approach applied by the Minister in her decision-making.

95. This section of the report reflects on the so-called ‘market substitution’ argument raised in several Australian cases as the basis for limiting consideration of the climate impacts of GHG-intensive projects. It examines court precedents in Australia that have specifically considered this argument under State-based legislation.

4.1. What is the market substitution argument?

96. The market substitution argument (‘MSA’) is an argument that has been raised by proponents and decision-makers in some cases challenging large fossil fuel projects. It puts forward the proposition that stopping a particular project of this kind will not have any net benefit in addressing climate change as it will be replaced by another such project elsewhere in the world to meet market demand for the fossil fuel in question.
97. The MSA is sometimes coupled with a further argument that blocking an Australian mine will in fact have a net climate detriment as Australian coal is argued to be of better quality, and therefore less environmentally harmful when combusted, than an equal quantity of coal sourced overseas (Bell James & Collins 2020).
98. The MSA was first raised in climate cases before the Land Court in Queensland and has gained particular traction in that jurisdiction (McGinness & Raff 2020; Bell-James & Collins 2020). Most recently it was relied on by the Environment Minister, Tanya Plibersek, in refusing to accept the climate impacts of several new coal mine proposals encompassed in the Living Wonders challenges brought under the EPBC Act, including the Narrabri Coal and MACH Energy coal mine expansions.
99. In her statement of reasons on the request for reconsideration under the EPBC Act regarding the Narrabri coal mine expansion project, which were echoed in the reasons issued regarding the MACH Energy proposal, the Environment Minister relied on advice from her Department that demonstrates a fairly typical application of the MSA. The MSA was raised by the proponent, Whitehaven Coal, in its response to the reconsideration request. In particular:

The proponent ... noted that, if the proposed action were not approved, the demand [for coal] would be met by other producers (as the proposed action would represent a very small shortfall in global supply) and that substituted supply would likely be coal of a lower calorific value (or low calorific value) causing higher GHG emissions than if the project were approved.

100. The Minister in turn relied on the MSA in reaching her decision that information submitted by Environmental Justice Australia and its advising scientists about climate-related impacts on MNES such as World Heritage areas was “not about impacts the proposed action has or will have, or is likely to have” on relevant MNES. She concluded that:

the information does not demonstrate that the proposed action will cause any net increase in global GHG emissions and global average temperature (and so, any physical effects of climate change on the world heritage values of declared World Heritage properties).

101. Particular reasons for this conclusion stated by the Minister were:

- She “considered that it is ... likely that, if the proposed action does not proceed, the prospective buyers will purchase an equivalent amount of coal from a supplier other than the proponent, which would result in an equivalent amount of GHG emissions when combusted, when compared with the amount estimated for the proposed action;” and
- “it [is] reasonable to assume that, should the proposed action not proceed, the market would respond through an increase in supply elsewhere, in circumstances where there is still anticipated demand for the coal from the proposed action.”

102. While the MSA was not the only basis on which the Minister reached her decision, this reasoning represents a classic statement of the approach similar to what has been seen before courts in Queensland. Its appearance may signal the potential for other fossil fuel projects coming before the Environment Minister for decision under the EPBC Act to be found to give rise to no “net increase in global GHG emissions and global average temperature” despite their significant total GHG emissions.

103. The outcome in the *Living Wonders* case concerning the reconsideration requests relating to the Narrabri Coal and MACH Energy proposals may further encourage this trend. The Federal Court did not specifically endorse the Environment Minister’s MSA-style reasoning but found that it was open to the Minister to reason in this way. Justice McElwaine stressed that the EPBC Act is not prescriptive regarding the Minister’s reasoning process when assessing whether there are likely indirect impacts on MNES hence the ‘no net increase’ reasons she provided were “intelligible and explained” and “not lacking in commonsense, particularly once it is accepted that the statutory scheme ... did not require the Minister to reason in a particular way but did require her to undertake an evaluative assessment to reach the state of satisfaction required by s 78” (para. 144). His Honour also expressed concern with any line of argument from the applicant that—in the context of a judicial review proceeding—seemed to be “an invitation to engage in a detailed factual analysis on the merits of the Minister’s reasoning and conclusions” (para. 143).

4.2. The market substitution argument is under growing scrutiny

104. Although the MSA continues to be favoured by some proponents and legal commentators (Dwyer 2022), it has been strongly critiqued in other literature by Australian environmental lawyers (e.g. Bell-James & Collins 2020). As McGinniss and Raff (2020) state, the strongest rationale for rejecting application of the MSA seems to be on the basis of a rigorous factual assessment that challenges economic evidence of a continuing ‘demand-driven’ market for fossil fuels in a rapidly changing global policy environment.

105. The merits review decision of Chief Judge Preston in *Gloucester Resources* provides a clear template for other courts and decision-makers of how economic evidence on fossil fuel supply and demand can be scrutinised and the MSA ultimately rejected for a particular proposal.

106. In *Gloucester Resources*, the proponent of the mine raised an MSA-style argument pointing to evidence of strong projected demand for its product and the more limited substitutes for coking coal which is used in steel production. Following the trend of US decisions such as *WildEarth Guardians v US Bureau of Land Management*, Chief Judge Preston examined closely the evidentiary underpinnings of the MSA in the circumstances before him. Ultimately the Chief Judge found that there was “no certainty” of market substitution from new coal mines in other countries if the project was refused, especially given the trend of increasing regulation of coal in large developing countries to meet climate mitigation and air pollution control objectives.

107. This reasoning effectively places the burden of producing evidence that a project will have no additional environmental harm on the proponent rather than on third party challengers, an approach which can be described

as consistent with the precautionary principle (applicable in the Environment Minister’s controlled action decision under the EPBC Act).

108. Preston CJ’s judgment in *Gloucester Resources* also offered other indications of how the MSA might be challenged. For instance, the Chief Judge pointed to the responsibility under the international climate regime for developed countries to “take the lead” in combating climate change on the basis of their greater share of historical and current global GHG emissions and noted that the refusal of a coal mine in Australia might be seen as a demonstration of such leadership which could encourage other developing countries in the region to embrace stronger controls on new fossil fuel developments in their NDCs.
109. The judgment also endorsed arguments that have been raised in the literature and in other overseas case law regarding MSA’s logical flaws. As Chief Judge Preston stated:

If a development will cause an environmental impact that is found to be unacceptable, the environmental impact does not become acceptable because a hypothetical and uncertain alternative development might also cause the same unacceptable environmental impact. The environmental impact remains unacceptable regardless of where it is caused. The potential for a hypothetical but uncertain alternative development to cause the same unacceptable environmental impact is not a reason to approve a definite development that will certainly cause the unacceptable environmental impacts.

110. Indeed, it may be that “the tide is turning” for the future acceptability of the MSA (Bell-James & Collins 2020), even before courts in Queensland as the 2022 decision of the Land Court in the *Waratah Coal v Youth Verdict* case signals. In this case, President Kingham rejected the MSA—referred to as the ‘perfect substitution’ argument in her judgment—which had been raised by Waratah Coal as a basis for its assertion that approving the mine would make no difference to total GHG emissions.
111. In considering the proponent’s arguments of ‘perfect substitution’, President Kingham found that the evidence did not allow a finding about how much the project’s coal might displace other coal or be substituted by it if the mine did not proceed. Her Honour also noted that “because the competition for the Project coal is from other high rank coal, it is unlikely there would be a material difference in GHG emissions because of displacement/substitution.” President Kingham therefore “rejected Waratah’s argument there will be perfect substitution, therefore no net impact.”
112. It should be noted, however, that both the NSW Land and Environment Court’s decision in *Gloucester Resources* and the Queensland Land Court’s decision recommending refusal of the Waratah coal mine were merits review decisions where the judges concerned ‘stood in the shoes’ of the original decision-maker and reassessed all relevant factual and expert evidence.
113. Merits review is not available under the EPBC Act and the Australian government has indicated that introducing merits review is not currently part of its reform proposals for the legislation. Hence the opportunities for challenging the evidentiary underpinnings of a MSA raised by a proponent or decision-maker in federal climate litigation under the EPBC Act may be more limited, a conclusion strengthened by the outcome of judicial review challenges in the *Living Wonders* case.

5. Scope 3 emissions and greenhouse pollution are a growing focus in other environmental laws

- Environmental laws, guidance and court precedents in other jurisdictions provide alternative models for federal environmental regulation of climate change and GHG emissions.
- One potential model seen, for example, in the US, extends the consideration of impacts under environmental impact assessment laws to cover indirect, cumulative and scope 3 emissions expressly.
- In the US and, more recently, in NSW, a direct regulatory model for GHG emissions as an environmental pollutant is emerging. Taking this approach, regulated projects and proponents have pollution licences that specify requirements for the reduction of their GHG emissions.

114. The final section of this report discusses examples from other jurisdictions of environmental precedents and laws that allow more explicit coverage of climate change and GHG emissions compared to the EPBC Act.

5.1. Coverage of scope 3 emissions is a growing focus

115. Just as in the federal context, the extent to which environmental impact assessment processes permit or require consideration of scope 3 emissions associated with GHG-intensive projects has been a feature of case law in Australian States and in other jurisdictions internationally.

116. The *Gloucester Resources* decision discussed in earlier sections represents the culmination of a line of case law in NSW that endorses a consideration of downstream, indirect GHG emissions of projects as part of their assessment under environmental and planning laws.

117. At the federal level in the US, a holistic approach to assessment of GHG emissions has been endorsed by the Council on Environmental Quality ('CEQ') in the guidelines it issues to federal departments applying the National Environmental Policy Act ('NEPA Act'). The NEPA Act governs environmental reviews conducted by federal agencies and requires these agencies to disclose and consider the reasonably foreseeable effects of their proposed actions. A NEPA rule issued by the Biden administration in April 2022 restored the requirement (revoked by the previous Trump administration) that federal agencies must evaluate all relevant environmental impacts – including those associated with climate change – during their environmental reviews. This rule is supplemented by a CEQ Interim Guidance being finalised following public consultation.

118. The CEQ Interim Guidance clarifies the approach federal agencies should take with respect to the assessment of climate effects. This includes requirements for agencies to quantify the reasonably foreseeable direct and *indirect* GHG emissions of their proposed actions and reasonable alternatives (as well as the no-action alternative).

119. The CEQ Interim Guidance displaces some of the common 'drop in the ocean' arguments that have featured in Australian federal environmental decision-making on coal projects. For example, a statement that emissions from a proposed federal action represent only a 'small fraction' of global emissions is not adequate for NEPA purposes and is not considered an appropriate way to characterise the extent of a proposed action's contributions to climate change.

120. The reasonably foreseeable 'effects' of a proposed action considered under NEPA are also broadly defined by the CEQ. They include direct and 'indirect' effects (namely, "effects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable"). The CEQ guidance clarifies that the reasonably foreseeable indirect effects of a proposed action involving fossil fuel extraction "likely would include effects associated with the processing, refining, transporting, and end-use of the fossil fuel being extracted, including combustion of the resource to produce energy."

121. 'Cumulative' effects are also included within the scope of effects to be assessed. The latter are described as "effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from actions with individually minor but collectively significant effects taking place over a period of time."

122. When considering GHG emissions and their significance, US federal agencies are instructed to use appropriate tools and methodologies to quantify GHG emissions, compare GHG emission quantities across alternative scenarios (including the no action alternative), and place emissions in relevant context, including how they relate to climate action commitments and goals. As the CEQ notes, this approach allows presentation of a picture of the environmental and public health effects of a proposed action that is clear and provides sufficient information for reasoned choice.
123. The CEQ guidance potentially provides a model for the EPBC Act and its consideration of scope 3 emissions as ‘indirect consequences’ of an action involving fossil fuel extraction. More generally, the US example indicates an approach to environmental review that allows for a more holistic assessment of GHG emissions from projects and activities as part of an overall government policy to support clean energy rollout and the reduction of climate impact.

5.2. Some regulators are moving to treat greenhouse gases as pollutants

124. Another model which is also demonstrated by US federal experience is direct regulation of GHGs as environmental pollutants. The US Supreme Court decision in *Massachusetts v EPA* provided the basis for this approach in the US when it was held that GHGs fall within the definition of ‘air pollutants’ in the Clean Air Act. This decision paved the way for federal regulation of GHG gases from sources such as vehicles and stationary energy facilities (although the implementation of these regulations has been impacted by subsequent Supreme Court rulings).
125. A similar direct regulatory model is now emerging in NSW under the Environment Protection Authority’s (‘EPA’) recently released Climate Change Policy and Climate Change Action Plan 2023–26. This Plan supports the NSW Climate Change Policy Framework including its net zero by 2050 and interim emissions reduction targets.
126. The Action Plan addresses the duty of the EPA under section 9 of the Protection of the Environment Administration Act 1991 (‘POEA Act’) to develop environmental quality objectives, guidelines and policies to ensure environment protection. This follows the ground-breaking *Bushfire Survivors* decision of the NSW Land and Environment Court in 2021 which ruled that the POEA’s duty to develop environmental protection instruments included the duty to develop climate change protection instruments (Schuijers & Young 2021).
127. The commitments made by the NSW EPA under the Action Plan (anticipated to be implemented by 2024-2025) include to:
- develop feasible, evidence-based greenhouse gas emission reduction targets for key industry sectors subject to EPA licences, including appropriate pathways; and
 - progressively place feasible, evidence-based greenhouse gas emission limits and other requirements on licences for key licensed industry sectors, once appropriate targets have been set and guidance identified or developed to support these requirements being set consistently.
128. It is expected that GHG-related requirements placed on pollution licences issued by the NSW EPA may include monitoring and/or emissions estimation conditions, reporting conditions, pollution reduction studies and programs, and other performance requirements. The NSW EPA intends to develop these requirements in consultation with industry and existing licence holders, and to ensure any GHG emissions limits complement existing NSW Government and Commonwealth Government actions including the NSW Net Zero Plan and the Safeguard Mechanism.
129. The NSW EPA is the first environmental regulator nationally to take “a comprehensive approach to managing greenhouse gasses down to safe levels in the same way as we treat other pollutants” (Greber 2023). As the Australian government looks to establish a federal EPA counterpart as part of its environmental law reforms there is an opportunity to follow this model.

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