



Environmental Defenders Office

**BEFORE THE INDEPENDENT PLANNING COMMISSION
PUBLIC HEARING 15-17 FEBRUARY 2021
FOR THE TAHMOOR SOUTH COAL PROJECT**

**CLOSING WRITTEN SUBMISSIONS
FOR
UNDERMINED INC.**

**PREPARED BY
ENVIRONMENTAL DEFENDERS OFFICE LTD**

Contents

1. EXECUTIVE SUMMARY.....	3
2. FACTUAL BACKGROUND	5
3. ROLE AND POWERS OF THE IPC	6
4. RELEVANT MATTERS TO BE CONSIDERED BY THE IPC	8
4.1 The public interest	9
4.2 The public interest and ESD	10
4.3 Principles of Ecologically Sustainable Development	11
4.3.1 Intergenerational equity and intragenerational equity	12
4.3.2 Conservation of biological diversity and ecological integrity	13
4.3.3 The polluter pays principle	14
4.3.4 Precautionary principle.....	15
5. LIKELY ENVIRONMENTAL IMPACTS.....	17
5.1 Climate change.....	17
5.1.1 Three statutory pathways to refusal of consent	17
5.1.2 The meaning and application of the Rocky Hill case	18
5.1.3 If the IPC were minded to grant consent to the Project, the Project must be carbon neutral.....	22
5.1.4 Difficulties with “land carbon” offsets	26

5.2 The move towards green steel.....	26
5.3 Subsidence and groundwater Impacts.....	29
5.3.1 The precautionary principle	30
5.3.2 The application of the precautionary principle to the Project's subsidence and groundwater impacts.....	35
6. CONCLUSION	40

1. EXECUTIVE SUMMARY

1. Undermined Inc (**Undermined**) is a community action group formed to address concerns about damage caused by long wall mining in the Wollondilly Shire.
2. Undermined seeks a determination that the Tahmoor South Coal Project (**Project**) be refused development consent.
3. The environmental impacts of the Project outweigh its purported social and economic benefits. The Project is not in the public interest.
4. The principles of ecologically sustainable development (**ESD**), in particular the principles of intragenerational and intergenerational equity, the precautionary principle, the principle of conservation of biological diversity and the polluter pays principle, dictate that the Project should be refused. These principles are contravened in relation to the following environmental impacts:
 - a. **Climate change impacts:** The Project will cause unacceptable harm to the environment through the generation of Scope 1, 2 and 3 greenhouse gas (**GHG**) emissions over the life of the Project. The impact of the Project's GHG emissions has been significantly understated by the applicant in the context of the urgent need to reduce GHG emissions and adopt alternative technologies, such as green steel. The Project contravenes the principles of intergenerational equity and conservation of biological diversity and ecological integrity, and the polluter pays principle. In order to ensure that the rise in global temperatures will be limited to well below 2 degrees Celsius, it would be irrational and unreasonable for the Project to be granted consent.
 - b. **Subsidence and groundwater impacts:** The Project will cause unacceptable subsidence impacts on a number of tributaries to the Bargo and Nepean Rivers and there is a risk that the Project will cause serious or irreversible harm to Thirlmere Lakes, part of the Greater Blue Mountains World Heritage Area. In this respect, the Project contravenes the precautionary principle and the principles of intergenerational equity and conservation of biological diversity and ecological integrity.
5. Undermined has commissioned the following experts to present and/or provide independent expert reports to the IPC:
 - a. Prof James Goodman – greenhouse gas emissions;

- b. Mr Tony Wood –market drivers for green steel;
- c. Associate Professor John Pye – technical developments in green steel; and
- d. Dr Philip Pells – subsidence and impacts on Thirlmere Lakes.

2. FACTUAL BACKGROUND

6. On 27 October 2020 the Minister for Planning and Public Spaces wrote to the Independent Planning Commission (**IPC**) with the following request:
 1. Conduct a public hearing into the carrying out of the Tahmoor South Coal Project (SSD 8445) prior to determining the development application for the Project under the Environmental Planning and Assessment Act 1979, paying particular attention to:
 - a) the Department of Planning, Industry and Environment's assessment report, including any recommended conditions of consent;
 - b) key issues raised in public submissions during the public hearing; and
 - c) any other documents or information relevant to the determination of the development application.
 2. Complete the public hearing and make its determination of the development application within 12 weeks of receiving the Department's assessment report in respect of the project, unless the Planning Secretary agrees otherwise.
7. Accordingly, the IPC is the consent authority for the Project; s 4.5(a) of *Environmental Planning and Assessment Act 1979 (EP&A Act)* and clause 8A of *State Environmental Planning Policy (State and Regional Development) 2011*.
8. The Department of Planning, Industry and Environment's (**DPIE's**) assessment report was published on 17 December 2020. The referral letter from the Planning Secretary providing the IPC with the DPIE's assessment report stated that:¹

On balance, the Department considers that the significant economic and social benefits of the project outweigh its potential impacts, and that the project is approvable subject to the recommended conditions.

9. In Undermined's submission, the evidence establishes that the DPIE has underestimated the likely environmental impacts of the Project and the Project should be refused consent.

¹ DPIE Letter of Referral (17 December 2020), 2.

3. ROLE AND POWERS OF THE IPC

10. The IPC is a statutory agency under s 2.7(3) of the EP&A Act. It is independent from, and not subject to the direction or control of, the Minister and DPIE: s 2.7(2).

11. The Statement of Expectations published by the Minister for the period from 1 May 2020 to 30 June 2021 confirms the importance of the IPC from Government and DPIE (emphasis added):²

The [IPC] plays an integral role in **upholding the integrity** of the NSW planning system, by fulfilling its **primary purpose of providing independent decision making on contentious State significant development applications...**

12. The Memorandum of Understanding between DPIE and IPC (**MOU**) dated May 2020 notes the 'independence' of the IPC and expressly states that it is to bring 'a high level of independence and transparency to the assessment and determination of State significant developments'.³ Members of the IPC are appointed by the Minister but are 'not subject to the direction or control of the Minister, except in relation to procedural matters'.⁴ Further the MOU expressly identifies that the IPC is 'also independent of DPIE and other government agencies, and plays an important role in strengthening public confidence in the planning system...'.⁵

13. The MOU identifies the IPC's objectives which are to build public trust in the NSW planning system by:⁶

- a. being independent and objective in its decision-making;
- b. being fair, open and transparent in its operations;
- c. delivering robust and timely determinations within the legislative and government policy framework to best serve the people of New South Wales; and
- d. encouraging effective community and other stakeholder participation to inform [the IPC's] determinations.

14. To the extent that cl 5.4.2 of the MOU, which states 'The Commission will use the DPIE assessment report as the starting point for its determination', seeks to depart from the text of s

² The Hon. Rob Stokes MP, *Statement of Expectations for the Independent Planning Commission for the period from 1 May 2020 to 30 June 2021*, 1.

³ IPC and DPIE Memorandum of Understanding (5 May 2020), 3.

⁴ IPC and DPIE Memorandum of Understanding (5 May 2020), 3.

⁵ IPC and DPIE Memorandum of Understanding (5 May 2020), 4.

⁶ IPC and DPIE Memorandum of Understanding (5 May 2020), 4.

4.15, it is bad in law; the IPC is bound to make its decisions in accordance with s 4.15 of the EP&A Act, and not the MOU. The EP&A Act does not identify that DPIE's assessment report should be given precedence over other evidence. DPIE's assessment report is not a mandatory relevant consideration. Whilst it is no doubt a relevant consideration to be taken into account by the IPC, it is of no greater import than other relevant evidence placed before the IPC, including by objectors to the Project.

15. The IPC has the functions of the consent authority under Part 4 for the State significant development: s 2.9(1)(a) of the EP&A Act.

16. In its role as consent authority, the task of the IPC is not to consider whether the recommendations of DPIE in its assessment report are correct or preferable on the material available to it, but rather to determine, based on the evidence now before the IPC, what is the preferable outcome.⁷

⁷ *Bulga Milbrodale Progress Association Inc v Minister for Planning* (2013) 194 LGERA 347, [28], [7]-[11].

4. RELEVANT MATTERS TO BE CONSIDERED BY THE IPC

17. The IPC is a statutory body that can have no wider powers than those conferred by the EP&A Act, which establishes this body. As consent authority, the matters to be considered by the IPC in determining a State significant development application⁸ are those expressly stated in section 4.15(1) of the EP&A Act. Additionally, those matters implicated by the subject matter, scope and purpose of the Act are required to be considered.⁹

18. Section 4.15 provides:

Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

- (a) the provisions of:
 - (i) any environmental planning instrument, and
 - (ii) any proposed instrument ...
 - (iii) any development control plan, and
 - (iiiia) any planning agreement ...
 - (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),
 - ...
 - that apply to the land to which the development application relates,
- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- (c) the suitability of the site for the development,
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.

19. As set out above, section 4.15(a)(i) of the EP&A Act makes any applicable environmental planning instrument (**EPI**) a mandatory relevant consideration. The activities the subject of the Project meet the definition of 'mining, petroleum production or extractive industry' in clause 3 of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP)*. Consequently, the Mining SEPP applies to the determination of the Project.

20. In addition to the provisions of any relevant EPI, s 4.15 requires that the IPC must take into account the likely environmental impacts of the development, the likely social impacts, the

⁸ Defined in EP&A Act, s 4.40.

⁹ *Bulga Milbrodale Progress Association Inc v Minister for Planning* (2013) 194 LGERA 347, [52].

economic impacts, the suitability of the site for the development, and any submissions made in accordance with the EP&A Act. The IPC must also take into account the public interest: s 4.15(e) EP&A Act. The relevant considerations to the public interest in a development are summarised below.

21. The Minister's Statement of Expectations (**SOE**) states that he expects the IPC 'to make decisions based on the legislation and policy frameworks and informed by the Planning Secretary's assessment'.¹⁰ To the extent that this statement seeks to depart from s 4.15, it is also bad law; the IPC is bound to make a decision in accordance with s 4.15 of the EP&A Act, and not the SOE. Namely, there is no reference to the phrase 'policy frameworks' in s 4.15. Further, contrary to the suggestion in the SOE, the EP&A Act does not provide that DPIE's report should be provided precedence over other evidence. This report is not a mandatory consideration. Whilst evidently a relevant consideration to be taken into account by the IPC, it is of no greater import than other relevant evidence placed before the IPC, including submissions by objectors.
22. Further, the SOE states that the Minister encourages the IPC to 'seek guidance from the Planning Secretary to clarify policies or identify policy issues that may have implications for State significant development determinations'.¹¹ This is, again, inconsistent with the proper role of an independent IPC, which is required to make a determination according to law, and not by reference to any guidance or fettering from the Planning Secretary on policy issues that may have implications for the Project.

4.1 The public interest

23. The public interest has a 'wide ambit'.¹² A consent authority may range widely in the search for material as to the public interest.¹³ According to Preston CJ, 'a requirement that regard be had to the public interest operates at a high level of generality'.¹⁴ The public interest must be applied having regard to the scope and purpose of the relevant statute.¹⁵

24. The objects of the EP&A Act include:

¹⁰ The Hon. Rob Stokes MP, *Statement of Expectations for the Independent Planning Commission for the period from 1 May 2020 to 30 June 2021*, 2.

¹¹ The Hon. Rob Stokes MP, *Statement of Expectations for the Independent Planning Commission for the period from 1 May 2020 to 30 June 2021*, 2.

¹² *Shoalhaven City Council v Lovell* (1996) 136 FLR 58, [63].

¹³ *Terrace Tower Holdings Pty Limited v Sutherland Shire Council* (2003) 129 LGERA 195, per Mason P [81].

¹⁴ *Warkworth Mining Ltd v Bulga Milbrodale Progress Association Inc* (2014) 200 LGERA 375, [298].

¹⁵ *Patra Holdings v Minister for Land* (2002) 119 LGERA 231, [11].

- a. facilitating ESD by integrating relevant economic, environmental and social considerations;¹⁶ and
- b. promoting the social and economic welfare of the community and a better environment,¹⁷ and to provide increased opportunity for community participation in environmental planning and assessment.¹⁸

25. The considerations relevant to these objects are detailed below.

4.2 The public interest and ESD

26. Decisions of the Land and Environment Court, and the Court of Appeal, have held that the public interest necessitates consideration of principles of ESD during the merits assessment of projects which are equivalent to State significant development,¹⁹ including coal mines.²⁰

27. In *Minister for Planning v Walker* (2008) 162 LGERA 423, Hodgson JA stated at [56]:

... I do suggest that the principles of ESD are likely to come to be seen as so plainly an element of the public interest, in relation to most if not all decisions, that failure to consider them will become strong evidence of failure to consider the public interest and/or to act bona fide in the exercise of powers granted to the Minister, and thus become capable of avoiding decisions. It was not suggested that this was already the situation at the time when the Minister's decision was made in this case, so that the decision in this case could be avoided on that basis; and I would not so conclude.

28. In *Barrington-Gloucester-Stroud Preservation Alliance Inc v Minister for Planning and Infrastructure* (2012) 194 LGERA 113, Pepper J stated at [170] (emphasis added):

I therefore reject the submission of AGL and the Minister that there was no requirement to consider ESD principles. In the words of Hodgson JA in *Walker*, **the time has come that “the principles of ESD” can now “be seen as so plainly an element of the public interest”** (at [56]).

¹⁶ EP&A Act, s 1.3(b).

¹⁷ EP&A Act, s 1.3(b), (e).

¹⁸ EP&A Act, s 1.3(j).

¹⁹ *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [58].

²⁰ *Hunter Environmental Lobby Inc v Minister for Planning* [2011] NSWLEC 221.

29. The public interest also includes community responses to the Project. In *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, Preston CJ stated at [63]:

The public interest also includes community responses regarding the project for which approval is sought. In *Telstra Corporation Ltd v Hornsby Shire Council* (2006) 67 NSWLR 256; 146 LGERA 10, I confirmed (at [192]) that community responses are aspects of the public interest in securing the advancement of one of the express objects of the EPA Act in s 5(c), being “to provide increased opportunity for public involvement and participation in environmental planning and assessment” (see also *Kulin Holdings Pty Ltd v Developments Pty Ltd v Baulkham Hills Shire Council* (2003) 127 LGERA 303 at [58]). I said, however, that in considering the community responses, an evaluation must be made of the reasonableness of the claimed perceptions of adverse effect on the amenity of the locality (see also *Foley v Waverley Municipal Council* [1963] NSWLR 373 at 376; (1962) 8 LGRA 26 at 30). An evaluation of reasonableness involves the identification of evidence that can be objectively assessed to ascertain whether it supports a factual finding of an adverse effect on the amenity of the locality. A fear or concern without rational or justified foundation is not a matter which, by itself, can be considered as an amenity or social impact: *Telstra v Hornsby Shire Council* at [193] and [195].

30. In the Court of Appeal proceedings, (*Warkworth Mining Ltd v Bulga Milbrodale Progress Association Inc* (2014) 200 LGERA 375), the Court endorsed this approach and held at [295]:

Likewise, we consider that community responses to the project were relevant to the public interest. As his Honour pointed out, at [430], the evidence of the community responses was relevant to a consideration of noise impacts, air quality, visual impacts and more generally, the social impacts on the community. All of those factors were aspects of the overall public interest.

4.3 Principles of Ecologically Sustainable Development

31. The principles of ESD to be considered under public interest are set out in section 6(2) of the *Protection of the Environment Administration Act 1991 (POEA Act)*. The chapeau to section 6(2) provides:

...ecologically sustainable development requires the effective integration of social, economic and environmental considerations in decision-making processes.

32. What this requires is a balancing exercise whereby the social, economic and environmental benefits and disbenefits are weighed up to determine whether the Project should proceed.²¹
33. It is Undermined's submission that the environmental impacts of the Project outweigh its purported social and economic benefits. The Project is not in the public interest.
34. Key principles of ESD relevant to Undermined's submission are outlined below.

4.3.1 Intergenerational equity and intragenerational equity

35. The principle of intergenerational equity is set out in section 6(2)(b) of the POEA Act. It provides that:

the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations ...

36. This principle of ESD includes two ethical elements: concern for the present – intragenerational justice or equity; and concern for the future – intergenerational equity. The needs that are to be equitably shared relate to the three components of ESD: economic development, social development and environmental protection. Accordingly, equity is not limited to the use or exploitation of natural resources and in fact extends to environmental protection.
37. In *Taralga Landscape Guardians Inc v Minister for Planning and RES Southern Cross Pty Ltd* (2007) 161 LGERA 1, the Court recognised that the goal of intergenerational equity requires the present generation to 'extend the life of finite resources and the benefits yielded by exploitation and use of the resources to future generations'.²²
38. In *Gloucester Resources Limited v Minister for Planning* (2019) 234 LGERA 257, Preston CJ explained that even after rehabilitation of a mine, the environmental, social and economic burdens will continue after the closure of the site. In the case of the Rocky Hill Coal Project, his Honour stated:

The visual impact of the Project, even after mining rehabilitation, will continue. The natural scenery and landscape will be altered forever, replaced by an artificial topography and landscape. The

²¹ *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [36].

²² *Taralga Landscape Guardians Inc v Minister for Planning and RES Southern Cross Pty Ltd* (2007) 161 LGERA 1, [74].

social impacts on culture and community, especially for the Aboriginal people whose Country has been mined, will persist. A sacred cultural land created by the Ancestors of the Aboriginal people cannot be recreated by mine rehabilitation... the Project will emit greenhouse gases and contribute to climate change, the consequences of which will burden future generations.²³

39. It is Undermined's submission that the benefits declared in the Project are distributed to the present generation, while the 'burdens are distributed to the current as well as future generations'.²⁴

4.3.2 Conservation of biological diversity and ecological integrity

40. Section 6(2)(c) of the POEA Act states that 'conservation of biological diversity and ecological integrity should be a fundamental consideration'.

41. In this regard, the foreword to the Global Biodiversity 3 report (2010), produced by the Secretariat of the Convention on Biological Diversity, states:²⁵

to tackle the root causes of biodiversity loss, we must give it higher priority in all areas of decision-making and in all economic sectors ... conserving biodiversity cannot be an afterthought once other objectives are addressed – it is the foundation on which many of these objectives are built.

42. The importance of the principle of the conservation of biological diversity and ecological integrity is highlighted in the objects of the EP&A Act, which include:²⁶

to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats ...

43. In addition, it is notable that before granting consent for development for the purposes of mining, petroleum production or extractive industry, the IPC must, pursuant to cl 14(1)(b) of the Mining SEPP (emphasis added):

consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following—

²³ *Gloucester Resources Limited v Minister for Planning* (2019) 234 LGERA 257, [415].

²⁴ *Gloucester Resources Limited v Minister for Planning* (2019) 234 LGERA 257, [416].

²⁵ Secretariat of the Convention on Biological Diversity, *Global Biodiversity Outlook 3*, <<http://www.cbd.int/gbo3/>>, 5.

²⁶ EP&A Act, s 1.3(e).

...

(b) that **impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable,**

...

44. It is Undermined's submission that the Project's impacts on climate change, subsidence and groundwater engage the principle of conservation of biological diversity and ecological integrity.

4.3.3 The polluter pays principle

45. Section 6(2)(d) of the POEA Act provides:

improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:

- (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
- (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
- (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

46. In *Bentley v BGP Properties Pty Ltd* (2006) 145 LGERA 234, Preston CJ commented at [157]:

The fourth pillar of ecologically sustainable development is the internalisation of external environmental costs. Ecologically sustainable development requires accounting for the short term and long term, external environmental impacts of development. One way in which of doing so is by adoption of the user pays or polluter pays principle: J Moffet and F Bregha, "The Role of Law Reform in the Promotion of Sustainable Development", (1997) 6 *Journal of Environmental Law and Practice* 1 at 7.

47. This was further qualified in *Director-General, Department of Environment and Climate Change and Water v Venn* [2011] NSWLEC 118, where Preston CJ stated at [328]:

The principle requires the polluter to take responsibility for the external costs to the environment and the community arising from its pollution. This can be done by the polluter cleaning up the pollution and restoring the environment as far as practicable to the condition it was in before being polluted. The polluter ought also to make reparation for any irremediable harm caused by the polluter's

conduct such as death of biota and damage to ecosystem structure and functioning: *Environment Protection Authority v Waste Recycling and Processing Corp* [2006] NSWLEC 419; (2006) 148 LGERA 299 at [230] and see also *Bentley v BGP Properties Pty Ltd* [2006] NSWLEC 34; (2006) 145 LGERA 234 at [70], [157].

48. Therefore, the responsibility to provide for the remediation of any ongoing environmental harm caused by the operation of a development must be borne by the applicant itself.

4.3.4 Precautionary principle

49. In relation to the precautionary principle, section 6(2)(a) of the POEA Act provides:

if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
- (ii) an assessment of the risk-weighted consequences of various options, ...

50. In the seminal case *Telstra Corporation Limited v Hornsby Shire Council* (2006) 67 NSWLR 256 (**Telstra**), Preston CJ provides an explanation of how the precautionary principle is triggered, its two conditions precedent, and the concept of a proportionate response. At [128] his Honour states:

The application of the precautionary principle and the concomitant need to take precautionary measures is triggered by the satisfaction of two conditions precedent or thresholds: a threat of serious or irreversible environmental damage and scientific uncertainty as to the environmental damage. These conditions or thresholds are cumulative. Once both of these conditions or thresholds are satisfied, a precautionary measure may be taken to avert the anticipated threat of environmental damage, but it should be proportionate.

51. As will be detailed later in these submissions, the precautionary principle is a particularly relevant consideration in this case for the following reasons:

- a. There is a real threat of serious or irreversible environmental damage on the World Heritage-listed Thirlmere Lakes, including immediate damage, long-term damage, direct and indirect threats and unpredictable impacts as a consequence of previous mining and the ongoing drawdown that will result from the Project; and

- b. The IPC heard evidence that it is scientifically probable that drawdown is responsible for serious or irreversible impacts of the Project on the World Heritage-listed Thirlmere Lakes but there remains scientific uncertainty as to the scale of current and ongoing damage for which mining is responsible.

5. LIKELY ENVIRONMENTAL IMPACTS

5.1 Climate change

52. Undermined's case on this issue is that approval of the Project at the current time is not in the public interest and is contrary to the principles of ESD, in particular the principles of inter-generational equity, conservation of biological diversity and the polluter pays principle. The effects of carbon in the atmosphere arising from the activities at the site, and the burning of the coal extracted from the development, are inconsistent with a carbon budget and internationally agreed policy intentions to keep global temperature increases to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. The Project's emissions would have a cumulative effect on climate change over the long term.

53. In light of the projected substantial environmental harm, and the critical importance of combatting climate change now within the context of the carbon budget, the rational response would be to refuse consent to the Project. Moreover, it would be unreasonable for the IPC not to refuse consent to the Project on this basis.

5.1.1 Three statutory pathways to refusal of consent

54. There are three statutory pathways under the EP&A Act by which the IPC must have regard to the impacts of the Project on climate change, and which permit the IPC to refuse the development on this ground:

- a. Firstly, s 4.15(1)(a) requires the IPC to take into consideration the provisions of the State Environmental Planning Policy (*Mining, Petroleum Production and Extractive Industries*) 2007 (**Mining SEPP**). Clause 14(2) requires the IPC to "consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions". In this regard, we note:
 - i. Clause 14(2) makes an assessment of the Project's Scope 1, 2 and 3 emissions a mandatory relevant consideration; and
 - ii. Further, in the recent Land and Environment Court decision in *KEPCO Bylong Australia Pty Ltd v Independent Planning Commission (No 2)* [2020] NSWLEC

179,²⁷ Pain J held that the NSW Climate Change Policy Framework (**Framework**) is an applicable policy for the purposes of cl 14(2). Importantly, the Framework states, *inter alia*: “The NSW Government’s objective is to achieve net-zero emissions by 2050”²⁸ and “The NSW Government endorses the Paris Agreement and will take action that is consistent with the level of effort to achieve Australia’s commitments to the Paris Agreement.”²⁹

- b. Secondly, s 4.15(1)(b) requires the IPC to take into consideration the likely impacts of the proposed development, including environmental impacts (which, of course, includes the impacts of climate change).
- c. Thirdly, s 4.15(1)(e) requires the IPC to take into consideration the public interest, which has been held by the Court³⁰ to include the principles of ESD. In turn, the Court has held that the principles of ESD, particularly the precautionary principle and the principle of intergenerational equity, require consideration of climate change impacts, including Scope 3 emissions.³¹

55. Undermined submits that the IPC would, in rationally and reasonably considering the climate science against the text, objects and context of the EP&A Act, refuse consent to the Project.

5.1.2 The meaning and application of the Rocky Hill case

56. On this issue, Undermined submits that the IPC should attach substantial weight to Preston CJ’s decision in *Gloucester Resources Ltd v Minister for Planning* [2019] NSWLEC 7 (**Rocky Hill case**). As Commissioners will be aware, climate change was a significant factor in the refusal of development consent to the proposed Rocky Hill coal mine.

57. Preston CJ stated:³²

The project will be a material source of GHG emissions and contribute to climate change. Approval of the project will not assist in achieving the rapid and deep reductions in GHG emissions that are

²⁷ *KEPCO Bylong Australia Pty Ltd v Independent Planning Commission (No 2)* [2020] NSWLEC 179, [115] per Pain J.

²⁸ Framework, 4.

²⁹ Framework, 5.

³⁰ *Barrington-Gloucester-Stroud Preservation Alliance Inc v Minister for Planning and Infrastructure* (2012) 194 LGERA 113, [170] per Pepper J; Rocky Hill case, [498].

³¹ Rocky Hill case, [498]-[513].

³² Rocky Hill case, [697].

needed now in order to balance emissions by sources with removals by sinks of GHGs in the second half of the century and achieve the generally agreed goal of limiting the increase in global average temperature to well below 2°C above pre-industrial levels.

58. These reasons apply equally to the assessment of the current Project.

59. In particular, Preston CJ set out an approach for the assessment of the environmental impacts of a fossil fuel development in “absolute” or “relative” terms:³³

[553] I consider the better approach is to evaluate the merits of the particular fossil fuel development that is the subject of the development application to be determined. Should this fossil fuel development be approved or refused? Answering this question involves consideration of the GHG emissions of the development and their likely contribution to climate change and its consequences, as well as the other impacts of the development. The consideration can be in absolute terms or relative terms.

[554] In absolute terms, a particular fossil fuel development may itself be a sufficiently large source of GHG emissions that refusal of the development could be seen to make a meaningful contribution to remaining within the carbon budget and achieving the long term temperature goal. In short, refusing larger fossil fuel developments prevents greater increases in GHG emissions than refusing smaller fossil fuel developments.

[555] In relative terms, similar size fossil fuel developments, with similar GHG emissions, may have different environmental, social and economic impacts. Other things being equal, it would be rational to refuse fossil fuel developments with greater environmental, social and economic impacts than fossil fuel developments with lesser environmental, social and economic impacts. To do so not only achieves the goal of not increasing GHG emissions by source, but also achieves the collateral benefit of preventing those greater environmental, social and economic impacts.

60. Undermined submits that the Rocky Hill case is a form of persuasive guidance for the assessment of the environmental impacts of a fossil fuel development, and moreover, that it should be considered highly persuasive and directly applicable to the current matter.³⁴ Indeed, the IPC in its reasons for refusing consent for the KEPCO Bylong project “agree[d] with Preston CJ” in this regard, quoting paragraph [555] of the decision on page 122 of its reasons.³⁵

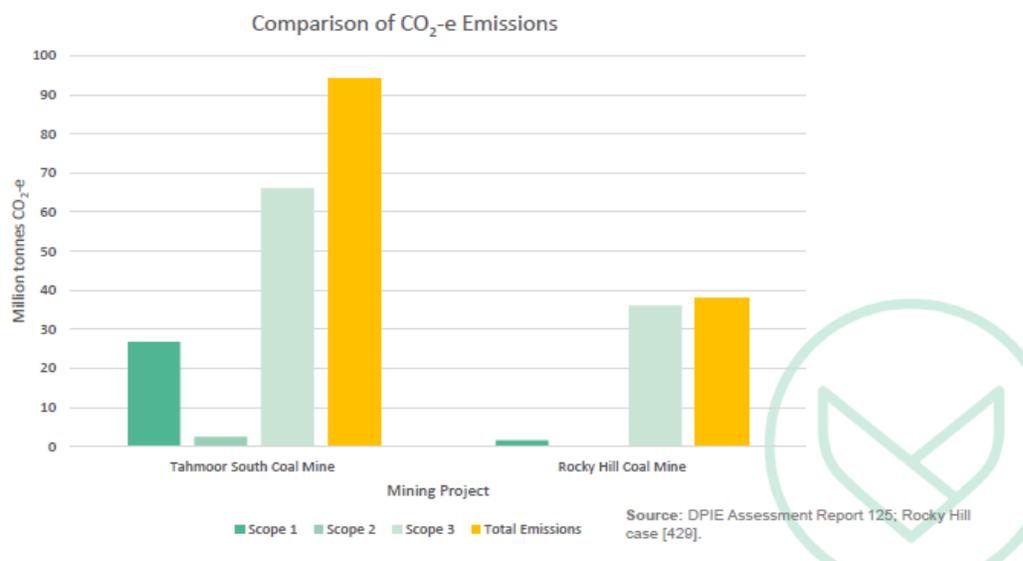
³³ *Gloucester Resources Ltd v Minister for Planning* (2019) 234 LGERA 257, [553]-[555].

³⁴ Linda Pearson, ‘Policy, principles and guidance: Tribunal rule-making’ (2012) 23 Public Law Review 16, pp. 32.

³⁵ IPC Statement of Reasons for the Refusal of the Bylong Coal Project, 122 [692].

61. Undermined submits that the environmental impacts of the Project are sufficiently adverse in **both** absolute and relative terms to warrant refusal of consent.
62. The DPIE assessment report estimates that the Project would generate around 28 million tonnes of CO₂-e Scope 1 and Scope 2 emissions, with Scope 3 emissions modelled to produce around 66 million tonnes emissions over the life of the Project.³⁶ This amounts to approximately 94 million tonnes over the life of the Project.
63. By comparison, as depicted in the below graph, the Rocky Hill coal mine was predicted to produce only 37.8 million tonnes CO₂-e from Scope 1, 2 and 3 emissions in total over the life of the mine.³⁷ This is a significantly smaller amount, and yet the GHG emissions from the Rocky Hill coal mine were considered by the Court to be sufficiently grave to be a further reason for rejection of consent. Further, it is now over two years since the Rocky Hill case was decided. In that time, as discussed below, global GHG emissions have continued to increase and the remaining carbon budgets to meet the Paris Agreement's goals have correspondingly decreased, as has the time period in which rapid and deep emissions reductions are required. For those reasons, Undermined submits that Preston CJ's reasoning in the Rocky Hill case should be considered even more powerful and persuasive today.

Comparison – Tahmoor South vs Rocky Hill



³⁶ DPIE assessment report 2020, xvi.

³⁷ Rocky Hill case, [515].

64. The expected Scope 1 emissions from the Tahmoor South Coal Project are approximately 26.7 million tonnes. Undermined is informed by research conducted by Lock the Gate that the Scope 1 emissions from the Project are the highest of any fossil fuel development considered by the IPC, or its predecessor the Planning Assessment Commission, since the Rocky Hill coal mine. This is a “gassy” mine, as was described on the first day of the IPC public hearing.³⁸ By comparison, the recently refused Dendrobium Mine Extension Project had a projected total 17 – 22 million tonnes of Scope 1 emissions.³⁹

65. The claim in the DPIE assessment report that the GHG emissions over the life of the Project “represent approximately 0.65% of total NSW emissions and 0.2% of total Australian emissions”⁴⁰ is disingenuous in regard to the impacts of the Project’s GHG emissions as, amongst other reasons discussed below, it does not include an account of the Project’s Scope 3 emissions. As explained later in these submissions, Scope 3 emissions must be considered under the EP&A Act and in accordance with the jurisprudence.

66. In Professor Goodman’s expert report, he explained that:⁴¹

Under the EP&A Act, planning decisions are made on the basis of project impacts, and... that includes all GHG emissions, including Scope 3.

67. Moreover, Undermined submits that the evidence of Professor Penny Sackett⁴² demonstrates that DPIE’s characterisation of these figures as (ostensibly negligible) percentage points disguises the true magnitude of the Project’s expected GHG emissions impacts, and the impact of such emissions on the achievement of the NSW Government’s emissions reduction target of 35% from 2005 levels by 2030.⁴³ According to Prof Sackett,⁴⁴ if total Scope 1 and 2 emissions are considered as part of the Project’s average annual emissions, when averaged over a 12 year period, these emissions alone comprise 0.75% of NSW’s average annual emissions. However, if total Scope 3 emissions are taken into account, this figure increases to a very significant 5.5%. In considering any of Scope 1, 2 and/or 3 emissions, approval of the Project would be inconsistent with the annual emissions reduction task that NSW must undertake if it is to meet its stated GHG

³⁸ IPC Public Hearing Day 1 Transcript, 17.

³⁹ IPC Statement of Reasons for the Refusal of the Dendrobium Mine Extension Project (2021), 70.

⁴⁰ DPIE Final assessment report 2020, 125.

⁴¹ Prof James Goodman, Expert Report to IPC, 3.

⁴² IPC Public Hearing Day 3 Transcript, 12-17.

⁴³ The Net Zero Plan Stage 1: 2020-2030, 13.

⁴⁴ Prof Penny Sackett, PowerPoint Slides presented to IPC.

emission targets and will make achieving these targets significantly more difficult, for the reasons presented by Prof Sackett and Prof Goodman.

68. In Professor Sackett's submissions to the IPC public hearing on 17 February 2021, she submitted that:⁴⁵

There needs to be an immediate drop in coal production worldwide – and a very, very strong drop in coal production worldwide – in order to have really any hope of holding global temperatures to 1.5, even 2 degrees.

69. As Professor Will Steffen stated in the Rocky Hill case:⁴⁶

All emissions are important because cumulatively they constitute the global total of greenhouse gas emissions, which are destabilising the global climate system at a rapid rate. Just as many emitters are contributing to the problem, so many emission reduction activities are required to solve the problem.

70. Despite DPIE's attempts to present them as only a small fraction of global GHG emissions, Undermined submits that the IPC must consider that the impacts of the emissions from this Project are unacceptably significant when considered against NSW's broader efforts to reduce emissions to protect its own environment and people, including peoples of future generations.

71. Ultimately, it is the wrong time and wrong place⁴⁷ for the Tahmoor South Coal Project and therefore Undermined submits that it would be irrational and unreasonable for the IPC to approve the Project.

5.1.3 If the IPC were minded to grant consent to the Project, the Project must be carbon neutral

72. Undermined opposes the granting of consent to the Project. If, however, the IPC were minded to grant consent to the Project, Undermined submits that it would be irrational and unreasonable for the IPC to grant consent and not ensure that the Project's total Scope 1, 2 and 3 emissions are required to be offset such that the Project is carbon neutral.

⁴⁵ IPC Public Hearing Day 3 Transcript, 14.

⁴⁶ Rocky Hill case, [450].

⁴⁷ Cf Rocky Hill case, [699].

73. In this regard, clause 14(1) of the Mining SEPP applies to the IPC’s decision-making process before it grants consent to the Project.⁴⁸ It requires the consent authority to “consider whether or not consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure ... that greenhouse gas emissions are minimised to the greatest extent practicable”. Of course, by clause 14(2), downstream emissions are a mandatory relevant consideration.
74. Undermined submits, having regard to the weight of independent scientific evidence before the IPC about the unacceptable impacts of the Project’s GHG emissions, that if the IPC were minded to grant consent to the Project, any consent should **indeed** be issued subject to conditions that ensure that GHG emissions are minimised to the greatest extent practicable. This is consistent with the text, objects and context of the EP&A Act, including the provisions of s 4.15 and the case law.
75. It is clear from cl 14(1) and (2) of the Mining SEPP that the IPC has the power to impose conditions regarding achieving carbon neutrality, including through the use of offsets. Indeed, in *Hunter Environment Lobby Inc v Minister for Planning* [2011] NSWLEC 221, Pain J found that proposed conditions requiring the offset of Scope 1 GHG emissions were lawful, while not deciding as to the lawfulness of conditions regulating Scope 2 or 3 emissions.⁴⁹
76. Further, in the Rocky Hill case, Preston CJ noted that the Rocky Hill mine was “not proposed to be carbon neutral”. In that regard, his Honour said:⁵⁰
- In the climate change context, for example, an applicant for development consent could commit to reducing the GHG emissions of the development by deploying emission reduction technologies, such as carbon capture and storage, or offsetting the GHG emissions of the development by increasing the removal of GHGs in the atmosphere by establishing sinks, such as by reforestation or afforestation of land.
77. More recently, in the IPC’s decision to refuse consent to the KEPCO Bylong coal mine, the Commissioners noted that KEPCO had not proposed any GHG offset measures.⁵¹

⁴⁸ *KEPCO Bylong Australia Pty Ltd v Independent Planning Commission (No 2)* [2020] NSWLEC 179, [147] per Pain J.

⁴⁹ [100]. Those conditions stipulated that the Director-General could waive compliance with the offset requirement if another law imposing financial or regulatory liability was imposed that would cover those emissions: [37].

⁵⁰ Rocky Hill case, [530].

⁵¹ *KEPCO Bylong Australia Pty Ltd v Independent Planning Commission (No 2)* [2020] NSWLEC 179, [80], [85] per Pain J.

78. In relation to the Project, the applicant has not proposed making the Project carbon neutral, including via any form of carbon offsetting. Nor has DPIE recommended any offsetting in its proposed conditions of consent.
79. In the context of the urgent need to reduce GHG emissions to keep within a safe global carbon budget, Undermined submits that a condition that requires a project to be fully carbon neutral (including Scope 3 emissions) would, on a reasonable view, be “minimis[ing] GHG emissions to the greatest extent practicable”. It would be an unreasonable reading of cl 14 of the Mining SEPP for the IPC to conduct a mandated consideration of Scope 3 emissions yet do nothing to attempt to minimise their impacts in granting a development consent for a fossil fuel project. The environmental impacts of the Project’s Scope 3 emissions will almost certainly occur both in NSW and around the globe. Further, according to the DPIE assessment report, a significant proportion of the Scope 3 emissions will be emitted in NSW by BlueScope Steel in Port Kembla.⁵²
80. Therefore, although the Applicant may not exercise complete control of the release of the Project’s Scope 3 emissions (just like its Scope 2 emissions), the emissions (or at least a significant part thereof) will occur in and/or affect the same jurisdiction in which the IPC is required to assess the environmental impacts of the Project. In Undermined’s submission, this means that the release of Scope 3 emissions (and thereby the occurrence of their environmental impacts) are sufficiently proximate to the Project for the IPC to be satisfied that the imposition of a condition to minimise Scope 3 emissions (which in Undermined’s submission should require carbon neutrality) is necessary and reasonable.
81. Importantly, Scope 1, 2 and 3 emissions will cumulatively impact on the environment of NSW. The EP&A Act regulates impacts on the environment of NSW, including all GHG emission impacts by State significant development such as the Project.
82. Furthermore, referring back to the Court’s analysis of the general tests for planning condition validity in *Hunter Environment Lobby v Minister for Planning* [2011], Undermined submits:⁵³
- a. A condition proposing carbon neutrality through the offset of the equivalent of all GHG emissions resulting from the Project would be consistent with the statutory framework set by the EP&A Act and the Mining SEPP;

⁵² DPIE assessment report, 18.

⁵³ *Hunter Environment Lobby v Minister for Planning* [2011] NSWLEC 221, [87].

- b. The condition would reasonably be capable of being regarded as related to the purpose of the approval functions being exercised; and
- c. Importantly, the purpose of the relevant approval functions includes the promotion of the public interest and the principles of ESD.

83. Also, if the *Newbury* test for planning condition validity is applied, Undermined submits:⁵⁴

- a. Such a condition would be consistent with the scope and purpose of the power exercised by the consent authority for the Project;
- b. The condition would “reasonably and fairly” relate to the development; and
- c. The condition would not be so unreasonable that no reasonable planning authority could have imposed it.

84. In the alternative, if the IPC is not minded to impose a condition requiring full carbon neutrality for the Project’s Scope 1, 2 and 3 emissions (although it remains Undermined’s position that not to impose such a condition would be irrational and unreasonable), Undermined submits the following. First, it would be irrational and unreasonable for the IPC not to impose a condition requiring carbon neutrality in so far as any Scope 1, 2, and 3 emissions are emitted in NSW. Second, it would be irrational and unreasonable for the IPC not to impose a condition, requiring offsets or otherwise, in respect of any Scope 3 emissions emitted outside NSW. Such conditions would be validly made under the IPC’s jurisdiction⁵⁵ and could be reasonably and fairly regulated

⁵⁴ *Hunter Environment Lobby v Minister for Planning* [2011] NSWLEC 221, [88].

⁵⁵ In relation to the United Wambo Open Cut Coal Mine Project (SSD 7142) and associated modifications (DA 305-7-2003 MOD 16 and DA 177-8-2004 MOD 3), the IPC determined to impose conditions (**United Wambo Scope 3 Conditions**) requiring the applicant to prepare an Export Management Plan governing that project’s Scope 3 GHG emissions: Statement of Reasons, [297]-[313]. The IPC found that the United Wambo Scope 3 Conditions were “for a planning purpose, as it mitigates an environmental impact caused by the Project and is responsive to the requirements of the Mining SEPP”; “is related to the development”; “is a reasonable measure over which the Applicant has some control”, and met the *Newbury* tests for planning condition validity. However, Undermined notes that the United Wambo Scope 3 Conditions contained critical deficiencies, chiefly that they were inappropriate because they were based on a flawed assumption that export of the project’s coal to Paris Agreement signatory countries would comprise “all practicable measures” to minimise Scope 3 GHG emissions. Moreover, the current Nationally Determined Contributions are insufficient to keep within the global temperature limits prescribed in the Paris Agreement and all UN member states are signatories to the Paris Agreement. See further EDO, Submission regarding Export Management Plan condition, <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2018/11/united-wambo-open-cut-coal-mine-project-ssd-7142/comments-on-proposed-condition-august-2019/hel-submission_redacted.pdf>, 9 August 2019.

More recently, in relation to the Dendrobium Extension Project, the IPC found in its Statement of Reasons at [304] (emphasis added): “... The Commission considers that in order to reduce emissions, the Project could be conditioned in a manner to ensure methane emissions are flared or that **offsets are provided accordingly** which in the Commission’s view could address the objectives of the CCPF”.

by NSW Government authorities, including DPIE and the Environment Protection Authority. In fact, the nature of any State Significant Development proposal requires that the EPA grant an Environment Protection Licence that is substantially consistent with the development approval.⁵⁶

5.1.4 Difficulties with “land carbon” offsets

85. In relation to offsets, Undermined would like to draw the IPC’s attention to a Climate Council report “Land Carbon: No Substitute for Action on Fossil Fuels”⁵⁷ that identified significant concerns with offsetting carbon emissions produced by fossil fuels with what they call ‘land carbon’ offsets, i.e. activities such as reforestation or afforestation of land. Land carbon offsets operate within the ‘active’ carbon cycle – this is carbon that moves between the land, ocean and atmosphere. While land carbon can be increased, it is vulnerable to loss from activities such as bushfires, droughts, insect attacks and heatwaves, all of which can release significant amounts of land carbon into the atmosphere, returning it to the ‘active’ carbon cycle.⁵⁸
86. In contrast, carbon in fossil fuels has been locked away for millions of years. Therefore, burning fossil fuels and releasing carbon dioxide to the atmosphere introduces a store of carbon that is additional to the current ‘active’ carbon cycle. While the land and ocean will absorb some of this extra carbon, almost half of the carbon dioxide emitted from fossil fuel combustion remains in the atmosphere, driving global warming.⁵⁹ Undermined therefore submits that any carbon offsetting conditions must consider the type of offsets that are appropriate for offsetting fossil fuel emissions.
87. In light of this information, GHG emissions, their likely contribution to climate change, and the ability to meaningfully store or offset them become key relevant considerations in any assessment of a fossil fuel development. Any technical difficulties in establishing meaningful offsets must be balanced against an overriding need for offsets to be mandated so that GHG emission levels, and associated impacts on global climate and the environment, can be mitigated.

5.2 The move towards green steel

⁵⁶ EP&A Act, s 4.42(1)(e).

⁵⁷ Steffen, W., Fenwick, J. and Rice, M. (2016) Land carbon: no substitute for action on fossil fuels Climate Council of Australia. Available at: <https://www.climatecouncil.org.au/resources/land-carbon-report/>.

⁵⁸ Land carbon: no substitute for action on fossil fuels, 12-15.

⁵⁹ Land carbon: no substitute for action on fossil fuels, 11.

88. Expert evidence from Mr Tony Wood (Grattan Institute) and Associate Professor John Pye (ANU) highlighted that the transition towards green steel was happening now, recent developments may see this transition accelerate further, and there was a risk that developments such as the Project may become stranded assets.

89. In contrast, while acknowledging he was not an expert in these matters,⁶⁰ during the IPC public hearing Mr Mike Young from DPIE, insisted that there was likely to be a strong market for coking coal into the future to support a transition to green steel ‘that would be many years off’.

90. However, Mr Wood submitted that there is great economic potential for green steel in Australia, and ‘if we’re going to start doing it, now is the time to start thinking about it [because it] is not an instantaneous thing.’⁶¹ Assoc Prof Pye noted ‘steel comes out as the top emitting industry globally’.⁶²

91. Undermined submits that the consideration of alternative technologies, such as green steel, is a necessary element in determining possible pathways to reduce emissions. Fundamental to this consideration is the significant scale of transition which will be required in order to meet the Paris Agreement’s 1.5-degree global warming target, as discussed by Associate Professor John Pye:

The IPCC did a study in 2019 where they highlighted that if we want to limit global warming to 1.5 degrees, it’s not enough to just improve efficiency of processes and our energy production. That is not enough. We need very major transitions in these sectors. And across all of the scenarios the IPCC looked at, the minimum reduction in coal used required to meet 1.5 degrees of global warming was 59% by 2030. So there’s massive pressure coming from the science to reduce emissions...⁶³

92. Mr Wood explained that Australia holds a competitive advantage, and provided economic analysis to support the proposition that green steel should be pursued now:

It could replace metallurgical coal as a source of income for Australia, it could replace metallurgical coal as a source of emissions for the environment, and it could also replace coal as a source of jobs.⁶⁴

⁶⁰ IPC Public Hearing Day 3 Transcript, 61.

⁶¹ IPC Public Hearing Day 1 Transcript, 80.

⁶² IPC Public Hearing Day 1 Transcript, 82.

⁶³ IPC Public Hearing Day 2 Transcript, 82.

⁶⁴ IPC Public Hearing Day 2 Transcript, 79.

93. In response to a question from IPC Commissioner Prof Fell on the likely timing of the transition, specifically whether it was likely to happen during the life of the Project, Assoc Prof Pye expressed his opinion that:

Yes. Well, I believe it could be. So this graph on the right shows 2030 being a period when it's becoming competitive, and this is in the absence of any CO₂ price. So if a CO₂ price comes into play – and this looks increasingly likely as a result of the carbon border tariffs that Europe is putting in place – in order to support and accelerate their own green steel efforts, it looks that there will be some pressure in international trade in steel to fall in line and also decarbonise. So I think it could be relevant.⁶⁵

94. On this same topic, Mr Wood said:

... in our view, that the economics for producing steel from hydrogen and renewable hydrogen are looking at least worth pursuing very vigorously from an Australian perspective. And more recently than this report, only in the last few weeks, you may have seen media coverage of the announcements that Twigg Forrest has made in relation to putting serious amounts of money into developing a green steel manufacturing facility in Western Australia. So the underlying economics would seem to be in favour of moving towards green steel as the world starts to look for, prepare to pay for and demand low-emission steel. And we're already seeing some aspects to that in some sectors in some parts of the world.⁶⁶

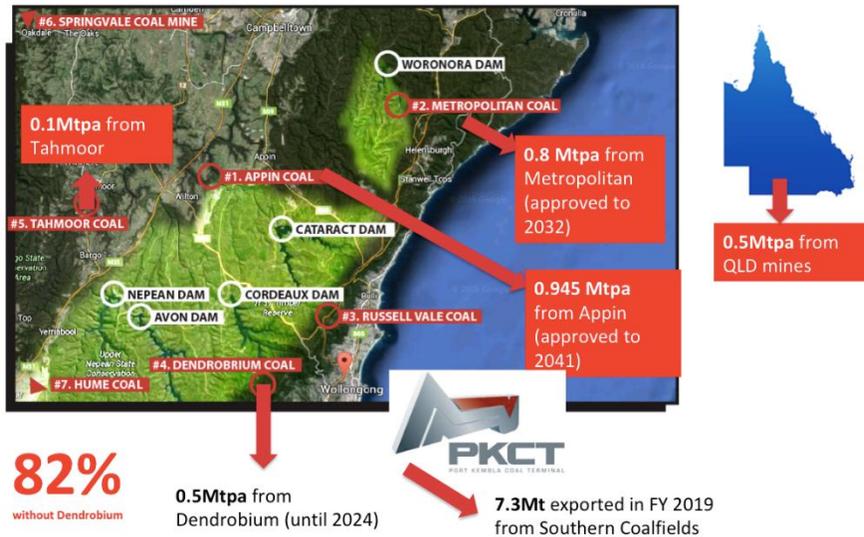
95. In light of the transition to green steel, and in the face of the urgent need to address climate change as submitted by Profs Goodman and Sackett, Undermined submits that it is appropriate for the IPC to consider whether there is a justifiable need for the Project in light of this green steel transition and the urgent need to stay within the global carbon budget.

96. Undermined refers the IPC to information presented by Lock the Gate to the IPC in relation to the Dendrobium Extension Project (SSD 8194) and reproduced below, that shows that in FY2019 Tahmoor Coal provided only 0.1Mtpa of coal to the BlueScope steel works at Port Kembla. Importantly, this information shows that there are a number of already approved mines that provide more coal to these steelworks and would likely be able to cover estimated supply from Project (to the steelworks) should it be refused.

⁶⁵ IPC Public Hearing Day 1 Transcript, 82.

⁶⁶ IPC Public Hearing Day 1 Transcript, 78.

In FY2019, **82%** of the 2.9Mtpa of coal Bluescope required was sourced from mines other than Dendrobium ...



Taken from Lock the Gate submission to Dendrobium Extension Project

97. Undermined submits that the quickening transition to green steel, the risk that the Project may become a stranded asset, and the uncertainty concerning the need for the Project's product coal to supply the BlueScope steel works,⁶⁷ cast doubt on the economic need for the Project. The uncertain economic benefits of the Project must be weighed together with the Project's significant adverse environmental impacts, including on climate, subsidence and groundwater. Undermined submits that the appropriate weighing of the Project's impacts would lead the IPC to refuse consent to the Project.

5.3 Subsidence and groundwater Impacts

98. Undermined submits that the Project will cause unacceptable subsidence and groundwater impacts on a number of tributaries to the Bargo and Nepean Rivers and there is a risk that the Project will cause serious or irreversible harm to Thirlmere Lakes, part of the Greater Blue Mountains World Heritage Area. Such impacts engage the precautionary principle, as well as the principles of intergenerational equity and conservation of biological diversity and ecological integrity.

⁶⁷ The DPIE assessment report is unclear as to the quantity or proportion of Project product coal that will be used by the BlueScope steel works at Port Kembla: see DPIE assessment report, [46]-[48].

99. The key issues concerning the precautionary principle, and the application of the precautionary principle to the Project's groundwater and subsidence impacts, are detailed below.

5.3.1 The precautionary principle

100. In the seminal case *Telstra Corporation Limited v Hornsby Shire Council* (2006) 67 NSWLR 256; [2006] NSWLEC 133 (***Telstra***), Preston CJ provides an explanation of how the precautionary principle is triggered, its two conditions precedent, and the concept of a proportionate response. At [128] his Honour states (emphasis added):

The application of the precautionary principle and the concomitant need to take precautionary measures is triggered by the satisfaction of two conditions precedent or thresholds: a **threat of serious or irreversible environmental damage and scientific uncertainty as to the environmental damage. These conditions or thresholds are cumulative.** Once both of these conditions or thresholds are satisfied, **a precautionary measure may be taken to avert the anticipated threat of environmental damage, but it should be proportionate.**

5.3.1.1 A threat of serious or irreversible environmental damage

101. In relation to the first condition, Preston CJ states in *Telstra* at [129]:

First, it is not necessary that serious or irreversible environmental damage has actually occurred — it is the threat of such damage that is required. Secondly, the environmental damage threatened must attain the threshold of being serious or irreversible.

102. At [130] his Honour characterises the threats that would satisfy the first condition to include:

direct and indirect threats, secondary and long-term threats and the incremental or cumulative impacts of multiple or repeated actions or decisions. Where threats may interact or be interrelated (for example where action against one threat may exacerbate another threat) they should not be addressed in isolation.

103. At [131]:

Assessing the seriousness or irreversibility of environmental damage involves consideration of many factors...The factors might include:

- (a) the spatial scale of the threat (eg local, regional, statewide, national, international);
- (b) the magnitude of possible impacts, on both natural and human systems;

- (c) the perceived value of the threatened environment;
- (d) the temporal scale of possible impacts, in terms of both the timing and the longevity (or persistence) of the impacts;
- (e) the complexity and connectivity of the possible impacts;
- (f) the manageability of possible impacts, having regard to the availability of means and the acceptability of means;
- (g) the level of public concern, and the rationality of and scientific or other evidentiary basis for the public concern; and
- (h) the reversibility of the possible impacts and, if reversible, the time frame for reversing the impacts, and the difficulty and expense of reversing the impacts.

104. These factors are not exhaustive, and other relevant matters may be taken into consideration. Importantly, his Honour highlights at [132]-[134]:

[132] The assessment of whether the threats are serious or irreversible will be enhanced by broadening the range of professional expertise consulted and seeking and taking into account the views of relevant stakeholders and rightholders. The former is important because of the inter-disciplinary nature of the questions involved. The latter is important because different judgments, values and cultural perceptions of risk, threat and required action play a role in the assessment process...

[133] The assessment involves ascertaining whether scientifically reasonable (that is, based on scientifically plausible reasoning) scenarios or models of possible harm that may result have been formulated...

[134] The threat of environmental damage must be adequately sustained by scientific evidence. As was held in *Monsanto Agricoltura Italia v Presidenza del Consiglio dei Ministri*, European Court of Justice, Case C-236/0 (13 March 2003) at [138]:

“not every claim or scientifically unfounded presumption of potential risk to human health or the environment can justify the adoption of national protective measures. Rather, the risk must be adequately substantiated by scientific evidence.”

105. NSW decisions⁶⁸ have accepted that the level of ‘threat’ includes the characterisation made in *Conservation Council of SA Inc v Development Assessment Commission and Tuna Boat Owners Assn (No 2)* [1999] SAERDC 86, namely that ‘threat’ can be taken to mean the ‘likelihood’ or ‘probability’ of serious or irreversible damage to the environment as a result of the

⁶⁸ *BT Goldsmith v Blacktown City Council* [2005] NSWLEC 210[71]; *Telstra* [152]; *Bentley v BGP Properties* [2006] NSWLEC 34 per Preston CJ [68]; *Gray v Minister for Planning* (2006) 152 LGERA 258 per Pain J [116]; *F&D Bonaccorso v City of Canada Bay Council (No 2)* (2007) 158 LGERA 250 per Biscoe J [55].

particular development application. The SA Environment, Resources and Development Court provided at [24] (emphasis added):

Because of the inherent uncertainty in a scientific opinion, an appellant is unlikely to be able to show that a particular development would be likely to result in serious or irreversible damage to the environment. **In reasoning thus, we have taken "threat" to mean "likelihood" or "probability"**.

106. In *Newcastle & Hunter Valley Speleological Society Inc v Upper Hunter Shire Council and Stoneco Pty Limited* [2010] NSWLEC 48, Preston CJ held that scientific likelihood was a higher threshold than a 'mere possibility' at [177] (emphasis added):

In the present matter, although there is an absence of site-specific information on biota in the limestone, the presence of biota in caves and groundwater in the near vicinity of the site and the increasing number of studies elsewhere that establish the presence of biota in limestone, make it scientifically likely that some form of biota will be found within the limestone on the site. **Without being able to predict the particular species which would be present, it is beyond a mere possibility that biota will be present. This scientific likelihood is sufficient to engage the precautionary principle.**

5.3.1.2 Scientific uncertainty as to the environmental damage

107. In relation to the second condition, scientific uncertainty as to the environmental damage, requires that there is a lack of full scientific uncertainty as to the 'nature and scope of the threat of environmental damage'.⁶⁹ Similarly to the first condition, Preston CJ stipulates that the degree of scientific uncertainty requires the analysis of many factors and provides a non-exhaustive list of factors that might be considered at [141], including:

- (a) the sufficiency of the evidence that there might be serious or irreversible environmental harm caused by the development plan, programme or project;
- (b) the level of uncertainty, including the kind of uncertainty (such as technical, methodological or epistemological uncertainty); and
- (c) the potential to reduce uncertainty having regard to what is possible in principle, economically and within a reasonable time frame.

108. Preston CJ states that the notion of 'full' scientific uncertainty is somewhat of an unattainable goal (at [143]); rather it should be at least 'considerable' or 'substantial' (at [146]-[147]). His Honour discusses the inverse proportionality between the degree of scientific uncertainty and the degree of potential environmental damage at [146] (emphasis added):

⁶⁹ *Telstra*, [140].

Cordonier Segger and Khalfan suggest that the magnitude of environmental damage is usually inversely proportionate to the likelihood of risk in order for precaution to be triggered. **That is to say, where the relevant degree or magnitude of potential environmental damage is greater, the degree of certainty about the threat is lower. They suggest that for a formulation of the precautionary principle which uses the threshold of “serious or irreversible” environmental damage, the correlative degree of certainty about the threat is “highly uncertain of threat”.** This would contrast with a formulation of the precautionary principle which sets a lower degree of potential harm such as “potential adverse effects”, where the correlative degree of certainty about the threat would be higher, namely “highly certain of threat”: M-C Cordonier Segger and A Khalfan, *Sustainable Development Law: Principles, Practices and Prospects*, Oxford University Press, 2004 at pp 145–146.

109. At [148], Preston CJ usefully cites a threshold test of ‘reasonable scientific plausibility’ as postulated by de Sadeleer, which follows (emphasis added):

“That condition would be fulfilled when empirical scientific data (as opposed to simple hypothesis, speculation, or intuition) make it reasonable to envisage a scenario, even if it does not enjoy unanimous scientific support.

When is there ‘reasonable scientific plausibility’? When risk begins to represent a minimum degree of certainty, supported by repeated experience. But a purely theoretical risk may also satisfy this condition, as soon as it becomes scientifically credible: that is, it arises from a hypothesis formulated with methodological rigour and wins the support of part of the scientific community, albeit a minority.

The principle may consequently apply to all post-industrial risks for which a cause-and-effect relationship is not clearly established but where there is a ‘reasonable scientific plausibility’ that this relationship exists. **This would be particularly appropriate for delayed pollution, which does not become apparent for some time and for which full scientific proof is difficult to assemble”:** N de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules*, Oxford University Press, 2005 at p 160.

110. In *Newcastle & Hunter Valley Speleological Society Inc v Upper Hunter Shire Council and Stoneco Pty Limited* [2010] NSWLEC 48, Preston CJ states that the threat of environmental damage was ‘scientifically likely’ at [178] (emphasis added):

If there is biota present then, at least within the extraction area, the biota will be harmed by quarrying. Such harm would constitute serious and irreversible environmental damage. **There is uncertainty as to the threat of environmental damage flowing from the uncertainty as to the presence of voids and fissures, with available water, to support biota. However, the threat of environmental**

damage is scientifically likely; there is reasonable scientific plausibility that there are voids and fissures, with available water, to support biota, which would be damaged by quarrying ...

111. Once it is determined that the two conditions precedent are satisfied, the precautionary principle is activated, and the evidentiary burden of proof shifts from the objector to the applicant.⁷⁰ The activation of the precautionary principle requires the decision-maker to: 'assume that the threat of serious or irreversible environmental damage is no longer uncertain but is a reality'. Moreover, the 'burden of showing that this threat does not in fact exist or is negligible effectively reverts to the proponent of the economic or other development plan, programme or project'.⁷¹

112. Preston CJ states at [161] (emphasis added):

The type and level of precautionary measures that will be appropriate will depend on the combined effect of the degree of seriousness and irreversibility of the threat and the degree of uncertainty. This involves assessment of risk in its usual formulation, namely the probability of the event occurring and the seriousness of the consequences should it occur. **The more significant and the more uncertain the threat, the greater the degree of precaution required ...**

113. Moreover, Bates states that 'if precautionary measures cannot acceptably manage the threat of serious or irreversible environmental damage, the appropriate determination **may in fact be to prohibit the proposed development or action**' (emphasis added),⁷² or to '**prohibit specified actions pending further consultation or reference to other expert advice**' (emphasis added).⁷³ By way of example:

- a. In *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, Preston CJ found that the 'proposed precautionary measures in relation to extension of a coal mine, including compensatory biodiversity offsets, were unlikely to prevent serious and irreversible harm to an endangered ecological community'.⁷⁴
- b. In *Leatch v Director-General, National Parks and Wildlife Service* (1993) 81 LGERA 270, Stein J applied the precautionary principle to 'refuse a licence to take or kill an

⁷⁰ *Telstra*, [150].

⁷¹ *Telstra*, [150].

⁷² Gerry Bates, *Environmental Law in Australia* (2019), 10th ed, p. 217, citing *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* [2013] NSWLEC 48.

⁷³ Gerry Bates, *Environmental Law in Australia* (2019), 10th ed, p. 229, citing *Seafish Tasmania Pelagic Pty Ltd v Burke, Minister for Sustainability, Environment, Water, Population and Communities (No 2)* [2014] FCA 117.

⁷⁴ Gerry Bates, *Environmental Law in Australia* (2019), 10th ed, p. 217.

endangered frog in the context of a development proposal for a link road' because the evidence 'left in doubt key questions as to the population, habitat and behavioural characteristics of the giant burrowing frog'.⁷⁵

5.3.2 The application of the precautionary principle to the Project's subsidence and groundwater impacts

114. In respect of the Project, the precautionary principle is activated in relation to subsidence and groundwater impacts because:

- a. There is a real threat of serious or irreversible environmental damage to the World Heritage-listed Thirlmere Lakes (including likely or probably direct and indirect threats, secondary and long-term threats and the incremental or cumulative impacts of multiple or repeated actions or decisions) as a consequence of previous mining and the ongoing drawdown that will result from the Project; and
- b. It is scientifically probable that drawdown is responsible for serious or irreversible impacts of the Project on the World Heritage-listed Thirlmere Lakes but there remains scientific uncertainty as to the scale of current and ongoing damage for which mining is responsible.

115. In his presentation to the IPC, Dr Pells outlined the history of longwall mining in the vicinity of Thirlmere Lakes, dating from 1975. In his written submission to the IPC, Dr Pells identified that the key points in relation to the history are that (emphasis added):⁷⁶

1. Major inflow of groundwater into the mine workings commenced 46 years ago and increased to between 3 and 6 million litres per day when the longwalls closest to the lakes were mined.
2. The inflows into the collapsed longwalls 14 to 21 have continued from 2003 until today, have been pumped from the mine into the Bargo River and **will continue for a long as the Tahmoor South project continues to operate.**

116. Dr Pells' research over the past two decades has overturned some long-term assumptions about the operation of the local groundwater system. During the public hearing, he explained that the historical argument is that 'mining may depressurise the groundwater system below the Bald Hill Claystone but it acts, if you like, [as] a plastic sheet ...'. However, 'the Bald

⁷⁵ Gerry Bates, *Environmental Law in Australia* (2019), 10th ed, p. 220.

⁷⁶ Dr Philip Pells, Expert Report (23 February 2021).

Hill claystone is not this magic solution to mining issues’ and ‘there’s a greater risk of connection [between] water and the lakes and what happens underneath the Bald Hill claystone.’⁷⁷

117. Dr Pells explained:⁷⁸

... in about 2008 some residents in the Thirlmere area became concerned by what they considered to be anomalously low water levels in the lakes (the Anomaly). Matters were confused by the fact that this was during the Millennium drought – but by 2010 it did appear that the lake levels, were surprisingly low, to the point that Nerrigorang had been empty for almost 5 years, and the “boating lake” (Werri Berri) and “swimming lake” (Couridjah) were, in effect empty by late 2010.

In this regard it is important to note that analyses by the Mining Company have modelled the likely increases in downward seepage from the lakes, as summarised in Table 1.⁷⁹

TABLE 1
Computations by Proponent

Water Depth	INCREASE IN LEAKAGE DUE TO TAHMOOR NORTH AND SOUTH ABOVE NATURAL LEAKAGE		
	Werri Berri	Couridjah	Nerrigorang
m			
2	200%	525%	157%
4	32%	380%	27%

118. This ‘leakage’ has the potential to impact the surface water levels in Thirlmere Lakes which has consequent impacts on the environment of the Greater Blue Mountains World Heritage Area.

119. Dr Pells presented a statement by the NSW Government regarding the significance of the World Heritage Thirlmere Lakes:⁸⁰

Within Thirlmere Lakes National Park are five unpolluted fresh water lakes approximately 15 million years old. Over time, lakes and wetlands normally dry out through the buildup of sediments.

⁷⁷ IPC Public Hearing Day 3 Transcript, 5-6.

⁷⁸ Dr Philip Pells, Expert Report (23 February 2021), 5.

⁷⁹ Dr Philip Pells, Expert Report (23 February 2021), 7.

⁸⁰ Dr Philip Pells, Expert Report (23 February 2021), 2.

However, at Thirlmere Lakes the combined size and shape of the lakes' catchment area has slowed this aging process and the stability of the landscape has enabled many aquatic organisms to evolve in isolation. Consequently, this is an outdoor laboratory of great scientific importance.

120. Undermined, in its written submission to the IPC, enclosed a report from Samira Schädler and Professor Richard Kingsford titled "Long-term changes to water levels in Thirlmere Lakes – drivers and consequences". This report summarises the impacts of groundwater drawdown and associated surface water impacts as follows:⁸¹

The implications are significant for the ecological character of the Thirlmere Lakes. There are many affected obligate aquatic species or species reliant on wet habitats, including five species of waterbirds (Australasian bittern *Botaurus poiciloptilus*, Australian painted snipe *Rostratula australis*, great egret *Ardea alba*, cattle egret *Ardea ibis*, and Latham's or Japanese Snipe *Gallinago hardwickii*) one fish species (Macquarie perch *Macquaria australasica*), two frog species (giant burrowing frog *Heleioporus australiacus*, Littlejohn's tree frog *Litoria littlejohni*) and two plant species (smooth bush pea *Pultenaea glabra*, Kangaloon sun orchid *Thelymitra kangaloon*) that are listed as threatened. There are serious implications for governments and their responsibilities for managing the values of Thirlmere Lakes National Park along with the Blue Mountains World Heritage Area of which it is a part. These major changes in flooding regimes to Thirlmere Lakes will continue to degrade the Thirlmere Lakes National Park and its ecological, cultural and recreational values. Most importantly, identifying the relative importance longwall mining and groundwater pumping on this deterioration should be a priority, requiring detailed analyses of changes to groundwater pumping volumes and identifying flow paths for water supplies to Thirlmere Lakes.

121. It is in this context that UNESCO's World Heritage Committee called for Australia to submit to the World Heritage Centre, by 1 December 2020, an "updated report on the state of conservation" of the Greater Blue Mountains Area for examination by the World Heritage Committee at its 45th session in 2021. The World Heritage Committee noted with concern:

...that several mining projects exist in the vicinity of or adjacent to the property, and that some mining activities have resulted in impacts on the property, as evidenced by the incident at the Clarence Colliery, and also requests the State Party to undertake an assessment of potential cumulative impacts of all existing and planned mining projects in the vicinity of the property through a Strategic Environmental Assessment (SEA) or a similar mechanism⁸²

⁸¹ Samira Schädler and Richard T. Kingsford, *Long-term changes to water levels in Thirlmere Lakes – Drivers and Consequences* (May 2016), 5.

⁸² Decision 43 COM 7B.2 Greater Blue Mountains Area (Australia) (N 917).

122. In response to the decision of the World Heritage Committee, the Australian Government commissioned CSIRO to undertake a “cumulative impact assessment of risks from existing and planned mining in the vicinity of the GBMA to its Outstanding Universal Value”. The Department of Agriculture, Water and Environment advise that CSIRO’s report is likely to be completed before mid-year (see update from DAWE at footnote below).⁸³ CSIRO’s cumulative impact assessment will include an analysis of the potential impact of Tahmoor South on the Outstanding Universal Value of the GBMA. In Undermined’s submission, and having regard to the precautionary principle, the IPC should have regard to CSIRO’s report before it makes a determination on the Project.

123. Dr Pells has identified that there is scientific uncertainty as to the extent that longwall mining contributes to the environmental damage that has been seen at Thirlmere Lakes. In particular, Dr Pells submitted:

...the amount of water lost from the lakes by seepage into the earth... is very difficult to determine under any circumstances...⁸⁴

With only 6 years of accurate lake levels, in a very variable climate, it is possibly impossible to determine [the amount of water lost from the lakes by seepage].⁸⁵

124. Nonetheless, Dr Pells is of the view that his analysis suggests that there is a ‘reasonable probability’⁸⁶ that the water loss in Thirlmere Lakes, and associated environmental impacts, has been ‘significantly exacerbated’ as a consequence of longwall mining and, in light of the need to continue de-watering older longwalls for the life of the mine, those impacts will continue for the life of the Project.

125. As noted above, the precautionary principle is engaged when there is “a threat of serious or irreversible environmental damage and scientific uncertainty as to the environmental damage”.⁸⁷ In light of Dr Pells’ expert evidence, both of these conditions are met in the case of the groundwater and subsidence impacts of the Project.

⁸³ Regarding CSIRO’s assessment of cumulative impacts from mining on the Greater Blue Mountains Area, Dept AWE advised on 1 Feb 2021: “the assessment is being undertaken by the Australian Government following a decision of the World Heritage Committee in 2019. The Department of Agriculture, Water and Environment is working closely with the CSIRO to ensure the assessment is technically and scientifically robust. The final report will be provided to the World Heritage Centre later this year, when it will also be made available publicly. At this stage we don’t have a date but it will be likely before mid-year.”

⁸⁴ Dr Philip Pells, Expert Report (23 February 2021), 7.

⁸⁵ Dr Philip Pells, Expert Report (23 February 2021), 7.

⁸⁶ Dr Philip Pells, Expert Report (23 February 2021), 8.

⁸⁷ Telstra, [128].

¹²⁶. However, given that the drawdown must continue as long as mining is undertaken, adaptive management is not an appropriate response in relation to the groundwater and subsidence impacts of the Project. Accordingly, the most appropriate precautionary measure “to avert the anticipated threat of environmental damage”⁸⁸ refusal of consent to the Project.

⁸⁸ Telstra, [128].

6. CONCLUSION

127. In respect of State significant development, section 4.38 of the EP&A Act provides relevantly:

4.38 Consent for State significant development (cf previous s 89E)

(1) The consent authority is to determine a development application in respect of State significant development by:

- (a) granting consent to the application with such modifications of the proposed development or on such conditions as the consent authority may determine, or
- (b) refusing consent to the application.

128. The exercise of the power under section 4.38 of the EP&A Act to grant or refuse consent to the Project involves consideration, weighting and balancing of the environmental, social and economic impacts of the Project. It is Undermined's submission that the proper consideration, weighting and balancing of the environmental, social and economic impacts of the Project lead to a conclusion that the Project should be rejected.

129. The exercise of a similar power under the former Part 3A of the EP&A Act was described by Preston CJ in *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347 at [31] as involving a "polycentric" problem:

The range of interests affected, the complexity of the issues and the interdependence of the issues, means that decision-making involves a polycentric problem. A polycentric problem involves a complex network of relationships, with interacting points of influence. Each decision made communicates itself to other centres of decision, changing the conditions, so that a new basis must be found for the next decision: Jowell J, "The Legal Control of Administrative Discretion" [1973] Public Law 178 at p 213.

130. Issues concerning a polycentric problem are interlinked:⁸⁹

A decision about one issue raised by the carrying out of the project is linked by interacting points of influence to decisions about other issues, necessitating readjustment of the project (Jowell at p 214).

⁸⁹ *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [33].

131. Further, the criteria to be considered in determining a polycentric problem are numerous, cannot be objectively weighted, and are interdependent:⁹⁰

The decision-maker must not only determine what are the relevant matters to be considered in deciding whether or not to approve the carrying out of the project, but also subjectively determine the weight to be given to each matter. Eisenberg suggests that where this is the case, an optimal solution can normally be arrived at by vesting a single decision-maker with managerial authority; that is, authority not only to select and apply relevant criteria but also to determine how much weight each criterion is to receive, and to change those weights as new objectives and criteria may require (Eisenberg at p 425).

132. Preston CJ outlines the approach to determining a polycentric problem as follows:⁹¹

... first, identification of the relevant matters needing to be considered; secondly, fact finding for each relevant matter; thirdly, determining how much weight each relevant matter is to receive, and fourthly, balancing the weighted matters to arrive at a managerial decision.

133. The fourth process, the balancing of the weighted matters:⁹²

is a qualitative and not quantitative exercise. The ultimate decision involves an intuitive synthesis of the various matters. Forms of economic analysis, such as cost benefit analysis, which endeavour to balance different factors by use of a common, quantitative unit, such as money, assist but are not a substitute for the intuitive synthesis required of the decision-maker.

134. The Court of Appeal dismissed a challenge to this approach (*Warkworth Mining Ltd v Bulga Milbrodale Progress Association Inc* (2014) 200 LGERA 375 at [147]-[174]), observing at [171] that the task for the Court is:

to balance the public interest in approving or disapproving the project, having regard to the competing economic and other benefits and the potential negative impacts the Project would have if approved.

135. Similar to the decision to approve or refuse the development application in *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth*

⁹⁰ *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [35].

⁹¹ *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [36].

⁹² *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [41].

Mining Ltd (2013) 194 LGERA 347, the decision to approve or refuse consent to the Project is a polycentric problem.⁹³

136. Importantly, the applicant and DPIE have not been able to demonstrate that any need outweighs the significant environmental impacts that are likely to be caused.
137. Moreover, the proper balancing of the environmental, social and economic factors, considering the principles of ESD and in particular the principles of intragenerational and intergenerational equity, the precautionary principle, the principle of conservation of biological diversity and the polluter pays principle, results in:
- a. Adverse climate change impacts;
 - b. Adverse water impacts with associated impacts on biological diversity and world heritage areas; and
 - c. Adverse subsidence impacts.
138. While it is purported that the Project will have economic benefits, the evidence has demonstrated that any such benefits do not outweigh the negative impacts identified above.
139. In the final analysis, the Project is not in the public interest and contrary to the principles of ESD. The Project must be refused consent.

⁹³ *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [33].