Environmental Defenders Office

BEFORE THE INDEPENDENT PLANNING COMMISSION

PUBLIC HEARING 18, 21 MARCH 2022

GLENDELL CONTINUED OPERATIONS – SSD 9349 AND SSD 5850 MOD 4

WRITTEN SUBMISSIONS FOR SCOTT FRANKS AND ROBERT LESTER

Contents

1. EXECUTIVE SUMMARY

1. EDO acts for Mr Scott Franks and Mr Robert Lester. Our clients are Wonnarua men and representatives of the Plains Clan of the Wonnarua People (**PCWP**), on whose traditional lands the proposed Glendell Continued Operations Project (SSD 9349 and SSD 5850 Mod 4) (**Project**) is situated.

2. Our clients **object** in the strongest terms to the Project, because the impacts it will have on the cultural heritage of the Wonnarua people are catastrophic.

3. The Project would have unacceptable social and environmental impacts, and the purported economic benefits of the Project are highly speculative. Approval of the Project would be contrary to the public interest, and as such the Independent Planning Commission (**Commission**) must refuse to grant development consent to the Project.

4. The Project area sits within the former Ravensworth Estate (**Estate**), and contains the historic Ravensworth Homestead (**Homestead**). The Estate and the Homestead together are of such exceptional heritage significance that the Heritage Council considers that the site is of State heritage significance for its aesthetic, historic, scientific, and social values. The Heritage Council considers that the Project (including the proposed relocation of the Homestead) "will result in the irreversible loss of its state significance in the form of its significantly intact fabric, archaeology, Aboriginal and colonial landscape setting, and views."[1]

5. Heritage NSW, part of the Department of Premier and Cabinet, also considers the Estate and Homestead together to be of State heritage significance. In a briefing to the Special Minister of State, Minister for the Public Service and Employee Relations, Aboriginal Affairs, and the Arts, Heritage NSW noted that "Ravensworth is a rare and exceptionally intact colonial homestead complex and cultural landscape of state heritage significance that tells the story of shared Aboriginal

[1] 9 December 2020 letter Heritage Council to DPE, *Response to Submissions of application for Glendell Continued Operations Project (SSD-9349) (Singleton Shire)*, available at <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9349%2120201210T225225.303%20GMT> (**Heritage Council RTS advice**).

and European heritage in the Hunter Valley, including early conflict, the development of pastoralism and the convict labour system. It meets all seven criteria for assessing state level significance."[2]

6. There has been a disproportionate focus by the Department of Planning and Environment (**DPE**) and the Project's proponent in documentation and discussion on the Project about the physical structure of the Homestead and on one specific massacre event (formerly described as the "Ravensworth Massacre") at the expense of adequately considering and assessing the heritage values of the Estate and Homestead together as, and as part of, a complex cultural landscape with substantial Aboriginal cultural heritage and other heritage values.

7. In this manner, the actual heritage significance of the place (being the Estate, including the Homestead, as part of a cultural landscape) has been obscured.

8. Our clients have briefed the following experts (under rules pertaining to independent expert witnesses in the Uniform Civil Procedure Rules 2005 (NSW) and under the Expert Witness Code of Conduct in Schedule 7) to provide independent expert reports to the Commission:

    a. Associate Professor Neale Draper – Aboriginal cultural heritage;
    b. Professor Penny D Sackett – climate change;
    c. Dr Steven Pells – water resources;
    d. Dr Alistair Davey – economics;
    e. Dr Liam Phelan – workforce futures.

9. It is clear, when examining all the evidence before the Commission, that the environmental, social and economic impacts of the Project are, properly assessed, negative. These impacts include:

    a. **Impacts on heritage:** The impact of the Project on the cultural heritage of the Wonnarua people will be catastrophic. The Project area has extremely high heritage values in relation to both Aboriginal and non-Aboriginal heritage. The NSW Heritage Council considers the area of such significance that it recommended it be listed as a place of State

[2] Heritage NSW, 3 March 2020, *Brief to Special Minister of State, Minister for the Public Service and Employee Relations, Aboriginal Affairs, and the Arts*, DOC19/588696, document attached to 18 March 2022 submission of David Shoebridge to the Commission on the Project, available at <https://drive.google.com/file/d/1wBTCdMI7BIbeglucMtzZytFVGE_LwMhk/view> (**Heritage NSW Brief**); see also Heritage NSW, 22 February 2021, *Brief to Chair, Heritage Council* (Document NC #1 to 8 March 2022 submission of Lock the Gate to the Commission on the Project).

Heritage significance. Associate Professor Draper's expert opinion is that the Project area (comprising the Estate and Homestead) has high cultural/social, historical, scientific, and aesthetic significance, that the PCWP Wonnarua families have spiritual, traditional, historical and contemporary cultural and social associations and attachments to Ravensworth and the immediate surrounding area. It is located adjacent to important cultural route along Glennies Creek and its tributaries which was part of traditional male initiation (Bora) cycle of the Wonnarua People. The establishment of the Estate resulted in the inability to utilize this section of the route for traditional cultural practices and traditional resource access by the Wonnarua People. It is a central place in the colonial invasion and associated conflict and violence that resulted from the establishment of this and other estates in the 1820s, that lead to the deaths of many Wonnarua people, as well as some colonists. Numerous conflict raids and reprisals, with accompanying fatalities in most cases, took place on the Ravensworth estate. The DPE assessment report and Proponent's project documents focus on the physical structure of the Homestead, and fail to appreciate that the significance of the site does not reside only in the Homestead, but in the Project area as a whole as, and as part of a larger, cultural landscape. Relocation of the Homestead does not mitigate the heritage impacts of the Project.

b. **Climate change impacts:** Expert statements—nationally and globally (e.g. International Energy Agency)—are unequivocal: if we are to halt human-induced climate change and its calamitous results, there can be no new coal mines or extensions to existing ones. Professor Sackett advises that the latest climate projections mean that 1.5°C global temperature increase over pre-industrial times is already locked in and could arrive before 2025. Her advice is that an approval for continuation of the Glendell coal mine to 2044 would be adding substantially to greenhouse gas (**GHG**) emissions year by year, when NSW should be actively cutting GHG emissions. It must be understood NSW is already precariously exposed, because our continent is warming at 1.4 times the global mean. Warming trajectories—from best to worst—predict rises for Australia of 2.7°C to 7°C, respectively, by the end of this century. The cumulative impact of this Project along with other recent coal-mining approvals, in Professor Sackett's estimation, puts the state's target of a 50% reduction in emissions by 2030, over 2005 levels, in clear jeopardy. In parts of NSW, some effects of climate change are already surpassing 2030 projections published only two years ago for medium and high emission scenarios. On a scientific and logical basis, all GHG emissions—Scopes 1,2 and 3—must be included in the

assessment for this project as to its impacts upon NSW. Coal production globally must drop by a minimum of 36% to 2030 to hold warming to 2°C (with a 67% chance). For NSW, Professor Sackett's analysis shows this translates to an annual reduction of 10 Mt coal. The continuation of the Glendell coal mine would instead be adding about 3.8 Mt product coal (5.9 Mt ROM coal) each year.

c. **Impacts on water resources:** In Dr Pells' opinion, the EIS and its assessment do not give due consideration to, or effectively quantify effects of, an activity that will either remove or disrupt seriously "highly productive groundwater" resources (as defined in the NSW Aquifer Interference Policy) and intersect two Hunter River tributaries requiring interruption of the natural watercourses and construction of artificial diversions. Cumulative impacts of the project are incorrectly set against a baseline of existing mining operations in the vicinity, rather than against the natural background conditions for water resources (i.e. pre-dating mining). Dr Pells also challenges the re-interpretation of the alluvium by the proponent to reduce its extent, where the process has neither been peer reviewed nor substantiated by observations (test pit logs). He also finds a serious omission in the lack of a comprehensive plan for multi-level groundwater level monitoring of the alluvium that is backed up by statutory incentives to ensure a long-term time series is recorded.

d. **Economic impacts:** Dr Davey observes that the project's economic impact assessment lacks transparency so that it is impossible to fully replicate, which fails to meet the requirements of the current NSW 'Guidelines for the economic assessment of mining and coal seam gas proposals'. His analysis was, therefore, constrained to the mining revenue from the project. The results of the cost benefit analysis of the project are dependent on the coal price assumptions used. Against a backdrop of structural changes in global thermal coal markets as a result of net-zero commitments, especially by Asian nations that are Australia's main markets, long-term thermal-coal price forecasts from both KPMG (2022) and the World Bank (2021) are for prices to fall markedly from current high levels. Dr Davey modelled the Project financials, using both forecasts, over its lifetime. His analysis using the more rigorous World Bank data (incorporating both expected decrease in coal demand and alternative energy supply) estimates a net loss of $AUD 316 million, suggesting that the Project could become a stranded asset.

e. **Workforce futures issues:** The proponent argues that one of the main benefits of the Project is the continued availability of at its Hunter Valley operations. Dr Phelan considers that despite the Proponent's claims to the contrary, there is no real prospect of those operations offering continued employment opportunities into the long term, because the national and international policy context within which it operates is changing at an accelerating rate. Dr Phelan's expert opinion indicated that the Hunter Valley, region through NSW Government and other initiatives, is already engaging in the process to transition away from coal, and that approval of the Project would undermine this future-focussed work.

10. The Project is contrary to the principles of ecologically sustainable development (**ESD**) in particular the principles of intragenerational and intergenerational equity, and the precautionary principle, and is not in the public interest.

11. The Project will have unacceptable social, environmental, and economic impacts, contrary to the public interest, and as such the Commission must refuse to grant approval.

2. FACTUAL BACKGROUND

12. The Commission is the consent authority for the Project under s 4.5(a) of *Environmental Planning and Assessment Act 1979* (**EP&A Act**) and clause 8A(1)(b) of the *State Environmental Planning Policy (State and Regional Development) 2011* with over 50 submissions being duly made by way of objection.

13. On 9 September 2021 the Minister for Planning and Public Spaces wrote to the Commission with the following request:

> 1. Conduct a public hearing into the carrying out of the Glendell Continued Operations Project (SSD 9349) 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.

14. The Department of Planning and Environment's (**DPE**'s) assessment report for the Project (**Assessment Report**) was published on 22 February 2022. The referral letter dated 21 February 2022 from the Director of Resource Assessments stated:

> Based on this assessment, the Department considers that Glencore has designed the project in a manner that achieves a good balance between maximising the recovery of a coal resource of State significance and minimising the potential environmental impacts. Overall, the Department considers that the major economic and social benefits for the local area and to NSW outweigh the potential impacts, and that the project is approvable subject to the recommended conditions.

15. In our clients' submission, the evidence establishes that the DPE has failed to properly assess the environmental, social and economic impacts of the Project. Properly assessed, those impacts are, on balance, all negative.

3. RELEVANT MATTERS TO BE CONSIDERED

16. The Commission is constituted under s 2.7 of the EP&A Act. The Commission's independence is confirmed by s 2.7(2), which states that it:

> is not subject to the direction or control of the Minister (except in relation to the procedure of the Commission and any directions authorised to be given to the Commission under section 9.1 or other provision of this Act).

17. Furthermore, the Commission must exercise its powers for the purpose of achieving such of the objects of the Act as a relevant to its decision.

18. The objects of the EP&A Act are set out in s 1.3 as follows:

> **1.3 Objects of Act**
> (cf previous s 5)
>
> The objects of this Act are as follows—

(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,

(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,

(c) to promote the orderly and economic use and development of land,

(d) to promote the delivery and maintenance of affordable housing,

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

(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),

(g) to promote good design and amenity of the built environment,

(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,

(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,

(j) to provide increased opportunity for community participation in environmental planning and assessment.

19. The Commission's underlying function is identified in s 4.38(1) of the EP&A Act, which states:

> 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.

20. That function falls to be assessed by reference to the matters in s 4.15: see s 4.39.

21. Section 4.15(1) relevantly states:

> 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 that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning

Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

(iii) any development control plan, and

(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and

(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.

22. These submissions will return below to key components of s 4.15(1).

3.1 Section 4.15(1)(a): relevant environmental planning instruments – the Mining SEPP

23. Section 4.15(1)(a) obliges the Commission to take into account relevant environmental planning instruments (**EPIs**).

24. One such instrument is the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (NSW), commonly known as the **Mining SEPP**.

25. Clause 14 of the Mining SEPP states:

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

(2) Without limiting subclause (1), in determining a development application for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.

26. Clause 14 of the Mining SEPP has been considered in a number of recent Court decisions. Those decisions establish a number of important propositions.

27. In short, these decisions confirm that cl 14 empowers the Commission to decide to refuse a project on the basis of the climate change impact of the Project's direct and indirect impacts.

28. Clause 14(1) applies when considering a development application, whether or not the consent authority has decided (prima facie or finally) to grant consent to the application: *KEPCO Bylong Australia Pty Ltd v Bylong Valley Protection Alliance Inc* [2021] NSWCA 216 at [27]-[34].

29. So far as cl 14(1) contemplates consideration of the imposition of conditions: the Commission need not *itself* propose conditions; it is not for the Commission to "plug any gaps" that arise because the proponent has themselves failed to identify appropriate conditions which minimise GHG emissions: *KEPCO Bylong Australia Pty Ltd v Independent Planning Commission (No 2)* [2020] NSWLEC 179 at [82]-[83].

30. The "greenhouse gas emissions" to which cl 14(1) refers include Scope 3 emissions: *KEPCO Bylong Australia Pty Ltd v Independent Planning Commission (No 2)* [2020] NSWLEC 179 at [85]. So much flows from a coherent construction of cl 14 as a whole: it is clear from cl 14(2) that the clause encompasses consideration of "downstream emissions" ie Scope 3 emissions.

31. As for cl 14(2), it is for the consent authority to decide whether a policy is "applicable": *KEPCO Bylong Australia Pty Ltd v Bylong Valley Protection Alliance Inc* [2021] NSWCA 216 at [65]. In *KEPCO Bylong Australia Pty Ltd v Bylong Valley Protection Alliance Inc* [2021] NSWCA 216, there was no error in the Commission treating as "applicable" the NSW Climate Change Policy Framework and the Paris Agreement.

32. The consent authority can consider the absence of proposed conditions minimising Scope 3 emissions in determining whether to refuse development consent: *KEPCO Bylong Australia Pty Ltd v Bylong*

Valley Protection Alliance Inc [2021] NSWCA 216 at [44]. In that matter, it was open for the Commission to make the factual finding that because the proponent had proposed to undertake the development by minimising only Scope 1 and 2 GHG emissions and not Scope 3 GHG emissions, the proponent had not minimised GHG emissions to the greatest extent practicable: *KEPCO Bylong Australia Pty Ltd v Bylong Valley Protection Alliance Inc* [2021] NSWCA 216 at [44], [138]-[140].

3.2 Section 4.15(1)(b): likely impacts – general principles

33. Section 4.15(1)(b) obliges the Commission to take into account the likely impacts of the development.

34. Section 4.15 is the statutory successor of former s 79C(1) and, before then, s 90(1) of the EP&A Act. What Moffit P said of s 90(1) in *Parramatta City Council v Hale* (1982) 47 LGRA 319 at 340 applies equally to s 4.15(1). His Honour there said:

> The obligation is to take into consideration (a) to (s) matters which are in fact relevant, and not those which the authority or its officers considers relevant. By remaining ignorant of relevant environmental matters, an authority could not avoid its obligation to consider and, in its ignorance, give a valid consent without considering harm (not de minimis) to the environment which in fact fell within (b). Accordingly, despite the absence of a direct obligation to do so, the requirement of s. 90(1) to consider carries with it an indirect obligation, which rests upon the authority to acquaint itself with such material as will permit it to consider such s. 90(1) matters as are in fact material. Thus, if it is to consider the impact of the development upon the environment, if it is to consider whether it is likely to cause harm, if it is to consider the ways the environment may be protected or, if it is to consider the ways likely harm may be mitigated, it must be aware of each of these matters, namely, what is the impact, the likely harm and the ways to protect or mitigate.

35. In other words, the Commission is obliged to acquaint itself with such material as will permit it to consider the likely impacts of the development. It is not confined to the material placed before it by the proponent. And, where likely impacts are in issue, the Commission must be aware of the impact, the likely harm and the ways to protect or mitigate.

36. Further, in assessing likely impacts, it is incumbent on the Commission to form an estimate of the likelihood or possibility: *Cartier Holdings Pty Ltd v Newcastle City Council* [2001] NSWLEC 170 at [25].

37. The expression "likely impact" has a well-understood meaning. An impact is "likely" if there is a "real chance or possibility" of the impact *whether or not* the impact is "more probable than not": *Hoxton Park Residents Action Group Inc v Liverpool City Council* (2011) 184 LGERA 104 at [43]-[47].

38. The likely impacts of a development include both direct and indirect environmental impacts: *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7 at [494].

39. In addition to the provisions of any relevant EPI, s 4.15 requires that the Commission must take into account the likely environmental impacts of the development, the likely social impacts, the economic impacts, the suitability of the site for the development, and any submissions made in accordance with the EP&A Act. The Commission 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.

40. Section 1.4 of the EP&A Act provides that "***environment*** includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings". The breadth of this definition means that "Aboriginal artefacts and cultural heritage can be described as forming part of the environment": *Kennedy v NSW Minister for Planning* [2010] NSWLEC 240 at [80].

3.3 The relevance of the Minister's Statement of Expectations

41. The Minister's Statement of Expectations (**SOE**) states that he expects the Commission "to make decisions based on the legislation and policy frameworks and informed by the Planning Secretary's assessment".[3] To the extent that this statement seeks to depart from s 4.15, it is bad law; the Commission 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 DPE's report should be provided precedence over other evidence. This report is not a mandatory consideration. Whilst evidently a

[3] 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.

relevant consideration to be taken into account by the Commission, it is of no greater import than other relevant evidence placed before the Commission, including submissions by objectors.

42. Further, the SOE states that the Minister encourages the Commission to "seek guidance from the Planning Secretary to clarify policies or identify policy issues that may have implications for State significant development determinations".[4] This is, again, inconsistent with the proper role of an independent Commission, 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.

3.4 The public interest

43. The public interest has a "wide ambit".[5] A consent authority may range widely in the search for material as to the public interest.[6] According to Preston CJ, "a requirement that regard be had to the public interest operates at a high level of generality".[7] The public interest must be applied having regard to the scope and purpose of the relevant statute.[8]

44. As noted above, the objects of the EP&A Act include:

    a. promoting the sustainable management of built and cultural heritage (including Aboriginal cultural heritage); [9]
    b. facilitating ESD by integrating relevant economic, environmental and social considerations;[10]
    c. promoting the social and economic welfare of the community and a better environment;[11] and
    d. to provide increased opportunity for community participation in environmental planning and assessment.[12]

[4] 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.
[5] *Shoalhaven City Council v Lovell* (1996) 136 FLR 58, [63].
[6] *Terrace Tower Holdings Pty Limited v Sutherland Shire Council* (2003) 129 LGERA 195, per Mason P [81].
[7] *Warkworth Mining Ltd v Bulga Milbrodale Progress Association Inc* (2014) 200 LGERA 375, [298].
[8] *Patra Holdings v Minister for Land* (2002) 119 LGERA 231, [11].
[9] EP&A Act, s 1.3(f).
[10] EP&A Act, s 1.3(b).
[11] EP&A Act, s 1.3(b), (e).
[12] EP&A Act, s 1.3(j).

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

3.5 The public interest and ESD

46. Decisions of the Land and Environment Court (a superior court of record), 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,[13] including coal mines.[14]

47. 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.

48. 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]).

49. 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

[13] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [58].
[14] *Hunter Environmental Lobby Inc v Minister for Planning* [2011] NSWLEC 221.

> 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 EP&A 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] NSWR 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].

50. In the Court of Appeal proceedings, (*Warkworth Mining Ltd v Bulga Milbrodale Progress Association Inc* (2014) 200 LGERA 375), the Court of Appeal 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.

3.6 Principles of Ecologically Sustainable Development

51. The principles of ESD are defined in the EP&A Act by reference to s 6(2) of the *Protection of the Environment Administration Act 1991* (**POEA Act**).[15] The chapeau to section 6(2) provides:

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

52. 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.[16]

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[15] See EP&A Act, s 1.4: "ecologically sustainable development has the same meaning it has in section 6(2) of the *Protection of the Environment Administration Act 1991*. "

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

53. The Court has held that "[a] decision-maker should conscientiously address the principles of ESD in dealing with any application for a project."[17] This has been held to extend to, for instance, the utility of a cost-benefit analysis where the principles of ESD (and in particular intergenerational equity) were not accorded appropriate weight.[18]

54. Key principles of ESD relevant to our clients' submission are outlined below.

3.6.1 Intergenerational equity and intragenerational equity

55. 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 …

56. There are three fundamental principles underpinning this:[19]
    a. the conservation of options principle which requires each generation to conserve the natural and cultural diversity in order to ensure that development options are available to future generations;
    b. the conservation of quality principle that each generation must maintain the quality of the earth so that it is passed on in no worse condition than it was received;
    c. the conservation of access principle which is that each generation should have a reasonable and equitable right of access to the natural and cultural resources of the earth.

57. Accordingly, equity is not limited to the use or exploitation of natural resources and in fact extends to the conservation of cultural and natural resources.

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[17] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [492]. *Minister for Planning v Walker* [2008] NSWCA 224, [62], [63].
[18] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [493]-[495].
[19] See, for example, *Gray v The Minister for Planning and Ors* (2006) 152 LGERA 258; [2006] NSWLEC 720, [118]-[126].

58. In *Gray v The Minister for Planning and Ors* (2006) 152 LGERA 258, the Court found that an aspect of implementing intergenerational equity is for an environmental impact assessment to assess (not only raise) cumulative impacts.

59. In *Taralga Landscape Guardians Inc v Minister for Planning and RES Southern Cross Pty Ltd* (2007) 161 LGERA 1, the Court found that:

> "The attainment of intergenerational equity in the production of energy involves meeting at least two requirements.
>
> The first requirement is that the mining of and the subsequent use in the production of energy of finite, fossil fuel resources need to be sustainable. Sustainability refers not only to the exploitation and use of the resource (including rational and prudent use and the elimination of waste) but also to the environment in which the exploitation and use takes place and which may be affected. The objective is not only to extend the life of the finite resources and the benefits yielded by exploitation and use of the resources to future generations, but also to maintain the environment, including the ecological processes on which life depends, for the benefit of future generations.
>
> The second requirement is, as far as is practicable, to increasingly substitute energy sources that result in less greenhouse gas emissions for energy sources that result in more greenhouse gas emissions, thereby reducing the cumulative and long-term effects caused by anthropogenic climate change. In this way, the present generation reduces the adverse consequences for future generations.".[20]

60. In *Gloucester Resources Limited v Minister for Planning* (2019) 234 LGERA 257*,* Preston CJ explained that even after rehabilitation of a mine, the cultural, social, environmental, 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 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

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

> 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.[21]

61. It is our clients' submission that the limited benefits declared in the Project are distributed to the present generation, while the "burdens are distributed to the current as well as future generations".[22] As such, the Project is not consistent with the principle of intergenerational and intragenerational equity.

3.6.2 Conservation of biological diversity and ecological integrity

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

63. In this regard, the foreword to the Global Biodiversity 3 report (2010), produced by the Secretariat of the Convention on Biological Diversity, states:[23]

> 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.

64. 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:[24]

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

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

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[21] *Gloucester Resources Limited v Minister for Planning* (2019) 234 LGERA 257, [415].
[22] *Gloucester Resources Limited v Minister for Planning* (2019) 234 LGERA 257, [416].
[23] Secretariat of the Convention on Biological Diversity, *Global Biodiversity Outlook 3*, <http://www.cbd.int/gbo3/>, 5.
[24] EP&A Act, s 1.3(e).

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

66. It is our clients' submission that the Project's environmental impacts through its contribution to climate change engage the principle of conservation of biological diversity and ecological integrity.

3.6.3 The polluter pays principle

67. 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.

68. 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.

69. 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].

70. Therefore, the polluter pays principle requires that:
    a. reparation must be made for irremediable harm caused by the Project, including the irremediable impact on the cultural heritage values of the locality;
    b. the responsibility to provide for the remediation of any ongoing environmental harm caused by the operation of a development must be borne by the proponent itself; and
    c. the social costs of the greenhouse gas emissions that result from the project should be borne by the proponent (such as through the purchase of equivalent greenhouse gas sequestration).

71. It is our clients' submission that the Project's impacts engage the polluter pays principle.

3.6.4 Precautionary principle

72. 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, …

73. 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.

74. As will be detailed in these submissions below, the Project's environmental and social impacts engage the precautionary principle.

3.7 Application of the Public Trust Doctrine

75. The public trust doctrine has clear application in respect of the Project.[25] In relation to natural resources under the public trust doctrine, the NSW Government has an obligation to protect trust resources, including coastal, riparian and navigable waters and foreshores, public lands, and the air, including the atmosphere.

76. Chief Judge Preston of the NSW Land and Environment Court has stated that 'the concept of the doctrine of public trust can be traced back to an early dispute over a proposed coalmine in Sydney Harbour in the 1890s'.[26] The Chief Judge has observed that, "The concept of the "public trust" has its roots in Roman law, and was based on the idea that certain common resources such as the air, waterways and forests were held in trust by the State for the benefit and use of the general public. A broader conception of the public trust holds that the earth's natural resources are held in trust by the

[25] For an overview of the public trust doctrine, see Tim Bonyhady, 'A Useable Past: The Public Trust in Australia' (1995) 12 *EPLJ* 329; Lauren Butterly, Hasimi NR, Johnson E, Koroglu R, 2020, 'Could the Public Trust Doctrine be used for climate litigation in Australia? The modernisation of the Public Trust Doctrine in the US and Canada in the context of the climate emergency', *Australian Environment Review*, vol. 35 - No 1, pp. 15 – 20; Joseph Sax, 'The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention' (1970) 68 *Michigan Law Review* 471; Gerry Bates, *Environmental Law in Australia* (LexisNexis, 10th ed, 2019) 26; Chief Judge Preston, 'The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific' (2005) 9(2-3) *Asia Pacific Journal of Environmental Law* 109,.

[26] Chief Judge Preston, 'The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific' (2005) 9(2-3) *Asia Pacific Journal of Environmental Law* 109, 203.

present generation for future generations… The essence of the public trust is that the State, as trustee, is under a fiduciary duty to deal with the trust property, being the common natural resources, in a manner that is in the interests of the general public."[27]

77. Chief Judge Preston has noted that 'public trust law may be the "strongest contemporary expression of the idea that the legal rights of nature and of future generations are enforceable against contemporary users".[28]

78. Examples of judicial acceptance of the public trust doctrine specifically in NSW include:

    a. *Re Sydney Harbour Collieries Co*:[29] The NSW Land Appeal Court held that the Crown occupies a position in relation to public lands as "something in the nature of a trustee under an obligation to dispose of or alienate those lands, whether permanently or temporarily, only in the interest and for the benefit of the people of this Colony."[30] The Court went on to state that it was: "the duty of the Government not only to take the greatest care to protect both present and contingent public interests, but also to obtain the best consideration for the temporary alienation of frontages which, if the Crown could be in law a trustee, it holds in trust for the health, recreation, and enjoyment of an enormous and ever-increasing population."[31]

    b. *Willoughby City Council v Minister Administering the National Parks and Wildlife Act*:[32] Stein J accepted the applicant's submission that there was a public trust over national parks, and the Minister could not lawfully make an administrative decision to harm the land without a breach of the public trust doctrine.[33]

[27] Chief Judge Preston, 'The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific' (2005) 9(2-3) *Asia Pacific Journal of Environmental Law* 109, 203.
[28] Preston, Brian, 'The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific' (2005) 9(2-3) *Asia Pacific Journal of Environmental Law* 109, 203
[29] *Re Sydney Harbour Collieries Co* (1895) 5 Land Appeal Court Reports 243.
[30] *Re Sydney Harbour Collieries Co* (1895) 5 Land Appeal Court Reports 243 at 255.
[31] *Re Sydney Harbour Collieries Co* (1895) 5 Land Appeal Court Reports 243 at 251-252.
[32] *Willoughby City Council v Minister Administering the National Parks and Wildlife Act* (1992) 78 LGERA 19.
[33] *Willoughby*, 34. For additional cases which consider the public trust doctrine, see *Palmer v The Board of Land and Works* (1875) 1 VLR 80; *Kent v Johnson* (1973) 21 FLR 177; *Woollahra Municipal Council v Minister for the Environment* (1991) 23 NSWLR 710; *Packham v Minister for the Environment* (1993) 31 NSWLR 65.

79. In the matter of *Upper Mooki Landcare Inc v Shenhua Watermark Coal Pty Ltd,*[34] the public trust doctrine was argued to be a 'second source' of the obligation of the Planning Assessment Commission (**PAC**) to consider two principles of ESD. Preston CJ held that the applicant had not established that the PAC failed to consider the relevant ESD principles which meant that the ground would fail. However, in rejecting the formulation of the public trust ground in the specific way it was asserted in that case, Preston CJ left open the possibility of a future public trust doctrine argument.[35] Preston CJ distinguished between using the public trust doctrine 'as a means to establish the end' that the principles had not been considered (as in that case), and using it as 'an end in itself of being a consideration' that was not taken into account. This indicates that the public trust doctrine is to be treated as a separate obligation.

80. The NSW Government, as trustee, has a public trust duty to protect the trust assets from damage, including from the effects of climate change, so that current and future trust beneficiaries will be able to enjoy the benefits of the trust. A decision by the Commission to exercise its authority to grant consent to the Project, in light of the knowledge before the Commission about the direct contribution of this Project to higher atmospheric CO_2 concentrations, would amount to a breach of the public trust doctrine.

4. IMPACTS OF THE PROJECT

4.1 Heritage impacts

81. Our clients consider that the Project will have a catastrophic impact on the cultural heritage of the Wonnarua people such that approval of the Project would be contrary to the public interest and should be refused.

82. The Project area is of great significance to our clients and to other Wonnarua people, particularly those families comprising the Plains Clan of the Wonnarua People (**PCWP**), whose identified ancestors inhabited the Project area and surrounding plains lands prior to and during colonisation and who have maintained connection with the area since.

[34] *Upper Mooki Landcare Inc v Shenhua Watermark Coal Pty Ltd* (2016) 216 LGERA 40; [2016] NSWLEC 6.
[35] *Upper Mooki Landcare Inc v Shenhua Watermark Coal Pty Ltd* (2016) 216 LGERA 40; [2016] NSWLEC 6 [183].

83. The Project area also has such considerable (Aboriginal and non-Aboriginal) heritage values that both the Heritage Council and the independent expert appointed by the DPE to review the plethora of evidence on the range of heritage values of the Estate found that it meets the threshold for State heritage significance.[36]

84. The Assessment Report does not even attempt to set out the intangible cultural heritage values of the site, nor does it consider the Project area as part of a cultural landscape, to enable the Commission to adequately consider the impacts on heritage if it were to approve the Project. Both the DPE in the assessment report and the proponent in its project documents take a blinkered focus on the Ravensworth Homestead and on an individual massacre, at the expense of adequately describing or assessing the cultural heritage values and historic heritage values of the Ravensworth Estate (**Project area**), including as a cultural landscape, and therefore the heritage impacts of the Project.

4.1.1 The evidence

85. The evidence before the Commission demonstrates the extremely high heritage values of the Project area, both Aboriginal cultural heritage values and historic heritage values for the whole of New South Wales. These values are multifaceted and interconnected, and are not limited to the Ravensworth Homestead, but attach to the Ravensworth Estate including as part of a broader cultural landscape. The evidence of its significance comes from a diverse range of sources, including Wonnarua oral tradition and colonial documentation, and is accepted by both the NSW Government's and the proponent's heritage experts:[37]

a. The Heritage Council in its December 2020 reply to the response to submissions (**RTS**) reiterated to DPE that:

> "the Heritage Council considers that Ravensworth Homestead and its surrounding cultural landscape, located within the proposed open cut mining area, to be of state heritage significance for its aesthetic, historic, scientific and social values. The Heritage

[36] See: Hector Abrahams Architects, 30 November 2021, *Glendell Continued Operations Project – Review of Heritage Impacts*, available at <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=RFI-32759319%2120211130T215535.349%20GMT> (**Abrahams Report**); Heritage Council RTS advice, above n 1.
[37] Heritage Council RTS advice, above n 1; Abrahams Report; Mark Dunn, 2015 *A Valley in a Valley: Colonial struggles over land and resources in the Hunter Valley, NSW 1820 1850*. PhD Thesis, School of Humanities and Languages, University of New South Wales, Sydney (**Dunn 2015**); Mark Dunn, 2019, *Ravensworth Contact History*. Report prepared for Umwelt Environmental & Social Consultants, NSW (**Dunn 2019**).

> Council considers that the proposed removal of Ravensworth Homestead from its original location as outlined in the EIS and RtS reports will result in the irreversible loss of its state significance in the form of its significantly intact fabric, archaeology, Aboriginal and colonial landscape setting, and views. The Heritage Council does not support the relocation of Ravensworth Homestead or the rationale provided in the EIS or RTS as either relocation option would also result in an unacceptable heritage impact as the loss of the intact homestead complex will remove its State significant values and the relocated buildings are unlikely to meet the criteria for state heritage significance."[38]

b. Heritage NSW (within the Department of Premier and Cabinet) provided Ministerial advice in March 2020 that:

> "Ravensworth is an exceptionally intact cultural landscape that tells the story of shared Aboriginal and European heritage in the Hunter Valley including early conflict, the development of pastoralism and the convict labour system…. . The site is noted to have the strongest documentary evidence of any conflict site across the Hunter Valley. This demonstrates how fiercely the Wonnarua defended and valued the landscape involving several violent episodes including the event known as the Ravensworth Massacre."[39]

86. The Commission also has before it (at **Attachment B**) the expert opinion of Associate Professor Neale Draper that the Project area has very high cultural and social significance. These aspects include:

a Being located adjacent to important cultural route along Glennies Creek and its tributaries which was part of traditional male initiation (Bora) cycle of the Wonnarua People. The establishment of the estate resulted in the inability to utilize this section of the route for traditional cultural practices and traditional resource access by the Wonnarua People.

b It is a central place in the colonial invasion and associated conflict and violence that resulted from the establishment of this and other estates in the 1820s, that lead to the deaths of many Wonnarua people, as well as some colonists. Numerous conflict raids and reprisals, with accompanying fatalities in most cases, took place on the Ravensworth estate, not just the main 'massacre" event referred to in the DPE assessment report.

c Ravensworth Estate had military forces stationed at it to subjugate Wonnarua resistance and to kill those who participated in resistance efforts. This resulted in both recorded and unrecorded massacres and executions of local Wonnarua people. Wonnarua oral history

[38] Heritage Council RTS advice, above n 1.
[39] Heritage NSW Brief, above n 2.

suggests that Dr James Bowman (who established the Estate) may have personally killed, or at least ordered the execution of Wonnarua people in the mid-1920s.

d Due to these bloody colonial beginnings, the Wonnarua people consider this place to be spiritually significant and dangerous because of the strong belief that there are unsanctified burials of their ancestors on the Ravensworth Estate.

e The place is regarded as both symbolic of and central to the violent invasion and decimation of the Wonnarua people in this region.

A cultural landscape

87. Both the DPE and the Proponent have focused the bulk of the discussion of the heritage significance of the Project area on the physical structure of the Homestead. This approach is misconceived (see discussion below at [107]-[**Error! Reference source not found.**] and in the submissions of Counsel for our clients, Mr Seymour, at **Attachment A**). The Project area is part of a cultural landscape and must be considered in this context.

88. A number of the NSW Government guidelines prescribed by the Secretary's Environmental Assessment Requirements (**SEARs**) to be considered by the proponent in undertaking its assessment note the importance of assessing Aboriginal cultural heritage items, landscape features, and other elements as part of a cultural landscape featuring both tangible and intangible elements:

    a. The NSW Government *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (listed at Attachment 1 to the SEARs for the Project) says that "Aboriginal cultural heritage is dynamic and may comprise physical (tangible) or non-physical (intangible) elements. It includes things made and used in traditional societies, such as stone tools, art sites and ceremonial or burial grounds. It also includes more contemporary and/or historical elements such as old mission buildings, massacre sites and cemeteries. Tangible heritage is situated in a broader cultural landscape, so it needs to be considered within that context and in a holistic manner." [35]

    b. Fact Sheet 2 to the NSW Government *Consultation requirements for Proponents* (also listed at Attachment 1 to the SEARs) says "the significance of individual landscape features is derived from their interrelatedness within the cultural landscape. This means features cannot be assessed in isolation and any assessment must consider the feature and its associations in a holistic manner"

89. As A/Prof Draper notes, the cultural heritage of the homestead is connected to the landscape it is found, which will be completely lost if relocated. This view is shared by the specialist NSW government heritage advisory body, the Heritage Council, which considers that the Project (including the proposed relocation of the Homestead) "will result in the irreversible loss of its state significance in the form of its significantly intact fabric, archaeology, Aboriginal and colonial landscape setting, and views."[40]

90. Heritage NSW in its internal documentation also acknowledged that the heritage significance of the Project area resides in the site as a landscape, not only in the Homestead:

> "Ravensworth is an exceptionally intact cultural landscape that tells the story of shared Aboriginal and European heritage in the Hunter Valley, including early conflict, the development of pastoralism and the convict labour system. The Wonnarua landscape, centred on a series of creeks, comprises tangible and intangible values. While nineteenth century rural land use practices such as vegetation clearance, cultivation and grazing have had some impact on the Aboriginal archaeological record, the landscape, its resources and much Aboriginal archaeology remains. The site is noted to have the strongest documentary evidence of any conflict site across the Hunter Valley. This demonstrates how fiercely the Wonnarua defended and valued the landscape - involving several violent episodes including the event known as the Ravensworth massacre.
>
> The large pastoral estate was granted to Dr James Bowman, principal surgeon in the colony, in 1824. Located picturesquely in the landscape and responding to the particular topography of the Hunter region with its river valleys and alluvial plains, the siting of the intact complex of convict-built homestead buildings, together with the surrounding pastures form a distinctive rural colonial landscape. Although surrounding agricultural lands have been subdivided and gradually impacted by open cut mining since the late 1990s, the setting and significant views from the Ravensworth homestead have been largely maintained."[41]

91. Part of the cultural heritage significance of the Project area to our clients is the cumulative impact of mining (including historic mining that has changed the landform) on the surrounding landscape. Mr Franks noted in his evidence at the public hearing that "[y]ou know, this particular area is incredibly important, it's the only landscape left intact."[42]

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[40] Heritage Council RTS advice.
[41] Heritage NSW Brief.
[42] Independent Planning Commission, 21 March 2022, Transcript of Proceedings Re: Glendell Continued Operations Project (SSD-9349) and Mount Owen Continued Operations Mod 4 Project (SSD-5850-Mod 4) (**Public Hearing Day 2 Transcript),** p 53.

92. The cumulative impact of mining on Aboriginal cultural heritage values, the importance of understanding and assessing Aboriginal cultural heritage as part of a cultural landscape, and the personal and community impact of this on traditional custodians was described (and set out in the 2013 PCWP Cultural Values Assessment for the Mount Owen Mine, in the same complex of operations as the Project) in 2011 by the late PCWP Elder, Aunty Barbara Foot:

> "As a girl I would travel along Bowmans [Creek]. We'd go from the mission, to school to town…My Dad had a lot of cultural knowledge. He passed it on to me. He'd tell me places I could and couldn't go. He showed me important places. Places our ancestors still come through. I know how to read the sings [*sic*] of the land, the seasons. The signs are our lore, they show the way - like people used street signs to have order. Some of the signs, the trees, have been cleared but we know where they were from our ancestors, and we know what they tell us. People not from here don't have that knowledge…
>
> The area is all important to us. We can't break it up for each mine – that is how they are getting away with destroying so much of our culture. They don't understand how it all links together, so it doesn't seem as important when you look at this little bit or that little bit. That's how they are breaking up our community too – the mine mention money and that starts fights. The mines want the fights as they get to keep what they want if the community is distracted."[43]

93. In Associate Professor Draper's expert opinion, the Project area has very high historical significance, because:

    a. It has the potential to yield additional archaeological information about early colonial conflict events in the form of archaeological sites or conflict burials, as well as the focus for additional ethnographic (oral history) and historical research concerning the colonial conflict period around that location.
    b. The important themes surrounding the colonisation and Wonnarua resistance on and adjacent to the Ravensworth Estate has only begun to receive overdue research attention in the last five years and has significant, further research potential that will be destroyed if this mine extension is approved.[44]

94. According to Associate Professor Draper, the Project areaalso has very high aesthetic significance, because:

[43] Cited in Draper 2020a, p 37.
[44] Draper 2022.

a. Visually – the Estate includes the very early and distinctive Homestead complex, with associated exotic garden and cleared home paddock
b. Spiritually – this property evokes severe dread and anxiety within the Wonnarua people because of its associations with the deaths of many of their ancestors and their loss of sovereignty. [45]

A battlefield

95. The Commission heard evidence from our client, Mr Franks, that for the Wonnarua, the Ravensworth Estate is both central to and symbolic of the battlefield in which the Wonnarua defended their land from the European colonists.

96. The evidence before the Commission shows that, rather than being the location of one horrific event (such as the massacre that the Proponent and DPE expend a great deal of effort and focus on at the expense of accurately understanding the significance of the Project area), Ravensworth Estate was the location of a number of well-documented attacks and reprisals (that the Proponent's own documentation sets out[46]), including:
    a. Arrival of mounted police in region
    b. Capture of Jackey Jackey at Ravensworth, leading to his murder/execution (on 1 August 1826) at Wallis Plains jail (See Maria Cotter written sub page 6 for colonial record-warning, brutal) and the subsequent trial for murder of Lieutenant Lowe (the first time in the history of the colony that an officer and a gentleman had been charged with murder of an Aboriginal person)
    c. Two shepherds killed at Ravensworth (18 June 1826)
    d. Spearing and wounding of Dr Bowman's fencers at Ravensworth (June 1826)
    e. Spearing killing of Dr Bowman's watchman
    f. Capture of Aboriginal men said to be because of attack on fencers and the killing three of them on Ravensworth, ostensibly for attempting to escape; (12 August 1826)
    g. Group of Europeans with Hunter Valley land grants, including Dr Bowman, write to Governor Darling for military protection from Aboriginal raids

[45] Draper 2022.
[46] Glencore submission, 2022, available at <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/02/glendell-continued-operations-project-ssd-9349/public-submissions/general-public-submissions/220328-applicant-submission_redacted.pdf>.

h. Five fencers on Ravensworth attacked, no serious injuries (3 October 1826)

97. These are only the violent incidents that are confirmed to have happened directly on the Ravensworth Estate, as set out by the Proponent itself.[47] Other events occurred in its surrounds, and this brutality, violence, dispossession and death, must be understood as part of the cultural heritage of the Project area as well because those events are part of the cultural landscape within which the Project area sits (and, as the above shows, was a significant site in the cultural landscape of the war for the Hunter).

98. It is critical to understand that, for our clients and the PCWP, the Aboriginal people discussed above are direct ancestors (200 years is short amount of time in the context of tens of millennia), and the brutal accounts of their deaths and mistreatment are felt deeply. Dr Cotter notes that:

> "[T]o read reports of the brutal slaying of an ancestor- whether one or many – does not matter... it is still a massacre/murder/death/ loss of life of someone that you recognise to be of your own 'flesh and blood'."[36]

99. Mr Franks -an ex-serviceman- described Dr Bowman's Ravensworth Estate as a significant component of the theatre of war[48] of Wonnarua defence of their land. That war commenced in the 1820s with European settlement, and, our clients consider, continues today:

> "And one thing I've noticed today is all these comments and speculations about the theatre of war and how it's conducted, but I've never heard once from an expert who has been brought here to talk about the theatre of war and what it means to people."
>
> "To sit here and say that British cavalry, British soldiers, British marines and British police stayed within the thousand-acre block from a staging point is ridiculous."
>
> "[H]ere we are today fighting to protect an area where heavy cavalry ran my people's women into the ground."
>
> "Glencore have staged an attack on my people, not only in closed doors but to suppress information like an enemy invading Ukraine today."

[47] See, for example Umwelt, March 2022, *GLENDELL CONTINUED OPERATIONS PROJECT Response to Submissions Made to IPC Public* Hearing, available at https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/02/glendell-continued-operations-project-ssd-9349/public-submissions/general-public-submissions/220328-applicant-submission_redacted.pdf, Attachment 5.

[48] "The entire land, sea, and air area that may become or is directly involved in war operations"

> "The truth of the matter is the theatre of war is never where it starts, it's where it ends, and that's what's happening here today. If we don't defend Ravensworth, our war is over for the Wonnarua People. It can't go to, or the homestead can't be moved to Broke. The reason it's being promoted to be moved to Broke is for financial gain and greed. The essence of our people are of the land, for the land for future generations. We don't sell our heritage and that's what Glencore proposed to do here, a very unique symbiotic location that attaches our cultural laws and customs into the next generations that should be an area of reconciliation. If there was ever a place that needs to be preserved, it's the Ravensworth Estate. It's a place that attaches to the First Fleet with a surgeon who's very well known and an officer. It's the beginning and the end of what life to us as Wonnarua people means in that area and it still today holds deep dark secrets that are trying to be forgotten"
>
> "I think I've probably said enough as I can without getting a bit more emotional because it has been, it's been a long time fighting this battle, it's been a long time having my Wonnarua voice taken away from my by a mining company. It's been a long time allowing our people to heal, and if there's ever a call for intergenerational equity and reconciliation for the Wonnarua people, it's Ravensworth Estate. It's not here in Sydney, it's not out at Bulga where the mine have built a temporary tin shed to put all our artefacts on. It's to leave them in the paddock at Ravensworth for our people to conduct a proper ceremony to allow our fallen to move on with Kawale so our people are no longer tormented and harassed. So that's what's been happening whilst this is not settled."[49]

100. As is apparent from the above, our clients consider that their advocacy before the Commission and their actions in other fora to protect the Project area and its surrounds is a continuation of the fight for Country that commenced in the 1820s. Dr Cotter described this in the following terms:

> "For the PCWP the brave actions of Augustus and Alister [Lester, ancestors to Mr Robert Lester and other PCWP members] in World War I are inexorably linked to the actions of their Wonnarua antecedents who offered armed resistance in the earliest days of colonial settlement; and to the contemporary actions of members of the PCWP who have involved themselves in Land and Environmental Court Proceedings in an attempt to prevent their 'Country' from being destroyed by coal mining."

101. That the Ravensworth Estate and its neighbouring estates were the location of a war between the Wonnarua and the colonists was also the documented view of the Europeans. The proponent's

[49] Day 2 Transcript.

expert, Dr Mark Dunn in his 2015 PhD thesis described the catalyst for the events of 1826 in the following terms:

> "After years of relative quiet following the Hunter's opening for European settlement, what caused the outbreak of violence in 1826 in the first place? The reports of the magistrates indicate that settlers saw the series of attacks as a co-ordinated campaign, with one event leading inexorably onto the next as bands of Aboriginal raiders moved through the upper reaches of the settled areas. The settlers at first feared and then talked openly of a war, demanding the government deploy foot soldiers and mounted troops in response."

102. Dr Dunn identified that, in the pattern of targeted raids and reprisals following the arrival of troops in the Valley, Dr Bowman's Ravensworth Estate was central:

> "The concentration of the later attacks around the Ravensworth estate of Dr Bowman and his neighbours would appear to be an escalation following the military's first foray into the valley when a number of suspects from the Greig attack were captured. The arrival of the mounted police under Lowe soon after, which resulted in the shooting of the "escaping" three and the capture of Jackey-Jackey, marks the moment of intensification that swirled around Ravensworth and its neighbours. Bowman's property remained the centre of the troubles up until the confrontation with Samuel Owen in March 1827"[50]

103. A/Prof Draper considers that "Bowman's Ravensworth estate constitutes a central focus in this turbulent, violent history of the usurping of Wonnarua traditional owners by these powerful colonists and their convict servants, with the assistance of major military interventions."

104. The independent expert engaged by the Department to review the heritage significance of the Project area noted that its very high historic significance related to the role of the Ravensworth Estate in a series of events that did not necessarily occur on the estate:

> "Due to particular events within the Ravensworth Estate and events that followed directly from them, the estate has a wider significance than the immediate local area that encompasses the Hunter region and the justice system of the colony. These events, specifically, are: the killing and wounding of Bowman's employees by Aboriginal people; the murder of an Aboriginal man suspected of involvement in the wounding of Bowman's men (within a mile of the original Bowman homestead); the murder of another Aboriginal man, Jackey-Jackey (at Willis Plains), after his alleged involvement in the killing of Bowman's men; and the subsequent trial of Lieutenant Nathaniel Lowe. The historical value of Ravensworth Estate is

[50] Dunn 2015, 229- cited in Draper 2020a

important to the whole of New South Wales and the Estate is likely, in our view, to meet the threshold for State heritage significance for its historical heritage value."[51]

105. In Associate Professor Draper's expert opinion, the Project area (Estate and Homestead together) has very high scientific significance, because:
    a It has a strong association between the colonial conflict and invasion of the Wonnarua people.
    b It is a central place to the above-mentioned historical events, recorded in both written records of the conflicts but also through oral history records of Wonnarua families related to the conflict.
    c It is an important landmark in the overall pattern of European invasion and Aboriginal resistance in the Hunter Valley and neighbouring areas, such as the Bathurst region from the early 1820s onwards.

106. At the public hearing, the Commission heard from Dr Padriac Gibson of the Jumbunna Institute about the importance of the retention of landscapes in which colonial violence took place, for the Australian community broadly "to not only discuss the history of the violence that was perpetrated to dispossess Aboriginal people is, but to be able to maintain the integrity of the cultural landscapes in which this violence actually took place, to allow people in the contemporary generations to fully actually engage with and experience and try to understand the depth of the violence that lies at the root of their settlements that we actually now have in Australia, including in areas such as the Hunter Valley, where there was such terrible violence that was used to actually establish these homesteads in the first instance."

4.1.2 Likely impacts of the Project on heritage values: response to assessment report

107. As the evidence set out above, and submissions made by Counsel for our client, Mr Seymour, in the public hearing and in writing at **Attachment A**, make plain, the Department and the Proponent both take an erroneously limited approach to the assessment of the cultural heritage values of the Project area. The framing of the heritage significance of the place as residing chiefly in the structure of the Homestead, and therefore the heritage impacts of the project able to be mitigated through relocation of that structure, is fundamentally misconceived.

[51] Abrahams Report.

108. This is clear when the cultural heritage is examined through the lens of the *Burra Charter*, and its instructions around places of cultural significance.[52] The assessment report's assertion that the relocation of the Homestead accords with Article 9.1 of the Burra Charter is a misrepresentation of that Article and the requirements of the *Burra Charter* generally, as Mr Seymour sets out at **Attachment A.**

109. The Department's assessment report and the Proponent's Aboriginal Cultural Heritage Assessment fail to address the intangible cultural heritage values of the Project area, and disregard the evidence provided by our clients as to the significant cultural values of the PCWP associated with the Project area.[53] All of these aspects were reported on in Draper (2020a) and Draper (2020b), which were ignored or dismissed in DPEs assessment report because they were not reflected in recorded colonial history or through preliminary and superficial archaeological excavations. The Department's assessment report only considers tangible cultural heritage, a defect that was also highlighted by NSW Heritage Council Assessment and the Casey and Lowe (2020) historical and archaeological assessment (refer to Draper 2020a; Section 3.4) and has not been rectified.

110. A/Prof Draper notes that the assessment report "practically ignores intangible (i.e., Aboriginal culture and oral-history based) cultural values and recognises only tangible (non-Aboriginal documentary and archaeological) evidence – which is only a partial record of the cultural heritage landscape."[54]

111. In so doing, the DPE would deprive the Commission of the opportunity to adequately consider the substantial impacts of the Project on the cultural heritage of the Wonnarua people and in particular the PCWP.

112. Astoundingly, the DPE's assessment report ignores the finding of the independent expert it commissioned, not mentioning it in its discussion of Aboriginal cultural heritage. In fact, in its assertion that Aboriginal groups had not identified any particularly significant cultural values for the Site, the DPE's assessment report makes a statement directly at odds with its own independent expert, which found that

[52] Mr Seymour, pp 8-12.
[53] That is, Draper 2020a, Draper 2020b and the PCWP Values Assessment by Tocomwall.
[54] Draper 2022.]

> "Statements in the report prepared by Tocomwall for the Plains Clan of the Wonnarua People (PCWP) dated 25 June 2020 contribute to an understanding of social significance. Testimony from people such as Aunty Barb Foot (p. 89), the heads of Family of the PCWP (p. 91), Scott Franks (p. 49) and Maria Stocks (pp. 51 and 86) are sufficient to establish that there is social value attached to this specific bounded place of the Ravensworth Estate for at least some Wonnarua people. That specific references to the specific parcel of land are limited (though not absent) does not diminish this social significance. The Tocomwall report gives a clear understanding of the spiritual significance of the broader landscape, which is intertwined with the social significance of this specific place. The social significance of the place for the PCWP is well-established."[42].

113. As is clear from *Parramatta City Council v Hale* (1982) 47 LGRA 319 at 340, the Commission is not limited to the information placed before it by the Department, it is not bound to give any greater weight on the Departmental report than any other submission.

114. Having regard to the significant failures of the DPE and the Proponent discussed above, in order to adequately consider the Aboriginal cultural heritage impacts of the Project, the Commission must pay close and genuine consideration to the material put before it on this issue by our clients. We submit that this material ought to be accorded significantly more weight than the DPE's assessment report or the Proponent's ACHAR.

4.1.3 Cultural knowledge holders must be properly identified and significant weight given to their knowledge

115. Glencore's repeated assertion that our clients and the PCWP are merely "one of the 32 RAPs that registered for the Project"[55] disregards established principles and best practice about the importance of identifying knowledge holders. Not all RAPs are knowledge holders, and the PCWP are one of only two identified knowledge holder groups for the Project.

116. As A/Prof Draper noted in his June 2020 report: "WNAC/WLALC [Wonnarua Nation Aboriginal Corporation/Wanaruah Local Aboriginal Land Council] are reported as not having a particular connection to that locality… The PCWP on the other hand have asserted a fairly detailed, close-knit

[55] See, for instance, 28 March 2022 letter from Shane Scott to Stephen Berry, *Glendell Continued Operations Project (SSD 9349) and Mount Owen Continued Operations (SSD 5850) Modification – Response to PCWP Historical Information*, p 6, available at <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/02/glendell-continued-operations-project-ssd-9349/public-submissions/general-public-submissions/220328-applicant-submission_redacted.pdf >.

cultural landscape across this section of the Hunter Valley, and have claimed that the subject land forms a cultural heritage place of very high significance to them. They have provided significant oral history on their cultural and historical associations with these places and associated cultural traditions and landscape". [56]

117. NSW Government Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (listed at Attachment 1 to the SEARs) says that (our emphasis):

"Consultation with Aboriginal people is an integral part of the process of investigating and assessing Aboriginal cultural heritage. Aboriginal people **who hold cultural knowledge about the area, objects and places that may be directly or indirectly affected by the proposed activity** must be given the opportunity to be consulted"[57]

118. The Juukan Gorge Inquiry found that "[p]robably the most basic issue facing Traditional Owners in the protection of heritage is the simple recognition of their knowledge of their own culture, heritage and lore. Traditional Owners know their own culture and traditions, they know the significance of sacred, ceremonial and heritage sites, and, at least roughly, their geographical location. They should not have to fight to prove what is already known to them. Their knowledge should be accepted in Australian law."[44]

119. The ICOMOS *Practice Note on Understanding and assessing cultural significance* notes the importance of identifying relevant knowledge holders:

> "In some traditional cultures and in other groups, relevant knowledge may reside in only a limited number of people. They should be identified and consulted. In particular, engagement with relevant knowledge-holders will be essential where cultural significance assessments concern social and spiritual values.
>
> Review of preliminary conclusions by those with significant associations or cultural connections will help ensure that their values have been understood and clearly articulated."[58]

[56] Draper 2020
[57] Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW.
[58] Australia ICOMOS, 2013, *Practice Note on Understanding and assessing cultural significance*, p 8. See also Mr Seymour's discussion in **Attachment A** at [21]-[28].

120. The proponent's ACHAR for the Project asserts that "there are no traditional cultural values associated with the Project Area (directly and specifically) held by the participants in this ACHAR process. By 'traditional' cultural values, we refer to these in the Native Title sense as an inherited and cohesive body of 'traditional' knowledge, laws and customs that are still observed and maintained by a particular Indigenous group".

121. This is incorrect in both fact and law.

    a. In fact, traditional cultural values *do* exist over the area, as evidenced by A/Prof Draper's reports[59] and the PCWP cultural values assessments prepared by Tocomwall in relation to both the Project and the Mount Owen Complex, all of which the proponent has had access to. To have had the benefit of these documents and to still make that statement - contrary to the instructions of the SEARs and the moral weight of the Jukaan Gorge Inquiry- is paternalistic and offensive. As paragraphs [117]-[119] above demonstrate, it is a matter of best practice and factual accuracy that Governments and proponents accept that traditional owners know their own culture and lore. The PCWP, and any other knowledge holders for the Project area, must be the authority on their own culture. It is undeniable that the PCWP are knowledge holders in relation to the area. They were registered native title claimants (that is, the registration test was satisfied). In early 2021 the claim was withdrawn to adjust the boundaries of the area over which native title is asserted, and a revised native tile claim has been resubmitted.
    b. In any event, at law, the ACHAR is a report under the NSW planning scheme, not the Native Title Act. It is legally erroneous of the author to be using the Native Title Act, which involves a very different and narrower test, in the context of a statutory scheme where the test is significantly broader. Using this test also contradicts the guidance documents the proponent was required by the SEARs to use. This statement undermines the whole ACHAR and therefore the EIS and Assessment Report (particularly because the assessment report has repeated the erroneous claim) with respect to the assessment of heritage impacts. In addition, "directly and specifically" is inconsistent with the guidance documents that the proponent is required by the SEARs to have regard to, which stress the importance, in assessing significance, of viewing sites and objects as part of a cultural landscape.

[59] Draper 2022; Draper 2020a; Draper 2020b.

4.1.4 Impacts of the Project on heritage values are contrary to the public interest

122. As set out above, s 4.15 requires that the Commission must take into account (relevantly):
    a. the likely environmental impacts of the development,
    b. the likely social impacts,
    c. the economic impacts,
    d. the suitability of the site for the development,
    e. the public interest (including the principles of ESD).

123. Consideration of the public interest has been held to include consideration of the protection of Aboriginal cultural heritage.[60]

124. The Project's likely impacts on the heritage (Aboriginal and non-Aboriginal) values of the locality, as set out above, constitute unacceptable environmental and social impacts, and are contrary to the principles of ESD, in particular the principles of intergenerational equity and the precautionary principle. The principles of ESD apply to both the tangible and intangible values of Aboriginal cultural heritage.[61]

Intergenerational equity

125. The heritage impacts of the Project - with respect to Aboriginal cultural heritage and non-Aboriginal heritage – engage the principle of intergenerational equity.

126. Approval of the Project, and the destruction of the heritage significance of the Ravensworth Estate (notwithstanding any proposed relocation of the Homestead Structure) deprives current and future Wonnarua people, and particularly the PCWP families, from passing knowledge of that landscape to their young people, in the manner discussed, for example, by Aunty Barbara Foot above at [92] and by Mr Franks in his oral evidence to the Commission.[62]

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[60] Darkinjung Local Aboriginal Land Council v Minister for Planning and Infrastructure & Anor [2015] NSWLEC 1465 *Garrett v Williams* (2007) 151 LGERA 92; [2007] NSWLEC 96 per Preston CJ at [67]; *Kennedy v NSW Minister for Planning* [2010] NSWLEC 240, [56].
[61] *Anderson & Anor v Director-General of the Department of Environment & Conservation & Anor* (2006) 144 LGERA 43 per Pain J; *Darkinjung Local Aboriginal Land Council v Minister for Planning and Infrastructure & Anor* [2015] NSWLEC 1465 at [465].
[62] Day 2 Transcript.

127. Approval of the Project would also deprive the people of NSW of the highly significant heritage place of the Ravensworth Estate, and importantly, as Dr Gibson noted "to allow people in the contemporary generations to fully actually engage with and experience and try to understand the depth of the violence that lies at the root of their settlements that we actually now have in Australia, including in areas such as the Hunter Valley, where there was such terrible violence that was used to actually establish these homesteads in the first instance."

128. Mr Franks told the Commission that "if there's ever a call for intergenerational equity and reconciliation for the Wonnarua people, it's Ravensworth Estate".

Precautionary principle

129. The precautionary principle is also engaged in relation to Aboriginal cultural heritage.[63]

130. The Land and Environment Court in *Darkinjung Local Aboriginal Land Council v Minister for Planning and Infrastructure* [2015] NSWLEC 1465 found that "[a]pproving the [Calga Sand Mine] Project without having first obtained a full understanding of the heritage values of the Project site would be contrary to the precautionary principle."[64]

131. The Heritage Council advice in relation to the RTS on 9 December 2020 stated that, "In conclusion, the Heritage Council strongly supports Ravensworth Homestead being retained in its current original, highly significant location with a curtilage around its equally significant cultural landscape and does not agree with the rationale contained within the RTS that would allow for its removal and loss of significance. The Heritage Council reiterates that a precautionary principle should be adopted with respect to the potential loss of Aboriginal cultural heritage."

132. The DPE Assessment Report demonstrates a lack of certainty in respect of the impacts on the heritage values of (Aboriginal, non-Aboriginal, tangible and intangible) of the Ravensworth Estate. In those circumstances, approval of the Project would be contrary to the precautionary principle.

133. As Mr Seymour's evidence at the public hearing and at **Attachment A** notes**, "**the Commission should not be required to act on the incomplete information submitted by the Proponent. The usual

[63] *Kennedy v NSW Minister for Planning* [2010] NSWLEC 240 at [79]-[80].
[64] *Darkinjung Local Aboriginal Land Council v Minister for Planning and Infrastructure* [2015] NSWLEC 1465 at [481].

course would be to refuse an application unsupported by relevant and required information when there is a risk of real harm to Aboriginal cultural values".

4.2 Climate change impacts

4.2.1 The evidence

134. Our clients' evidence on the Project's climate change impacts is there is a strong factual basis that the approval of the Project at the current time is not in the public interest and is contrary to the principles of ESD, in particular:
    a the precautionary principle;
    b the principles of inter-generational equity;
    c conservation of biological diversity; and
    d the polluter pays principle.

135. Based on the facts set out below, our clients consider the correct and preferrable decision for the Commission would be to exercise its discretion to refuse the Project.

136. As the Commission is aware, 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 degrees Celsius (°C) above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. Failure to limit warming to these levels will result in significant negative impacts on the people and environment of NSW.

137. Our clients presented evidence to the Commission from Distinguished Professor Penny Sackett, a leading climate scientist and former Chief Scientist for Australia. Professor Sackett's evidence demonstrates the immediate nature of the climate threat and the contribution that decision in NSW can make to either enhancing this threat or supporting global efforts to reduce.[65]
138. Our clients also provide additional climate change materials that the Commision should have regard to [see Attachment G].

[65] Dr Penny D Sackett, "Expert Report to the NSW IPC on the Greenhouse Gas and Climate Implications of the Glencore Glendell Continued Operations Coal Project (SSD 9349 and SSD 5850 Mod 4)" [14]-[28] ("Professor Sackett Report").

139. As Professor Sackett highlights, characterising CO_2 emissions as scope 1, 2 or 3 makes no material difference to the impact the Project, if approved, will have on the NSW environment.[66] Whether the coal produced by the Project is burnt within or outside of NSW will not change the impact those emissions, once combusted, will have on the NSW environment.[67]

140. If the Project proceeds it will facilitate the emission of over 227.3 Mt of $CO_{2\text{-e}}$ over the life of the mine,[68] which has a foreseeable impact on the NSW environment because of its contribution to catastrophic climate change. As set out in more detail below, hazards induced by climate change are already impacting the NSW environment. These climatic hazards will increase in frequency, intensity, and duration if there is a failure to address GHG emissions, the main driver of anthropogenic climate change.

141. Based on the remaining carbon budget, there is no prospect of limiting global warming in line with the agreed limits of 1.5°C, or even below 2.0°C, if new coal mines or expansions to existing mines are approved.[69] Specifically, approving this Project will facilitate the emission of over 227.3 Mt of $CO_{2\text{-e}}$ into the Earth's atmosphere, which as Professor Sackett highlights is inconsistent with limiting global warming to the agreed limit of well below 2.0°C.[70]

142. In Professor Sackett's view, climate change is the greatest overall threat to the environment and people of NSW because it is comprehensively dangerous, global, fundamental, rapid, compounding, self-reinforcing, has delayed effects and, in some cases, is irreversible.[71]

143. Professor Sackett advises that GHGs emitted by human activities are responsible for essentially all of the global warming driving climate change.[72] The primary anthropogenic GHGs are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O).[73] Atmospheric concentrations of all these gases have risen dramatically since the 1960s at an accelerating rate.[74] The level of CO_2, the most important GHG driving current climate change, is now higher than at any other time humans have

[66] Professor Sackett Report page 99 at [286].
[67] Professor Sackett Report page 99 at [286].
[68] Professor Sackett Report page 99 at [285].
Professor Sackett Report pages 77, 107, 109 at [226], [305], [312].
[70] Professor Sackett Report pages 106 – 109 at [304]-[312].
[71] Professor Sackett Report pages 4, 131 at [11], [381].
[72] Professor Sackett Report pages 4, 16 at para [8], [58].
[73] Professor Sackett Report pages 4, 11 at para [9], [43].
[74] Professor Sackett Report pages 4, 12 at para [9], [47].

inhabited Earth and about 90% of the CO_2 emitted by humans per year is from the burning of fossil fuels: coal, gas, and oil.[75]

144. The current level of global warming is about 1.2°C above preindustrial times.[76] For comparison, the temperature difference between ice ages and the intervening periods is about 4–6°C.[77] Climate impacts are hitting harder and sooner than previous scientific assessments have expected.[78] In parts of NSW, some effects of climate change are already surpassing future 2030 projections published only two years ago for medium and high emission scenarios.[79]

145. Continued warming increases the risk that some subsystems of the Earth (Artic Sea ice, Amazon rainforest etc.) will cross irreversible "tipping points" accelerating the effects of climate change.[80] Professor Sackett explains that if an irreversible tipping point is crossed, it will cause subsystems of the Earth to rapidly collapse, one initiating another, to create a cascade of transformations that result in what has been dubbed a `Hothouse Earth.'[81] If such a cascade in a domino effect were to occur, the result would be an unrecognisable landscape for current ecosystems and human civilisation.[82]

146. On the basis of the foregoing, Professor Sackett says it is reasonable to state that unabated climate change is the greatest threat to the environment and people of NSW.[83] As such, our clients consider the Commission would be justified in the circumstances, in making a finding that the Project it is not in the public interest.

[75] Professor Sackett Report pages 4, 15 at para [9]-[10], [53].
[76] Professor Sackett Report page 4, at para [12].
[77] Professor Sackett Report page 4, at para [12].
[78] Professor Sackett Report pages 5, 57 at para [18], [167].
[79] Professor Sackett Report page 5, at para [18].
[80] Professor Sackett Report pages 4, 28 at para [13], [92].
[81] Professor Sackett Report page 28 at para [92].
[82] Professor Sackett Report page 28 at para [92].
[83] Professor Sackett Report page 28 at para [94].

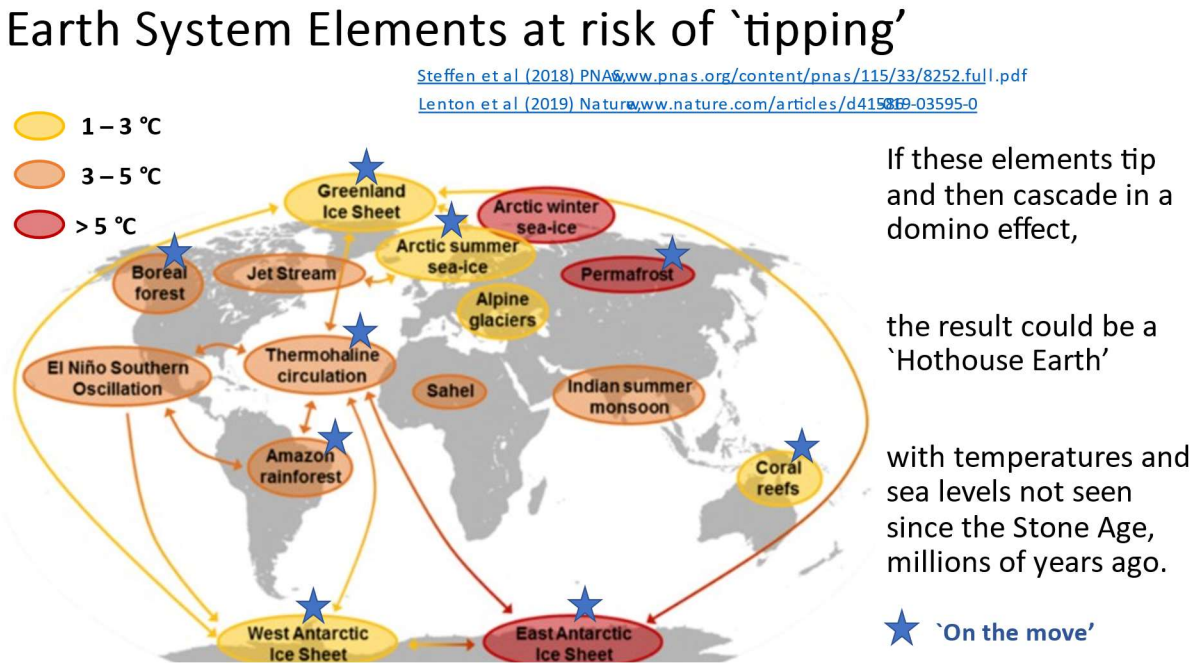

Figure 1 – Earth subsystems at risk of crossing tipping points accelerating global warming leading to future 'Hothouse Earth' state.

147. Professor Sackett says it is uncertain precisely where this `Hothouse' threshold may lie, but it could be as close as a few decades away, that is, at or just beyond 2°C of warming.[84] Some subsystems already show signs of approaching these transitions, with the systems marked with a star on the above diagram being 'on the move'. Based on the remaining carbon budget, no new fossil fuel developments including expansions to existing projects are compatible with a 2°C scenario.[85] Therefore, if approved, the Project will increase the likelihood an irreversible tipping point is crossed.

148. As the climate warms, climatic hazards will increase in severity, duration, frequency, and geographic spread.[86] This will make it difficult for any government to prevent or mitigate the impact of such hazards through adaptation strategies.

[84] Professor Sackett Report page 28 at para [93].
[85] Professor Sackett Report pages 77, 107, 109 at [226], [305], [312].
[86] For example, Professor Sackett discusses the increase in severity and frequency of extreme heat events, fires, and heavy precipitation at para [130], [134], [171], [184]-[185], [200], [326].

149. Current effects of climate change worldwide include increased severity of storms and heat waves, species extinction, wildfires, coastal inundation from rising sea levels and increased storm surges.[87] Australia is already experiencing dramatic climate change consequences. Most years in Australia are now warmer than almost any year in the 20th Century.[88] Australia's climate has already warmed on average by 1.4°C ± 0.24°C since national record keeping began in 1910.[89] Long-term increases in extreme fire weather and fire-season length are seen across the country.[90] Flash droughts now happen so quickly that farmers find it difficult to adapt.[91] Three billion individual native vertebrates perished in the Black Summer fires.[92] Australians are five times more likely to be displaced by a climate-fuelled disaster than someone living in Europe.[93]

150. NSW has borne the brunt of many of these changes.[94] For example, 37% of the State's rainforests were fire-affected during Black Summer, including over half of the Gondwana Rainforests.[95] In some cases, local tipping points in these forests may have already been crossed.[96] The short-term NSW health costs associated with smoke exposure is estimated to be $1.07 billion, more than any other State.[97]

151. Events like the recent 2022 floods where torrential rain caused catastrophic flooding in far-north NSW and parts of Sydney will increase in frequency and intensity. During the 2022 Australia floods:

- At least 22 people were reported to have died;[98]
- NSW SES reported over 932 rescues were conducted;[99] and
- a significant number of people were affected including half a million people in Sydney who were placed under evacuation orders.[100]

[87] Professor Sackett Report pages 4, 100 at para [14], [100].
[88] Professor Sackett Report pages 5, 33 at para [15], [106].
[89] Professor Sackett Report pages 34 at para [106].
[90] Professor Sackett Report pages 35 at para [106].
[91] Professor Sackett Report pages 37 at para [107].
[92] Professor Sackett Report pages 15, 41 at para [5], [123].
[93] Professor Sackett Report pages 15, 41 at para [5], [123].
[94] Professor Sackett Report page 5 at para [16].
[95] Professor Sackett Report page 5 at para [16].
[96] Professor Sackett Report page 5 at para [16].
[97] Professor Sackett Report page 5 at para [16].
[98] Professor Sackett Report page 46 at para [136].
[99] Professor Sackett Report page 46 at para [136].
[100] Professor Sackett Report page 46 at para [136].

152. Our clients note that at the time of writing, parts of northern NSW were experiencing a second flooding event, with an estimated 20,000 people impacted. [101] Nine evacuation orders are still in place across the Northern Rivers, and for some residents this is the second time their property has been inundated in just four weeks.[102]

153. Professor Sackett says it remains to be seen whether the costs of the Black Summer Bushfires will be surpassed.[103]

154. Although not enough time has elapsed for a scientific attribution study on this particular anomaly, Professor Sackett opines the 2022 Australia floods are entirely consistent with expectations for climate change with parts of NSW recording record flood level peaks.[104] Increasingly extreme rainfall events and flooding due to global warming have been predicted for Australia and NSW.[105]

155. Professor Sackett explains that the likelihood of extreme rainfall events increases as the climate changes because:

    a as the Earth's temperature warms, the more water vapour the atmosphere can hold;[106]
    b for every 1°C of warming extreme daily precipitation event are projected to intensify by about 7% (high confidence);[107] and
    c the frequency of extreme rainfall events is expected to increase doubling with each 1°C of global temperature rise.[108]

156. Critically, projected increases in direct flood damages are higher by 1.4 to 2 times at 2°C and 2.5 to 3.9 times at 3°C compared to 1.5°C of global warming without adaptation.[109]

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[101] Luisa Rubbo and Donna Harper, "Northern NSW floodwater recede but it may take longer for some communities to return home" (ABC News, Online, 02 April 2022). < https://www.abc.net.au/news/2022-04-02/floodwaters-recede-northern-nsw-evacuation-orders-in-place/100961464>.
[102] Luisa Rubbo and Donna Harper, "Northern NSW floodwater recede but it may take longer for some communities to return home" (ABC News, Online, 02 April 2022). < https://www.abc.net.au/news/2022-04-02/floodwaters-recede-northern-nsw-evacuation-orders-in-place/100961464>.
[103] Professor Sackett Report page 5 at para [16].
[104] Professor Sackett Report page 46 at para [135].
[105] Professor Sackett Report page 45 at para [134].
[106] Professor Sackett Report page 45 at para [134].
[107] Professor Sackett Report page 45 at para [134].
[108] Professor Sackett Report page 45 at para [134].
[109] Professor Sackett Report page 47 at para [138].

157. Professor Sackett opines in three years, eastern Australia has gone from unprecedented extremes in drought, heat and bushfire, to unprecedented extremes in rainfall and flooding, sometimes in the same geographical areas.[110] The 2022 Australian Floods have therefore placed an additional burden, particularly in NSW and Queensland, on communities and environments not yet fully recovered from climate extremes experienced just a two to three years ago.[111]

158. As Professor Sackett highlighted during the hearing, the trajectory of human emissions, particularly between now and 2030, is the most important determinant of how much more climate change is in store.[112] Already, human choices have essentially ensured that 1.5°C of warming will happen in the next two decades.[113] If the trend of rising emissions continues, in just 80 years global warming could be 3°C – 4°C above pre-industrial temperatures.[114]

159. The world is emitting greenhouse gases on a trend that would lead to substantially more dangerous climate change.[115] Nations that have committed to reducing emissions by 2030 have done so on average by only 7.5%, whereas a 30% reduction (on 2010 levels) is needed to limit warming to well below 2°C and a 55% reduction is needed to limit warming to 1.5°C. Australia's 2030 emissions reduction target is consistent with global warming of 4°C if all other countries followed a similar level of ambition.[116]

160. Based on current policies, as opposed to Paris Agreement pledges, warming could go as high as 3.6°C.[117]

161. Only about 8 years remain at current emission levels before the remaining global carbon budget to hold warming to 1.5°C with at least a 67% chance is exhausted.[118] Australia's and NSW's "share" of this budget would be exhausted in 3 and 4 years, respectively.[119]

[110] Professor Sackett Report page 45 at para [133].
[111] Professor Sackett Report page 45 at para [133].
[112] Professor Sackett Report page 5 at para [17].
[113] Professor Sackett Report page 5 at para [17].
[114] Professor Sackett Report page 5 at para [17].
[115] Professor Sackett Report page 8 at para [20].
[116] Professor Sackett Report page 8 at para [20].
[117] Professor Sackett Report page 8 at para [21].
[118] Professor Sackett Report page 8 at para [22].
[119] Professor Sackett Report page 8 at para [22].

162. In order to have even a 50% chance of holding warming to 1.5°C, globally, 58% of oil, 59% of fossil methane gas, and 89% of coal reserves must not be extracted.[120] Despite this, governments are still planning to produce about 45% more fossil fuels by 2030 than would be consistent with a 2°C pathway and more than double than would be consistent with a 1.5°C pathway.[121]

163. Professor Sackett opines that NSW could play a major role in limiting climate change by quickly reducing its production of fossil fuels, particularly those which are exported.[122] The emissions caused by combusting the black coal NSW produces are three times more damaging to the NSW environment than its own direct emissions.[123]

164. In Professor Sackett's opinion, the Project is inconsistent with holding global warming to well below 2°C.[124] The proponent itself concedes `the Project is consistent with the A2 SRES emissions scenario'[125] which is consistent with 3-4°C of warming by 2100.[126]

165. Despite being operational for only a portion of this decade, the scope 1 and 2 emissions from the Project alone would make it 11% more difficult for Australia to meet it 2030 emission target.[127] Furthermore, the Project would make it 5% more difficult for NSW to meet its 2030 target.[128] Although, as noted above, Australia's 2030 emissions reduction target is consistent with global warming of 4°C if all other countries followed a similar level of ambition.[129]

166. Professor Sackett says that most of the Project's scope 1 emissions are from methane (CH_4)[130] and because the Proponent has measured the Projects scope 1 emission in the outdated GWP values, specifically Mt CO_2-e**,** there is an underestimation of scope 1 emissions for the Project.[131]

[120] Professor Sackett Report page 8 at para [23].
[121] Professor Sackett Report page 8 at para [23].
[122] Professor Sackett Report page 8 at para [24].
[123] Professor Sackett Report page 8 at para [24].
[124] Professor Sackett Report page 8 at para [27].
[125] Professor Sackett Report page 8 at para [27].
[126] Professor Sackett Report page 109 at para [311].
[127] Professor Sackett Report page 8 at para [26].
[128] Professor Sackett Report page 8 at para [26].
[129] Professor Sackett Report page 8 at para [20].
[130] Professor Sackett Report page 98 at para [282].
[131] Professor Sackett Report page 98 at para [282].

167. Professor Sackett says that a recent surge in atmospheric methane over the past decade is attributed in equal parts to agriculture (particularly livestock) and fossil fuels.[132] If the Project is approved, it will continue to emit additional methane long after the mine is closed.[133] Noting if Australia fails to reduce its methane emissions much more quickly, its share of the remaining carbon budget will shrink even faster.[134] While NSW is on its way to achieving this specific 2030 goal for methane, approving further coal projects, whose primary Scope 1 emissions are from fugitive methane, has the potential to derail the effort.[135]

168. An argument that the Project emissions represent a very small fraction of national or global emissions is irrelevant and misleading.[136] The facts simply do not support such a conclusion. If individual consent authorities around the world were to accept this argument and act upon it to approve fossil fuel expansion projects, the climate change predicament would, per force, continue to worsen.[137] The climate change externalities of the Project will be borne disproportionately by younger and future generations, with no clear recourse or path to remediation.[138]

169. From a scientific perspective, all emissions, including Scope 3 emissions released when fossil fuels are combusted by any end user, must be included when considering environmental and social effects, including local environmental and social effects.[139] To do otherwise is to assume that the fuel is never used for its intended purpose.[140]

170. All three emission scopes have an equal effect on the climate of NSW on a per tonne basis, but due to the magnitude of Scope 3 emissions, Scope 3 dominates in its effect on the NSW environment.[141] In Professor Sackett's expert opinion, one question for the Commission is whether approving the Project will result in GHG emissions that unnecessarily, and in some cases irreversibly, damage the environment of NSW. She would contend that the answer is yes, regardless of where the Project's

[132] Professor Sackett Report page 58 at para [56].
[133] Professor Sackett Report page 106 at para [303].
[134] Professor Sackett Report page 85 at para [247].
[135] Professor Sackett Report page 92 at para [268].
[136] Professor Sackett Report page 131 at para [383].
[137] Professor Sackett Report page 131 at para [383].
[138] Professor Sackett Report page 131 at para [383].
[139] Professor Sackett Report pages 9, 117 at paras [30], [334].
[140] Professor Sackett Report pages 9, 117 at paras [30], [334].
[141] Professor Sackett Report page 99, at para [286].

GHG emissions occur geographically.[142] Project Scope 3 emissions have an identical effect on NSW's future climate – on a tonne per tonne basis – as do the Project Scope 1 emissions.[143]

171. Importantly in Professor Sackett's view, the Conditions of Approval do not address the most important component of the Project's emissions that affect the environment of NSW: Scope 3 emissions.[144]

172. The Commission should accept each of the opinions expressed by the distinguished Professor Sackett, and in doing so would be justified in reaching a conclusion that the Project should be refused.

173. Our clients submit that 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 facts strongly support a refusal decision. As such, if the Commission refuses consent to the Proponent's development application, such an exercise of its discretion is justified in the circumstances because the Project's approval is contrary to the public interest.

174. The proponent says the total emissions for the Project over the life of the mine will be:

    (a) Scope 1 emissions - 9,932,087 tonnes $CO_{2\text{-}e}$

    (b) Scope 2 emissions – 457,710 tonnes of $CO_{2\text{-}e}$

    (c) Scope 3 emissions - 220,423,822 tonnes of $CO_{2\text{-}e.}$[145]

    Being a total of 230,814,000 tonnes of $CO_{2\text{-}e}$ over the life.[146]

175. As Professor Sackett has highlights the total emissions from the Project over the life of the Project, factoring in the miscalculation of Scope 1 emissions are likely to be at least 227.3 Mt of $CO_{2\text{-}e}$.[147] As outlined above, the characterisation of emissions as scope 1, 2 or 3 makes no difference to the impact the Project will have on the NSW environment.[148]

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[142] Professor Sackett Report page 122 at paras [345].
[143] Professor Sackett Report page 89, at para [258].
[144] Professor Sackett Report pages 10, 129 at paras [38], [376].
[145] Glencore, "appendix 28 Greenhouse Gas and Energy Assessment – Glendell Continued Operations Project" (November 2019), executive summary.
[146] Glencore, "appendix 28 Greenhouse Gas and Energy Assessment – Glendell Continued Operations Project" (November 2019), executive summary.
[147] Professor Sackett Report page 99 at para [258].
[148] Professor Sackett Report page 99, at para [286].

176. By way of comparison, in 2020, the *total* volume of GHG emissions attributable to Australia was estimated in 2020 to be 499 Mt $CO_{2\text{-}e}$.[149]

177. Even taking *just* the Scope 1 and 2 emissions, the average annual emissions from the Project over its operational lifetime are 0.349 Mt CO_2-e, approximately 0.33% of Australia's current annual emissions.[150] Self-evidently, the proportion of the total would *increase* if Australia's total GHG emissions fall over time over the life of the Project.

178. In Professor Sackett's opinion, based on the remaining carbon budget the Project is inconsistent with holding global warming to well below 2°C.[151] Continued warming increases the risk and likelihood an irreversible tipping point may be crossed causing the Earth's subsystems to rapidly collapse, one after the other in a cascade in a domino effect resulting in a 'Hothouse Earth'.[152] If such a future eventuates, it will bring devastating consequences for the NSW environment,[153] some of which we are already beginning to see.[154]

179. As such, the correct and preferable exercise of the Commission's discretion is to refuse the Project because it would result in an unacceptable impact on the NSW environment. At this point in time, such development is not in the public interest as elaborated further below.

180. Acceptance of the scientific facts of climate change set out above is not unprecedented, the EPA and State of NSW have previously accepted the scientific facts related to climate change as set out below.

4.2.2 Matters that the EPA and the State of NSW have accepted, and which should be found by the Commission

181. It is convenient to say something about facts which the Environment Protection Authority (**EPA**) has agreed.

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[149] Department of Industry Science, Energy and Resources, "Quarterly Update of Australia's National Greenhouse Gas Emissions inventory: December 2020 – Australia's National Greenhouse Accounts < https://www.industry.gov.au/sites/default/files/2021-05/nggi-quarterly-update-december-2020.pdf>
[150] Professor Sackett Report page 101, at para [292].
[151] Professor Sackett Report pages 8, 109, at paras [27], [312].
[152] Professor Sackett Report page 28 at para [92].
[153] Professor Sackett Report page 28 at para [92].
[154] Professor Sackett Report at [5.2]-[5.3].

182. Our clients' submission is that the Commission can give weight to the fact that the EPA has agreed each of these facts and should adopt each of them.

183. The facts were admitted by the EPA in the context of Land and Environment Court proceedings, namely *Bushfire Survivors for Climate Action Incorporated v Environment Protection Authority* [2021] NSWLEC 92.

184. The EPA is relevantly "a statutory body representing the Crown" in right of the State of New South Wales: *Protection of the Environment Administration Act 1991* (NSW) s 5(2). Admissions by the EPA are thus admissions by the State of New South Wales.

185. The facts admitted by the EPA are as follows: see *Bushfire Survivors for Climate Action Incorporated v Environment Protection Authority* [2021] NSWLEC 92 at [76]:

> 1 Emissions of carbon dioxide (**CO2**) and other greenhouse gases from human activity (including power generation, industry, transport and agriculture) cause a build-up of greenhouse gases in the atmosphere.
>
> 2 The build-up of greenhouse gases in the atmosphere traps heat.
>
> 3 The build-up of greenhouse gases in the atmosphere leads to global warming, also known as climate change.
>
> 4 Anthropogenic greenhouse gas emissions contribute to anthropogenic climate change.
>
> 5 Once emitted, greenhouse gases disperse throughout the global atmosphere where they act cumulatively to contribute to anthropogenic climate change.
>
> 6 Anthropogenic climate change has the potential to adversely alter all aspects of the natural environment.
>
> 7 Anthropogenic climate change has the potential to irreversibly alter all aspects of the natural environment.

8 Direct and indirect greenhouse gas emissions from activities in New South Wales impact on the environment.

9 NSW and Queensland are the two main producing states for black coal in Australia.

10 Australia is one of the world's largest producers and exporters of coal.

11 Global average surface temperature is approximately 1 degree Celsius (ºC) higher than pre-industrial levels as at June 2020.

12 Australia's climate has warmed by just over 1°C since 1910.

13 2019 was Australia's warmest and driest year on record.

14 Globally, 2019 was the warmest year on record without the influence of El Niño.

15 As of 2018, eight of Australia's top ten warmest years on record had occurred since 2005.

16 As of 2018, sea surface temperature in the Australian region has warmed by around 1°C since 1910.

17 Eight of the ten warmest years for sea surface temperature on record have occurred since 2010 as at June 2020.

18 Anthropogenic greenhouse gas emissions have caused changes in the basic circulation patterns of the atmosphere and the ocean.

19 Anthropogenic greenhouse gas emissions have caused increases in intensity and frequency of many extreme weather events.

20 Anthropogenic greenhouse gas emissions have caused increases in acidity of the oceans.

21 Anthropogenic greenhouse gas emissions have caused rise in sea levels and consequent increases in coastal flooding.

22 Anthropogenic greenhouse gas emissions have caused intensification of the hydrological cycle.

23 Anthropogenic greenhouse gas emissions have caused increases in the frequency and/or duration of heat waves.

24 Anthropogenic greenhouse gas emissions have caused increases in the intensity and/or duration of drought.

25 Anthropogenic greenhouse gas emissions have caused or contributed to an increase in the frequency of extreme heat events in Australia.

26 Anthropogenic greenhouse gas emissions have caused or contributed to a decrease in April to October rainfall of approximately 11 per cent since the late 1990s.

27 Anthropogenic greenhouse gas emissions have caused or contributed to sea levels rising around Australia.

28 Warming of the ocean around Australia has contributed to longer and more frequent marine heatwaves.

29 Anthropogenic greenhouse gas emissions have caused or contributed to marine heatwaves and mass bleaching events on the Great Barrier Reef in 2016 and 2017.

30 Oceans around Australia are acidifying.

31 Acidification of oceans has led to a reduction in coral calcification and growth rates on the Great Barrier Reef, which impacts recovery from coral bleaching.

32 The climate of New South Wales is changing due to global warming.

33 Anthropogenic greenhouse gas emissions have caused a 1°C increase in average temperature in New South Wales as between the period 1960–90 and 1990 to 2018.

34 Anthropogenic greenhouse gas emissions have caused the number of hot days across NSW to increasing since the mid-20th century.

35 Anthropogenic greenhouse gas emissions have caused the number of cold nights (temperatures dropping to less than 2°C overnight) to decrease since the mid-20th century.

36 In the period 1911–2013, heatwaves in parts of NSW have become longer, hotter and more frequent.

37 Australia is a signatory to the Paris Agreement.

38 Climate change cannot meaningfully be addressed without multiple local actions to mitigate emissions by sources and remove greenhouse gas emissions by sinks.

39 Global greenhouse gas emissions are currently rising.

40 If there is a 1.5-2.0°C temperature rise (relative to the period 1850-1900), the risk of widespread impacts on the most vulnerable would rise from moderate towards high.

41 If there is a 1.5-2.0°C temperature rise (relative to the period 1850-1900), the aggregated impacts of climate change around the world will increase political tensions and instabilities.

42 If there were a 4°C temperature rise (relative to the period 1850-1900) above preindustrial levels, there is a high to very high risk that most of the world's ecosystems would be heavily damaged or destroyed.

43 If there were a 4°C temperature rise (relative to the period 1850-1900) above preindustrial levels, extreme weather events would be far more severe and frequent than today.

44 If there were a 4°C temperature rise (relative to the period 1850-1900) above preindustrial levels, the most vulnerable people would increase greatly in number and, as large areas of the world become uninhabitable, migration and conflict would escalate.
45 If there were a 4°C temperature rise (relative to the period 1850-1900) above preindustrial levels the aggregated impacts around the world would significantly damage the entire global economy.

46 If there were a 4°C temperature rise (relative to the period 1850-1900) above preindustrial levels, a cascade of intrinsic tipping points in the climate system could drive ongoing strong warming even if action was taken to reduce emissions.

186. It is open to the Commission to give weight to the fact that the State of New South Wales has admitted these facts in proceedings in a superior court.

187. The Commission should make findings of fact corresponding with each of the matters in paragraph185.

4.2.3 Matters the Commission can find in relation to greenhouse gas emissions having regard to the *Rocky Hill* decision

188. The Commission can also have regard, and give weight, to the findings of the Land and Environment Court in ***Gloucester Resources*** *Limited v Minister for Planning* [2019] NSWLEC 7.

189. In particular, the Commission can have regard to the following findings:

(a) Emission of greenhouse gases impacts the environment: *Gloucester Resources* at [431].
(b) Greenhouse gases change the climate by trapping outgoing heat from the earth's surface and retaining it in the lower atmosphere and at the surface, thus increasing the energy of the climate system and raising its average temperature: *Gloucester Resources* at [431].
(c) The direct and indirect emissions of a development contribute to the cumulative impacts of climate change: *Gloucester Resources* at [493].
(d) All anthropogenic GHG emissions contribute to climate change: *Gloucester Resources* at [514].
(e) "[C]limate 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 these myriad of individual sources": *Gloucester Resources* at [516].

190. The Commission should find as facts the matters set out in paragraph [189]185.

4.2.4 Greenhouse gas emissions and likely impacts: response to the proponent's position

191. Appendix 29 of the EIS is titled "Glencore Observations on Recent Climate Change and GHG Emissions Litigation".

192. It is beyond the scope of these submissions to respond to every contention made in that document; however, we note that:

a. the proponent's arguments with respect to the relevance of both the *Rocky Hill* and *Wallarah 2* decisions to the task before the Commission are misconceived;
b. since the date of that document, October 2019, a number of significant judgments have been handed down by courts in NSW and in other Australian jurisdictions, including

Bushfire Survivors and *Kepco*, which provide further context as to both the factual and legal task before the Commission;

c. also since the date of that document, the impacts of climate change on the environment of NSW and on the people of NSW have become more apparent and the scientific evidence shows that the task of stabilizing (and indeed, reducing) the atmospheric concentration of GHGs is significantly more urgent than previously anticipated see above at [Professor Sackett's Figure 1 – Earth subsystems at risk of crossing tipping points accelerating global warming leading to future 'Hothouse Earth' state.].

193. The Proponent seeks to completely disregard the impact of the vast majority of its GHG emissions:

> The Scope 2 and 3 emissions associated with the Project should not be considered, as global projections only represent Scope 1 emissions (i.e. the sum of all individual emission sources) as Scope 2 and 3 emissions of the Project are the Scope 1 emission of other parties.[155]

194. The proponent does accept Scope 3 emissions may be considered by the consent authority.[156] But goes onto say little weight should be given by the Commission because:
    a The issue of double counting GHG emissions when the *Paris Agreement* and domestic legislation clearly intend for double counting to be avoided;[157]
    b it is for the consent authority to determine how much weight is to be attributed to the relevant social, economic and environmental factors associated with the Project (including the climate change impacts and GHG emissions of the Project) that should not be restricted by the *Rocky Hill* or other case law cited by that judgment;[158] and
    c there are legal and policy reasons why the consent authority should not, as a result of its consideration of Scope 3 emissions, seek to impose conditions of development consent on the Project which require any offset of GHG emissions.[159]
195. Even based on this standard, Professor Dr Penny Sackett's evidence set out in summary above at [4.2.1 The evidence], weighs heavily in favour of a refusal.

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[155] Glencore, "Glendell Continued Operations project – Environmental Impact Statement" (November 2019) at page 497 [7.13.3.5].
[156] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 26 at [1.100].
[157] Ibid.
[158] Ibid.
[159] Ibid.

196. Our client notes, the Commission is not prohibited from considering the *Rocky Hill* decision and its reasoning. The *Rocky Hill* decision is not legal precedent, it is persuasive authority. Furthermore, the decision has been placed before the Commission in submissions and is relevant to the Commission's task and as such must be considered under s 4.15(1)(d) of the EP&A Act.

197. Contrary to what the proponent says about "double counting" emissions, the correct position to adopt that is available on the materials before the Commission, is it matters not to which country CO_2 emissions are attributed under international law for accounting purposes; the impact of all emissions facilitated by the Project will be felt on the NSW environment. As such, all emissions must be considered in any assessment as to the impacts the Project will have on the NSW environment.

198. The proponent makes a number of submissions concerning the countries to which greenhouse gas emissions are attributed under the Paris Agreement. For instance, at EIS 7.13.3.7 "Impact on policy objectives" it says:

> Glencore has reviewed the Project's forecast GHG emissions inventory and advises that it believes the Project is unlikely to materially increase the national effort required to reach Australia's 2030 GHG mitigation target. Glencore also notes that the policy framework provides little assistance to the consent authority (and cannot meaningfully guide the task of the consent authority) in determining the development application. The policy framework does not include any objectives capable of being applied by the consent authority in the context of this Project refer to Appendix 29). The policy also does not prescribe the mechanisms by which reductions in GHG emissions are to occur as there are no set prescriptive emission reduction criteria.
>
> The Project's Scope 2 and 3 emissions will be generated in either international jurisdictions, or by Australian facilities with separate environmental approval to generate greenhouse gas emissions.

199. It goes on to say:

> Scope 3 emissions are indirect emissions that are associated with the Project but occur at sources owned or controlled by other entities. Scope 3 emissions simply acknowledge that products will continue to generate GHG emissions as they move through a value chain. The Project's Scope 3 emissions are forecast to be generated by electricity generators burning coal in countries such as China, Japan, South Korea and Taiwan.
>
> Most of the product coal generated by the Project will be exported to countries who are parties to the Paris Agreement. These countries have, or are in the process of developing, domestic laws, policies, and measures to mitigate greenhouse gas emissions (to achieve their NDC targets or commensurate climate change policies), refer to Appendix 28 for further detail.

200. These assertions are echoed by the DPE in its assessment report at [336]-[339].

201. Mr O'Donoghue for the DPE during the public hearing restated the DPE's position that:

> "... we're looking at it from the Commonwealth and policy settings that, that we're required to consider the project, you know, which is the, the Paris Agreement, the Commonwealth, Commonwealth commitments under the, for Australia's nationally determined contribution under the Paris Agreement, but also the policy context in terms of who's responsible for the scope 3 emissions and what other countries are doing to, to reduce their scope 3 emissions in the global context. So, so we have considered all that in our assessment report in terms of the contribution of, of this mine to emissions globally, and, and have made, made recommendations on the basis of that, of that policy setting that we are required to consider the project."[160]

202. This clearly demonstrates the factual and legal errors into which the proponent and DPE have fallen. The conflation of the direction in cl 14 of the Mining SEPP to consider relevant policies and the requirement of s 4.15 to consider environmental, social, and economic impacts is incorrect. Even *if* (and our clients say this is legally incorrect in any event) the consideration of the policy context for the purpose of cl 14 of the Mining SEPP required Scope 3 emissions to be treated as a problem for another jurisdiction to deal with, s 4.15 does not. The impact of the GHGs generated, directly or indirectly by the Project on the environment on NSW must be considered by the decision-maker. This includes its Scope 3 emissions.

203. The submissions set out above appear to have two purposes. The first is to invite the Commission to disregard the Project's Scope 3 emissions because they are some other or country's responsibility. The second is to invite the Commission to find that the Scope 3 emissions of the Project will not contribute to anthropogenic climate change because the countries of end-use will implement measures to offset the contribution of the emissions to climate change.

204. The Commission should not accept either of these invitations.

205. As to the first invitation. The issue before the Commission is not which country, as a matter of international law, is obliged to account for the Scope 3 emissions of the Project under that country's nationally determined contributions (**NDC**). The immediate issue before the Commission is the likely

[160] Transcript of proceedings – public hearing day 2 (21 March 2022) re: Glendell continued operations project (SSD-9349) and Mount Owen continued operations mod 4 project (SSD -5850 -Mod 4) p-75.

impacts of the Project on the environment of NSW. As stated by Professor Sackett, all three emission scopes have an equal effect on the climate of NSW on a per tonne basis, but due to the magnitude of Scope 3 emissions, Scope 3 dominates.[161] Anthropogenic climate change and the adverse consequences therefrom are *still* likely impacts of the Project's contribution to global greenhouse gas emissions *even if*, as a matter of international law, a country other than Australia is obliged to account for those emissions towards its nationally-determined contribution.

206. As to the second invitation. This contention is wholly speculative.

207. The Proponent submits that the vast majority of export destinations are likely to be parties to the Paris agreement including Japan, China, South Korea, Taiwan, India, Malaysia, the Philippines and Vietnam (**export countries**).[162] But also makes a disclaimer that "there may well be other countries to which the Project's coal is exported from time-to-time during the Projects life of mine".[163]

208. Our clients note the Proponent has provided no factual basis, being evidence demonstrating those countries are the likely to be export countries that will buy the coal extracted from the Project. Taiwan, which the Proponent acknowledges is also not a party to the Paris Agreement.

209. Despite this, the Proponent sets out information about those countries domestic laws, policies and measures of export countries directed towards climate change impacts, GHG emissions and achievement of those countries NDCs.[164] The suggestion that Scope 3 emissions will be addressed because countries of end use will have their own Paris Agreement commitments. It is, however, speculative that countries of end use will:
    a be both parties to the Paris Agreement; *and*
    b will comply with their obligations under that Agreement; *and*
    c will have obligations under that Agreement which are consistent with minimising the impacts of climate change.

[161] Professor Sackett Report page 99, at para [286].
[162] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 14 [1.37].
[163] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) see footnote on page 14.
[164] Appendix 29, "Glencore observations on Recent Climate Change and GHG emissions Litigation" (October 2019) appendix 2 domestic laws, policies and measures of export countries directed towards climate change impacts, GHG emissions and achievement of the countries NDC.

210. There can be little confidence in such speculation when the Proponent provides no evidence these countries will in fact be the export countries, particularly when there is a disclaimer attached that there may be other export countries from time to time.[165]

211. Furthermore, the Commission when undertaking its task under the EP&A Act must determine the likely impacts of the Project and the public interest, *not* precisely how the emissions will be accounted for under the Paris Agreement. Such information does not assist the Commission in the statutory task it must undertake when assessing the environmental impact of the Project.

212. The proponent's arguments regarding the "double counting" of emissions are illogical in within the statutory context that the Commission must make its decision. The Project is being assessed a project basis for its impact among other things on the NSW environment. The Project is not assessed on a global basis, so it is not possible for the emissions to be "double counted" in the context of the Commission's decision. Our clients only seek that the GHG emissions for the Project are taken into account.

213. Even then, a contribution to climate change remains a contribution to climate change whether or not the country burning the coal is a party to the Paris Agreement. The proponent does not attempt to establish, or even assert, that global greenhouse gas emissions would be the same or higher if the project were not approved.

214. It must also be noted that the proponent's assertion that the "policy framework does not include any objectives capable of being applied by the consent authority in the context of this Project"[166] has been comprehensively rebutted by the NSW Court of Appeal in *Kepco*, in which it was found that "applicable", in the context of cl 14(2) of the Mining SEPP has a broad meaning and that a range of policies, including the NSW Climate Change Policy Framework, are capable of being applied to the task of determining whether a coal mine ought to be approved under the EP&A Act.[167]

215. The Proponent asserts the "NSW Climate Change Policy Framework provides little, if any, assistance to the consent authority in determining the development application for the Project and this view is

[165] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) see footnote on page 14.
[166] Glencore, "Glendell Continued Operations project – Environmental Impact Statement" (November 2019) at page 498 [7.13.3.7].
[167] *KEPCO Bylong Australia Pty Ltd v Bylong Valley Protection Alliance Inc* [2021] NSWCA 216 [185]-[188].

consistent with the decision of the Land and Environment Court in the matter of *Wollar Progress Association Inc v Wilpinjong Coal Pty Ltd* [2018] NSWLEC 92".[168] This proposition was rebutted in *Kepco*, the NSW Court of Appeal finding *Wollar* is not the authority that the NSW Climate Change Policy Framework was not, and could never be, an applicable State policy, program or guideline concerning greenhouse gas emissions under cl 14(2) of the Mining SEPP.[169]

216. Further, the assertion that 'the Project is unlikely to affect the objectives of the NSW Climate Change Policy Framework in a material way'[170] does not sit comfortably with the key policy directions set out in the framework. The Proponent has said that Scope 2 and 3 emissions for the Project should not be included, and yet, in its summary of the NSW climate change policy framework sets out a key policy direction is to reduce risks and damage to public and private assets arising from climate change.[171] All emissions associated with the Project will contribute to climate change which is already and will continue to impact the NSW environment as set out in Professor Sackett's evidence.[172]

217. In relation to the Australia's national efforts, the proponent 'believes' the Project is unlikely to materially increase the national effort to reach Australia's 2030 greenhouse gas mitigation target.[173] Evidence provided by Professor Sackett says otherwise see above at [165].

218. See also:

    a. EIS at p 497 "The Project, in isolation, is unlikely to materially influence global emission trajectories. Future emission trajectories will largely be influenced by global scale issues such as; technology, population growth and GHG mitigation policy. The extent to which global emissions and atmospheric concentrations of greenhouse gases have a demonstrable impact on climate change will be largely driven by the global response to reducing total global emissions that includes all major emission sources and sinks."

219. The EPA, in *Bushfire Survivors*, admitted that (at [76]) "Climate change cannot meaningfully be addressed without multiple local actions to mitigate emissions by sources and remove greenhouse gas

[168] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 23-24 at [1.89].
[169] *KEPCO Bylong Australia Pty Ltd v Bylong Valley Protection Alliance Inc* [2021] NSWCA 216 [184].
[170] Glencore, "Appendix 28 – Greenhouse Gas and Energy Assessment" page 20 at [4.3.2].
[171] Glencore, "Appendix 28 – Greenhouse Gas and Energy Assessment" page 20 at [4.3.2].
[172] Professor Sackett Report page 99, at para [286].
[173] Glencore, "Glendell Continued Operations project – Environmental Impact Statement" (November 2019) at page 498 [7.13.3.7].

emissions by sinks." As such, our clients say any suggestion or rather inference by the proponent that the Project in isolation is unlikely to have an impact on climate change is factually incorrect.

220. As Justice Bromberg found in *Sharma No 1*, the mine being the subject of the approval in that case was characterized as likely to make a small contribution to climate change.[174] However, his Honour said, the project's contribution was not so insignificant to deny its impact on climate change and the foreseeability of harm that would result as a consequence of it proceeding.[175] The facts in *Sharma No 1* were not overturned on appeal, the trial judge was entitled to make such findings on the facts before it.[176] Our clients also note the Vickery coal mine expansion is considerably smaller, less than half the size of the proposed Glendell expansion (Vickery coal mine will emit 100 Mt of CO_2, over the life of the mine compared to 227 Mt of CO_2).[177]

221. It may be noted that there is no mention at all of *any* steps to mitigate the *vast majority* of the Project's GHG emissions, namely, the Scope 3 emissions caused by the combustion of the coal to be mined by the Project.

222. In its assessment report DPE says:

> To ensure that GHG emissions are minimised to the greatest extent practicable, the Department has proposed a comprehensive suite of conditions that limit the emissions to no greater than predicted in the EIS through strict Scope 1 and Scope 2 performance measures, while also ensuring that new technologies and other options to further mitigate Scope 1 and Scope 2 GHG emissions would be regularly reviewed and implemented where feasible, through the preparation and implementation of an Air Quality Greenhouse Gas Management Plan in consultation with the EPA and the Department's CAS Branch. The plan includes 3 yearly review of abatement technologies, preparation of action plans and review of the performance measures to assist in reducing emissions through the life of the Project.[178]

[174] *Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment* [2021] FCA 560 [253].
[175] *Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment* [2021] FCA 560 [253].
[176] *Minister for the Environment v Sharma* [2022] FCAFC 35 [2].
[177] *Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment* [2021] FCA 560 [24].
[178] DPE, "Glendell Continued Operations Project – State Significant Development Assessment SSD 9349" (February 2022) at [342].

223. Neither DPE nor the proponent propose *any* conditions to minimise these Scope 3 emissions at all, let alone to the greatest extent practicable. Such absence of conditions regarding a development's Scope 3 emissions was considered by the Commission as a factor weighing against approval in its determination of the Bylong Coal Project: *KEPCO Bylong Australia Pty Ltd v Bylong Valley Protection Alliance Inc* [2021] NSWCA 216 at [44], [138]-[140]. The Court of Appeal found that there was no legal error in the Commission considering that a proponent's failure to proffer conditions regulating Scope 3 emissions was a factor militating against development consent. Therefore, the Commission can take into account a failure to propose a scope 3 condition or offsets as a factor weighing against the grant of development consent.

224. Instead of addressing the Project specific scope 3 emissions the proponent instead discusses how it as a corporation has a net zero by 2050 plan which includes scope 3 emissions. See:

    a. Appendix 29 "Appendix 1: Glencore's Corporate Initiatives concerning GHG emissions", also referred to in EIS 7.13.4 which is not relevant to the task before the Commission. Merely a list of actions the company is taking without any discussion of applicability of those actions to the project. Approval runs with the land, not the proponent.
    b. Appendix 29 [1.99-1.112] contentions relating to the impermissibility of the Commission imposing conditions on scope 3 emissions - are contrary to the finding of the NSWCA in *Kepco.*

225. The proponent says, there are legal and policy reasons why the consent authority should not, as a result of its consideration of Scope 3 emissions, seek to impose conditions of development consent on the Project which require any offset of GHG emissions.[179]

226. The Proponent argues that it would be unlawful to impose a consent condition requiring the offset of scope 2 and 3 GHG emissions because it would breach the *Newbury* test for a valid condition of development consent.[180] Our client says:

    1. there is no reasoning to support such a contention that a condition requiring offsetting would breach the *Newbury* test; and

[179] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 26 at [1.100].
[180] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 28 [1.112].

2. there is no reasoning to support the proposition the so-called "*Newbury* test" is even applicable.

227. Developed in England, the NSW Court of Appeal has observed that the *Newbury* test has not been adopted by either the High Court or the New South Wales Court of Appeal: *Botany Bay City Council v Saab Corp Pty Ltd* (2011) 82 NSWLR 171 at [66]-[69]). The Court have made it clear that even if the *Newbury* principles are relevant, they do not prescribe a rigid 'test": *Westfield Management Limited v Perpetual Trustee Company Limited* [2006] NSWCA 245 at [78]-[79] (Basten JA).

228. The correct approach to be followed is the scope of the power to impose conditions is a question of statutory construction: *Westfield Management Limited v Perpetual Trustee Company Limited* [2006] NSWCA 245 at [84] (Basten JA). Again:

- Section 4.38(1) of the EP&A Act states that the consent authority is to determine a State significant development application by "granting consent to the application with such modifications of the proposed development or on such conditions as the consent authority may determine" or "refusing consent to the application".
- Section 4.17 of the EP&A Act provides "[a] condition of development consent may be imposed if … (a) it relates to any matter referred to in section 4.15(1) of relevance to the development the subject of the consent": s 4.17(1)(a).

229. The proponent does concede that climate change impacts are matters which the Commission can consider under s 4.15(1) as part of the public interest[181] and, that being so, s 4.17(1)(a) *expressly* authorises the imposition of conditions relating to climate change impacts.

230. Our clients argue there is there is little difficultly in establishing that imposing a condition directed to mitigating climate change impacts of the Project including one requiring all GHG emissions be offset is, in fact valid within the statutory framework. This is further supported by cl 14 of the Mining SEPP which *expressly* authorises the Commission to consider the downstream emissions of the development. As such, our clients say the Commission would be correct in rejecting the proponent's arguments in relation to the imposition of conditions requiring the scope 2 and 3 emissions from the Project to be offset.

[181] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 24 at [1.94].

231. Should the Proponent wish to contend that a condition directed to offsetting emissions of any kind is impractical and would impose on it obligations to achieve outcomes beyond its control, it is for the *proponent* to establish that by evidence. The proponent has not sought to do so, and no presumptions in its favour should be made.

232. The proponent makes submissions on the "carbon budget approach" arguing that it is not an approach that is required to be followed under the *Paris Agreement* or Australian domestic laws, as such contends that it is inappropriate for the consent authority to either have regard to or to apply the "Carbon budget" approach.[182] The proponent says:

    a the "carbon budget" approach does not provide the consent authority with any practical assistance in discharging the function it has been asked to perform (i.e. to determine the development application for the Project), and is a matter that is best left to higher policy circles and the international community;[183]

    b the approach is inconsistent with the approach that has been adopted by the *Paris Agreement* for achieving the goal set under that agreement, each country has made a NDC commitment, the carbon budget results in double counting.[184]

    c The approach is uncertain, ignores the role of technology and has not been accepted by the international community as a means of sharing global mitigation efforts amongst countries, rather each country adopts NDC.[185]

233. Our clients submit:

    a the "Carbon budget" analysis *can* be, and is, used at the individual project level, there is no error in appreciating that to authorise a material contribution to GHG emissions is to authorise GHG emissions which do not assist in achieving a carbon budget. In Professor Sackett's opinion, the carbon budget approach does not seek to provide the consent authority with a prescription for making its decisions.[186] It is scientifically sound method to estimate the speed

[182] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) pages 17-18 at [1.52]-[1.54],
[183] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 18 at [1.54].
[184] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 18 at [1.54].
[185] Glencore, "Appendix 29 – Glencore observation on recent climate change and GHG emissions litigation" (October 2019) page 18 at [1.54].
[186] Professor Sackett Report page 124 at para [358].

and magnitude by which emission reductions must occur in order to meet a desired warming target focussing on CO2 as the primary greenhouse gas.[187] Professor Sackett places the emissions associated with the Project in the context of the remaining carbon budget required to hold global warming to 1.5°C or 2.0°C above temperatures in the pre-industrial era, to assist the consent authority in judging the impact of the Project on a notional regional 'share' of those budgets.[188]

b If the proponent's arguments are accepted, it means NDC are an inappropriate consideration because it says that individual decision-makers should not take into account the contribution of their decision to an overall objective (e.g. a NDC) because that is a matter best left for policy-makers. To accept that proposition is to accept that the Commission has no role at all in forming a view as to whether authorising large-scale coal mines is consistent with the public interest in minimising the impacts of climate change. Such an argument is inconsistent with the proponent's assertions elsewhere that NDC's are an appropriate consideration. Given the catastrophic consequences of continued warming, no person or entity should leave the matter to higher policy circles, but all levels should address GHG emissions.[189]

c In any event the Commission is not tasked with implementing or measuring progress towards the achievement of Australia's NDC.[190] Rather, it must assess the Project's likely impact on the NSW environment.

d "Carbon budget" analysis is not inconsistent with the *Paris Agreement*. The Carbon budget analysis can help achieve the objectives of the *Paris Agreement*. It is difficult to see how the *Paris Agreement* can be inconsistent with the use of a particular measure (e.g. carbon budget analysis) to help ensure that goals of "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels" are met if the Paris Agreement does not circumscribe the measures countries can use.

e The proponent does not explain beyond assertion how the carbon budget approach leads to "double counting" of emissions. As noted above at para [212], the Proponent's arguments are illogical in the statutory context that the Commission is required to make its decision. Professor Sackett also opines the carbon budget approach in no way `double counts' GHG emissions.[191]

[187] Professor Sackett Report page 124 at para [358].
[188] Professor Sackett Report page 124 at para [358].
[189] The EPA accepted in the *Bushfire Survivors case* [76] that climate change cannot be meaningfully addressed without multiple actions.
[190] Professor Sackett Report page 123 at para [355].
[191] Professor Sackett Report page 125 at [361].

Indeed, it does not count emissions by Scope 1, 2 or 3 at all, but considers GHG emissions by the natural and anthropogenic sources and sinks in the Earth System.[192] The suggestion that a carbon budget analysis is associated with double-counting represents a serious misconception of this scientific concept.[193]

f The proponent refers to unspecified "technological advancements". The precautionary principle does not favour giving weight to hopes of non-specific and unidentified "technological advancements". Professor Sackett also highlights the calculation of a carbon budget does not depend on 'technology' at all; it is a pure scientific relationship.[194] How the reaming carbon budget is spent may depend on technology.[195]

g the Court in *Rocky Hill* accepted the carbon budget approach: *Rocky Hill* at [527], [550]-[556].

234. Furthermore, the proponent does *not* assert that the Commission would commit a legal error in having regard to "carbon budget" analysis. And in fact, the proponent *concedes* that carbon budget analysis is used by "scientists" (at [1.53]), which suggests that it *is* a conventional and accepted approach. As such, our clients say the Commission can have regard to the "carbon budget" when assessing the impact, the Project is likely to have on the NSW environment.

235. Lastly, the proponent refers to participation in NGER scheme as demonstrating its track record of managing GHG emissions from its mining operations. The NGERS is no more than a reporting scheme, and the Paris Agreement and Australia's NDC are not part of the laws of Australia. This does not mean; however, they are not permissible considerations. As the proponent acknowledges, the NGER Act does not address scope 3 emissions. As previously pointed out, our clients say the Commission is required to consider scope 3 emissions because they will harm the NSW environment, which the Commission is required to consider as part of deciding whether to grant development consent for the Project. It is also the public interest that scope 3 emissions.

236. The Proponent also argues:

> the Australia Government and the NSW government have not – in any climate change policy or law – indicated that the development of new coal mines, or expansions of existing coal mines, is to be prohibited

[192] Professor Sackett Report page 125 at [361].
[193] Professor Sackett Report page 125 at [361].
[194] Professor Sackett Report page 125 at [363].
[195] Professor Sackett Report page 125 at [363].

or restricted in any way for the purpose of achieving Australia's NDC. As a corollary, it must follow that the Australian Government considers that Australia's NDC can still be achieved in circumstances where new coal mines, or expansions of existing coal mines, are approved. Consideration should also be given to the fact that the burning of the coal from the Project represent a foreign countries Scope 1 emissions and that the direct Scope 1 emissions of the Project are relatively insignificant.

237. The proponent makes this inference without pointing to no specific statement in Australia's Long Term Emissions Reduction Plan to the effect that Australia's NDC can be achieved with the approval of new coal mines. Not only that, and perhaps more importantly, the proponent points to nothing in national policy which supports a proposition that climate change impacts can be acceptably minimised or avoided *even if* new coal mines are approved – and that is the real issue for the Commission.

238. The Proponent then goes on to address the Safeguard Mechanism over a number of paragraphs. Missing from the proponent's submissions is any acknowledgement that the Safeguard Mechanism applies only to scope 1 emissions. In other words, the mechanism does not speak to the real vice in the Project: its enormous and unacceptable scope 3 emissions.

239. The Commission should reject the Proponent's assessment of what it says the Project's impact will be on GHG emissions and climate change. The Scope 3 emissions that result from the approval of the Project will harm the NSW environment. As such, in failing to address the impact of the Project's Scope 3 emissions neither the Proponent's nor the DPE's assessment properly considers the impact that the Project will have on the NSW environment.

4.2.5 The impact of the Project on GHG emissions and climate change are contrary to the public interest

240. Our clients' position on the Project's climate change impacts is there is a strong factual basis that the 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 principle of inter-generational equity see above at [3.6.1 Intergenerational equity and intragenerational equity]) and the precautionary principle see above at [3.6.4 Precautionary principle].

241. Unabated climate change is likely to be greatest overall threat to the environment and people of New South Wales (NSW) because it is comprehensively dangerous, global, fundamental, rapid,

compounding, self-reinforcing, has delayed effects and, in some cases, is irreversible.[196] In Professor Sackett's opinion, environmentally sustainable development is development that avoids the catastrophic risks that climate change poses, noting the special nature of climate change as a risk not only to the natural environment, but also human health, well-being and livelihoods.[197]

Intergenerational equity

242. Intergenerational equity is purportedly addressed by the proponent at EIS 8.3.2. The Proponent acknowledges that GHG emissions associated with coal combustion, and the established links to climate change, are likely to generate environmental impacts across generations.

243. The proponent says the Project, in isolation, is unlikely to materially influence global emission trajectories with future emission trajectories largely influenced by global scale issues such as technology, population growth and GHG mitigation policy. It says that, irrespective of future policy options, high calorific value/ low ash coal, such as that produced by the Project, is predicted to remain in high demand and will form part of any transition away from coal towards other, lower greenhouse gas intensive energy sources. The Proponent says a range of environmental management and mitigation measures have been developed and evaluated to minimise the impact on the environment as far as practicable and the design of the Project and commitment to the management of environmental issues as outlined in this EIS will maintain the health, diversity and productivity of the environment for future generations.

244. And yet in relation to GHG emissions, the Proponent says that scope 3 emissions should not be considered. Furthermore, there is no mention of measures to mitigate Scope 3 emissions. As already established, the scope 3 emissions facilitated by the Project's approval will have an impact on the NSW environment. As Professor Sackett's evidence highlights, climate change is the greatest overall threat to the environment and people of NSW because it is comprehensively dangerous, global, fundamental, rapid, compounding, self-reinforcing, has delayed effects and, in some cases, is irreversible.

245. Professor Sackett provides the climate change externalities of the Project will be borne disproportionately by younger and future generations, with no clear recourse or path to remediation.

[196] Professor Sackett Report pages 131 at para [381].
[197] Professor Sackett Report pages 131 at para [381].

[198] Given that any future emissions 'lock in' extra warming, there is no possibility for true `remediation' of the climate damages caused by emissions from the Project. [199] These damages include deterioration in the health, diversity and productivity of the environment, and have direct consequences for human health and livelihood.[200]

246. If the current generation fails to address the causes of climate change namely through reducing GHG emissions, the risk of an irreversible tipping point being crossed becomes more probable. If a 'Hothouse Earth' results, climatic hazards will increase in duration, intensity and frequency. Inheriting such an environment is not consistent with the principle of intergenerational equity. The Proponent's assertions that the Project is unlikely to materially influence global emissions trajectories is factually incorrect as dealt with above at [168].

Polluter pays principle

247. Professor Sackett's opinion highlights that the polluter pays principle is also engaged (see above at [3.6.3]). While there are substantial costs resulting from climate change, Professor Sackett says the estimates of costs to NSW are likely to be an underestimate because, not all damages can be quantified nor can some damages such as deaths or suffering caused as a consequence of climate change are monetary.[201] There is however, a 'Social Cost of Carbon' that is the value of the net damage caused to society by adding a tonne of carbon dioxide into the atmosphere.[202] Distinguished from a "price on carbon", a 'Social Cost of Carbon' is an assessment of climate change not a government policy or price related to carbon trading schemes or offsets.[203]

248. The current median value of the Social Cost of Carbon is $417 USD per tonne of CO_2 with a 'reasonable' (66% confidence) range of $177–805 USD.[204] Professor Sackett says this is likely an underestimate as it does not take into account costs associated with adaptation and mitigation to climate change, biodiversity loss, cultural loss, climate effects with very long-term consequences (sea level rise and ocean acidification) and long-term restructuring of the economy.[205] Most importantly,

[198] Professor Sackett Report pages 10, 131 at paras [40], [383].
[199] Professor Sackett Report pages 10, 131 at paras [40], [383].
[200] Professor Sackett Report pages 10, 131 at paras [40], [383].
[201] Professor Sackett Report pages 115-116 at para [327].
[202] Professor Sackett Report pages 116 at para [328].
[203] Professor Sackett Report pages 116 at para [328].
[204] Professor Sackett Report pages 116 at para [329].
[205] Professor Sackett Report pages 116 at para [330].

such estimates ignore the possibility of crossing tipping points in the climate system, in which case the social costs would be unthinkable and incalculable.[206]

Precautionary principle

249. In Professor Sackett's opinion, the precautionary principle is also engaged see above at [3.6.4 Precautionary principle] because Every tonne of GHG emission leads to (more) dangerous warming. It is not possible to know which amount, from which source, will precipitate environmental subsystems, including those in NSW, to tip irreversibly.[207] As such any arguments the proponent makes in relation to NDC and the likelihood this will address climate change is inconsistent with the precautionary principle, and substantial weight should be given to the real possibility of non-compliance.

250. The proponent purportedly addresses the precautionary principle at 8.3.1 of the EIS. The proponent effectively says that the Project is consistent with the precautionary principle because it has achieved a level of scientific certainty in relation to the potential impacts associated with the Project by undertaking the EIS process. The Proponent says the EIS has been undertaken on the basis of the best available science and where uncertainty in the data used for the assessment has been identified, a conservative worst-case analysis has been undertaken and/or sensitivity analysis undertaken to assess a range of potential impact scenarios They also say, contingency measures have been identified to manage areas of identified uncertainty and extensive management and mitigation measures will be implemented, including monitoring programs to measure predicted against actual impacts of the Project.

251. The DPE concluded that:

> The Department has assessed the Project's threats of serious or irreversible environmental damage using reasonable worst case scenarios, and is satisfied that there is sufficient scientific certainty to enable the decision maker to weigh up the impacts of the Project and determine the development application. The Department has considered all the available information presented and consulted closely with independent experts and key Government agencies to obtain advice on various aspects of the Project.

[206] Professor Sackett Report pages 116 at para [330].
[207] Professor Sackett Report pages 131 at para [380].

252. Although, the DPE identified greenhouse gas emissions and climate change as a key issue in its assessment report it did not specifically reference climate change in relation to the precautionary principle. Instead it recognised the Project would result in a number of impacts of varying significance, the key matters that could cause serious or irreversible environmental damage relate to unmitigated impacts on biodiversity values and found it has identified management and mitigation measures to address potential environmental impacts and considers the recommended risk-based conditions and performance measures would provide appropriate protection for the environment and minimise the potential for any serious or irreversible environmental damage.

253. DPE's recommended conditions fail to address the mitigation of scope 3 emissions despite there being a level of scientific certainty, that is to say it, is reasonably foreseeable that the emissions from the project will contribute to serious or irreversible environmental damage to the NSW environment if an irreversible tipping point is triggered.

254. The proponent in the EIS refused to consider scope 2 and 3 emissions and the impact they would have on the NSW environment. The Proponent says those emissions should not be considered, as global projections only represent scope 1 emissions, and the scope 2 and 3 emissions of the Project are the emissions of other parties. The proponent says:

> climate change models forecast many different climate change impacts, which are influenced by future greenhouse gas emission scenarios. Climate change forecasts also vary significantly from region to region and concluded that the Project in isolation, is unlikely to materially influence global emission trajectories because they will largely influenced by global scale issues such as; technology, population growth and GHG mitigation policy.
>
> The extent to which global emissions and atmospheric concentrations of greenhouse gases have a demonstrable impact on climate change will be largely driven by the global response to reducing total global emissions that includes all major emission sources and sinks.

255. That position is divorced from reality. That that is the proponent's position fundamentally undermines any contention by the proponent that the Project is consistent with the precautionary principle.

Conservation of biological diversity and ecological integrity

256. Evidence before the Commission also demonstrates that the conservation of biological diversity and ecological integrity is addressed above at [3.6.2 Conservation of biological diversity and ecological integrity] is also engaged. As Professor Sackett opines, if an irreversible tipping point is crossed, it has the potential to irreversibly change ecosystems and processes in the Earth system, including the possibility of cascading to an unimaginably hostile world.[208]

It is in the public interest that consent be refused

257. The proponent says although Scope 3 emissions can be considered as part of the public interest cannot and feature heavily in the consent authority's consideration and determination of the development application for the Project. The proponent is conceding the Commission is not precluded from considering Scope 3 emissions but says that based on the information before the consent authority, the benefits of the Project outweigh the adverse impacts associated with the Project and that it is in the "public interest" for the Project to be approved.

258. Our clients say the facts do not support such a conclusion. As discussed above, not only will the Project have an unacceptable impact on the NSW environment, but it will also have a significant impact on cultural heritage.

259. There would be no error in the Commission giving weight to climate change considerations including Scope 3 emission when determining whether the Project is in the public interest. Particularly when there is significant evidence before the Commission that sets out those impact are significant, and potentially catastrophic if they trigger the threshold for a tipping point.

260. It is in the public interest to consider the Project's scope 3 emissions because they will impact the NSW environment. Furthermore, several submissions cite concerns around the Project's Scope 3 emissions being incompatible with limiting climate change in line with the agreed *Paris Agreement* targets. This suggests that account Scope 3 emissions as part of the Project's impacts is very much in line with the public interest.

261. The facts before the Commission strongly support any decision it may make to exercise its discretion to give weight to the adverse climate change impacts of the Project. This may result in consent being refused because the Commission considers the Project is contrary to the public interest.

[208] Professor Sackett Report pages 19 at para [63].

262. Our clients submit the climate change impacts of the Project on the NSW environment provide further support for any decision of the Commission to refuse consent, bolstering the significant impact the Project will have on cultural heritage. For these reasons it is correct and preferable for the Commission to decide that the Project is not in the public interest.

4.3 Economic impacts

263. The economic impacts of the Project are:

    a. at best uncertain; and

    b. at worst a negative on the global and NSW economy.

264. Even in the best case the level of uncertainty in any economic benefits, which vary by an order of magnitude, should lead the Commission to placing little if any weight on those benefits when weighing them against the considerable impacts of the Project, on cultural heritage and climate change in particular.

265. Our clients' evidence to the Commission from economist Dr Alistair Davey demonstrates there are significant issues with the Proponent's economic assessment including:

    a the level of transparency in relation to the Proponents Economic Impact Assessment (**EIA**);[209]

    b the lack of regard for the NSW guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals;[210] and

    c errors including citing different coal price forecasts and inconsistent reporting of revenue.[211]

266. On one hand there is the proponent's cost benefit analysis (**CBA**) that says the net the Project to the State would be in the order of $1.149 billion in net present value terms comprised of a potential:

    a $398 million in direct benefits; and

    b $754.3 million in indirect benefits.[212]

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[209] Dr Alistair Davey, "Review of the Economic Impact Assessment of the Glendell Continued Operations Project" (2022) pages 4-5 at [3.2] ("Davey Report").
[210] Transcript of proceedings – public hearing day 2 (21 March 2022) re: Glendell continued operations project (SSD-9349) and Mount Owen continued operations mod 4 project (SSD -5850 -Mod 4) p-21 [10].
[211] Davey Report pages 5-6 at [3.3].
[212] Glencore, "Appendix 30 "Economic Impact Assessment" (29 October 2019) pages 2 - 4.

267. And on the other, the Department's independent reviewer, Centre for International Economics (**CIE**) found the net benefit of the project was likely to be closer to $151 million.[213]

268. Despite the significant differences in the CBA, the DPE accepted the assessment by the Proponent and CIE finding they "are likely to represent the two extremes when it comes to the realised benefit to NSW (i.e. they are the best and worst case scenarios)".[214] The DPE in its Assessment Report misstated CIE's central case estimate of $151 million as a worst-case scenario, when in fact $151 million was the CIE's the central case estimate.[215]

269. If the Project were to proceed, CIE's worst-case scenario from the table it provides appears to result in an economic loss of $94 million for NSW ($202 million (total costs total benefit (worst-case)) – $296.4 million (total cost to NSW (worst-case)).[216] If such a scenario was to eventuate, the Project would in fact have a negative impact to the NSW economy.

270. The Commission must consider the polluter pays principle as part of the principles of ESD. However, none of the economic reports applied the range of social costs of carbon to the Scope 3 emissions from the Project, which are 220.3 Mt $CO_{2\text{-}e}$ over the life of the Project.[217] If they had, the cost of that pollution globally would have nominally been between $3.1 billion, on the proponent's conservative carbon prices,[218] and $132 billion, on Professor Sacketts median social cost of carbon.[219]

271. The main areas of contention between the proponent's and CIE's economic analysis were the following:
    a values attributed to coal price;
    b company and payroll tax;
    c worker and supplier benefits; and

[213] The Centre for International Economics, 'Review of economic impact assessment supporting the Glendell Continued Operations Project' (30 November 2021) pages 4. ("CIE Report")
[214] DPE, 'Glendell Continued Operations Project' State Significant Development Assessment (SSD 9349) (February 2022) pages ix and 98 at [537].
[215] CIE Report page 4.
[216] CIE Report page 4.
[217] Sackett Report, page 99 at [285].
[218] Using the lowest Ernst & Young price of $14.17 per tonne –see Appendix 30 - Economic Impact Assessment page 34.
[219] Using 600 AUD per tCO_2 for the Social Cost of Carbon from the Sackett Report, page 116 at [330].

d GHG emissions.[220]

272. Evidence provided by Dr Alistair Davey posits that a critical question for the economic viability of the Project is whether coal prices are likely to remain high or whether they will fall.[221] No one can predict the future; however, it is far more likely than not that coal prices will fall from their current record high levels during March 2022 given structural changes in demand for thermal coal that are likely to occur.[222] These changes are likely to occur due to net zero emissions commitments from several countries including China, Japan, Taiwan and South Korea.[223]

273. Dr Davy highlights, a number of South-East Asian countries including Vietnam cancelled or scaled back a significant number of planned coal plant constructions at the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow last year.[224] China, Japan, South Korea, and Taiwan have further escalated policies to transition out of coal, including plans to convert existing coal fired plants to either natural gas, hydrogen, nitrogen.[225]

274. The proponent has also acknowledged some of the policies adopted by these countries in appendix 29 of its EIS (although these are potentially outdated since COP 26).[226]

275. The CIE also raised concerns about the proponent's coal price forecasts:

> there is a considerable degree of uncertainty in the long-term coal price forecast ... Furthermore, the long-term forecast period for the consensus estimates are based on 2024 onwards, and do not provide estimates for the expected reduction in coal production towards 2050. As the operations of the mine extend to 2044, relying on a 2024 onwards estimate would appear to result in a higher than expected range.[227]
>
> The operations of the mine are expected to continue until 2024, therefore, a long-term outlook on coal prices is required. The KPMG estimates relied upon by EY include a long-term forecast of 2024 onwards, with no revisions for incremental periods. The World Bank forecast provides revisions to the long-term forecast in

[220] CIE Report pages 1-3.
[221] Davey Report pages iv, 8 at [4.2].
[222] Davey Report pages iv and 8 at [4.2].
[223] Davey Report pages iv and 8 at [4.2].
[224] Davey Report page 9 at [4.2].
[225] Davey Report page 9 at [4.2].
[226] Appendix 29, "Glencore observations on Recent Climate Change and GHG emissions Litigation" (October 2019) appendix 2 domestic laws, policies and measures of export countries directed towards climate change impacts, GHG emissions and achievement of the countries NDC.
[227] CIE Report page 9.

> 2030 and 2035, which accounts for the expected decrease in coal demand and alternative energy supply. The KPMG estimates can be used as an upper bound price, with the World Bank forecast showing a mid-lower bound.[228]
>
> Coal price forecasts at the lower end of the range would place greater pressure on mine profitability and could result in mines halting production (either temporarily or permanently).[229]

276. The CIE says that a key driver of the benefits of royalties and company income tax payments of the Project is the coal price.[230] The CIE also noted that the benefits of company tax should be presented as a range from 0% to 30% because it's a fact that one cannot determine with certainty what income tax will be paid based off an individual entities earnings, whereas, the proponent only provided the upper bound estimate of income tax payable.[231] The CIE estimates the income tax will range from $0 to $38.7 million (in present value terms), compared to the proponents estimate of $49.9 million.[232] In relation to the proponents estimate of $37 million for payroll tax, the CIE said there was no evidence to support this assumption.[233] To the contrary, the CIE said there will be no net impact on the NSW economy as a result of the payroll tax payable by the proponent due to offsetting reductions applied as workers transfer between employers.[234]

277. Dr Davey echoed the concerns CIE raised about the amount of company tax paid on the Project could have been over-estimated.[235] The Proponent did not address those concerns CIE raised in relation to company tax in its response to CIE's review. When reviewing the proponent's assessment of the amount of company tax it would pay, Dr Davey found it was not possible to derive company tax payments because no details on depreciation have been provided.[236] To be able to derive company tax payments a depreciation schedule or more details on the capital assets for the Project would need to be provided.[237]

278. In relation to indirect benefits to NSW including worker benefits and benefits to suppliers the CIE found:

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[228] CIE Report page 1.
[229] CIE Report page 1.
[230] CIE Report page 1.
[231] CIE Report page 1.
[232] CIE Report page 2.
[233] CIE Report page 2.
[234] CIE Report page 2.
[235] Davey Report page 4 [3.2].
[236] Davey Report page 4 [3.2].
[237] Davey Report page 4 [3.2].

- Net economic benefit to NSW workers: the proponent's approach was inconsistent with the NSW government guidelines and the average wage for the Project was significantly higher than the existing average mine wage and wage paid at the proponent's Liddell sites.[238] Its unlikely that the Proponent would pay its workforce significantly more than other existing mines in the region.[239] Our clients note the difference between the proponent's ($468 million) and the CIE's ($0) estimate of net economic benefit to NSW workers was considerable.
- The CIE also said any estimates included related to benefits to suppliers is immaterial and should not form part of the benefits attributable to the Project.[240] In any event those estimates are inconsistent with the majority of projects submitted to the department over the past decade.[241] Our clients note the difference between the proponent's ($286.3 million) and the CIE's ($0) estimate of net economic benefit to NSW suppliers was considerable.

279. When looking at the economic costs of the Project, the CIE said the largest cost of the Project is associated with greenhouse gas emissions.[242] The CIE said the proponent only attributing 0.11% of the GHG emissions from the Project is inconsistent with the NSW Guidelines and CBA practice by NSW Government agencies.[243]The CIE said to be consistent with the guidelines, the full cost of Scope 1 and 2 emissions should be attributed to NSW.[244]

280. As the Commission is required to consider the impacts of Scope 3 emissions, as explained above, it is entirely consistent with the CIE approach to Scope 1 and 2 emissions to consider the full economic impact of the Scope 3 emissions which, as stated above, are between $3 and $132 billion dollars in damage globally in nominal terms.

281. Although there was determined to be significant uncertainty regarding the price of carbon emissions, the CIE using the carbon prices in the Guidelines for scope 1 and 2 emissions found the costs to be between $64.8 to $294 million (in present value terms) compared to the Proponent's estimate of $0.1 million.[245]

[238] CIE Report page 2.
[239] CIE Report page 2.
[240] CIE Report page 2.
[241] CIE Report page 2.
[242] CIE Report page 3.
[243] CIE Report page 3.
[244] CIE Report page 3.
[245] CIE Report page 3.

282. The differences between the proponent's and the CIE's CBA, most of which are highlighted above result in substantially different outcomes as to what the net benefit of the Project will be to the NSW economy.

283. Despite the CBAs representing wildly different outcomes, which varied by an order of magnitude, the Department was satisfied that "based on the analysis undertaken for the Project and the independent review…….the Project's benefits to society (especially to the region and State) would outweigh its costs."[246]

284. Our clients say the economic analysis creates too much uncertainty to reach such a conclusion. Depending on the assumptions the economic impacts range from over $1 billion in benefit to NSW, to $94 million disbenefit to NSW and at least $3 billion disbenefit to the world, if Scope 3 emissions are priced. Such uncertainty should lead the Commission to place little if any weight on the economic impacts when weighing against the clear and significant impacts of the project on non-quantifiable considerations, such as cultural heritage.

285. In any event, as evidenced above, the proponent has likely grossly inflated the economic benefits of the Project.

286. Dr Davey highlights that there are methodological limitations in the technique that mean the results of a CBA alone should not be viewed as a sufficient for determining the course of public policy.[247]

287. Of particular relevance is that in deriving the economic benefit to NSW the proponent put zero value on the indirect costs to "Aboriginal cultural heritage" and "Historic heritage".[248]

288. The present circumstances are substantially similar to the *Rocky Hill case*, Preston CJ found the predicted economic benefits of the mine were uncertain but, in any event, substantially overstated by the proponent.[249] His Honour accepted evidence that:

[246] DPE, 'Glendell Continued Operations Project' State Significant Development Assessment (SSD 9349) (February 2022) page 99 at [542].
[247] Davey Report pages 3-4 at [3.1].
[248] CIE Report page 6, Table 2.1
[249] *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7 [277], [563], [664] ('*Rocky Hill Case'*)

- The coal price impacts the amount of royalties paid[250] and that if the project were to shut down until coal prices improved impacting royalties and corporate income tax.[251] His Honour accepted that the proponent's forecast royalties are likely to be lower than the proponent projected.[252] Our clients note that since this decision it has become more reasonably foreseeable that coal prices will drop in future for the reasons outline by Dr Davey.
- the proponent's estimate of company income tax was inflated, they were likely to minimise the amount of tax they were required to pay and there was an absence of evidence such as the company's financial accounts to demonstrate otherwise;[253]
- the proponent's sought to inflate worker benefits by adopting different methodological approach to that required in the Economic Assessment Guidelines.[254]His Honour accepted that if there will be any worker benefits of the Project, they are likely to be small and it was possible that they may be even lower than the independent reviewer estimates.[255] The proponent also sought to inflate the benefits to suppliers by using its own modelling tool, and the assumptions were unable to be tested or verified as they were embedded in the model.[256] His Honour finding that any economic benefit to suppliers will be small and it may even be that there are no supplier benefits, the proponent's inflated figure is unreliable and unproven.[257]
- His Honour found the proponent's approach to apportioning the costs of GHG emissions to be unsound as it was inconsistent with the method for apportionment of benefits and costs required by the Economic Assessment Guidelines and technical notes.[258]
- Other indirect costs including the environmental and social impacts of the project such as First Nations cultural heritage, non-indigenous heritage, water and visual amenity were considered qualitatively not with a quantitative cost.[259] His Honour considered the environmental and social impacts of the project were significantly underestimate, and the project in particular will have significant social and visual amenity.[260]

[250] *Rocky Hill Case* [570].
[251] *Rocky Hill Case* [573], [575].
[252] *Rocky Hill Case* [586].
[253] *Rocky Hill Case* [585]-[586].
[254] *Rocky Hill Case* [590].
[255] *Rocky Hill Case* [605]-[606].
[256] *Rocky Hill Case* [609].
[257] *Rocky Hill Case* [[636].
[258] *Rocky Hill Case* [646].
[259] *Rocky Hill Case* [647].
[260] *Rocky Hill Case* [656].

- His Honour concluding the economic benefits of the project are uncertain and in any event substantially overstated. The total direct and indirect benefits are likely to be much lower than the proponent claimed and the total indirect costs of were likely to be greater than those assessed.[261] "The consequence of the significantly smaller direct and indirect benefits and the greater indirect costs will be a significantly reduced net economic benefit of the Project."[262]

289. When considering the purpose of a CBA, Preston CJ characterised it as a tool used to assess the public interest by estimating the net value of the Project to the NSW community.[263] Although, qualified that a positive net value does not mean a project is necessarily in the public interest.[264] There are some impacts that are difficult to quantify objectively, and these unquantified impacts are not included in the net present value.[265] As such, forms of CBA assist but are not a substitute for intuitive synthesis required of the consent authority in determining the development application.[266] Preston CJ found the "unquantified impacts of the Project should the determinative of the application for consent."[267]

290. The mine was deemed to be in the wrong place at the wrong time.[268] Wrong place due to the project's significant impacts on local amenity, visual and social impacts and wrong time because the GHG emission of the coal mine and its coal product will increase global concentrations of GHGs at a time when a rapid and deep decrease in GHG emissions is required.[269]

291. Like the above case, the facts before the Commission in the current matter in relation to what the proponent says the economic benefits will be are also highly uncertain and/or the evidence indicates net benefit is substantially overstated by the proponent. Where such uncertainty arises the unquantified impact of the Project such as the impact on cultural heritage and NSW environment should be determinative of the application for consent.

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[261] *Rocky Hill Case* [664]-[665].
[262] *Rocky Hill Case* [666].
[263] *Rocky Hill Case* [559].
[264] *Rocky Hill Case* [565], [667].
[265] *Rocky Hill Case* [565].
[266] *Rocky Hill Case* [687].
[267] *Rocky Hill Case* [668].
[268] *Rocky Hill Case* [699].
[269] *Rocky Hill Case* [699].

292. Our clients' say the following should be determinative of the application for consent including but not limited to the following:
    a The impact on First Nations cultural heritage;
    b Impact on the Project on the NSW environment, including via the Projects Scope 3 emissions are not accounted for the in the proponent's EIA. As Professor Sackett's evidence demonstrates, all emissions including scope 3 emissions, will harm the NSW environment above at [169]-[170]).
    c The impact the Project will have on the NSW environment particularly for future generations represents a significant intergenerational injustice. The costs to future generations as a consequence of scope 3 emissions facilitated by the Project will impose a significant financial burden on future generations because of the impact climate change will have on the NSW environment.
    d Other environmental impacts, such as the impact on water resources.

293. Our clients say the huge discrepancy between the economic assessments raises questions as to the authenticity of the proponents EIA and may infer that it has grossly inflated the actual cost benefits of the Project. Furthermore, the DPE in adopting a "range" of benefits approach does nothing to remove any uncertainty created, rather further compounds it.

294. This is not a case were the two assessments overlapped or mostly agree, each assessment is so markedly different that it's impossible to see how those differences can be reconciled.

295. Even so, if such approach were correct (which our clients say it is not) the so called "range" of benefits would also surely need to reflect the CIE findings in relation to the worst-case scenario. Resultingly, the "range" of benefits becomes even more uncertain, being somewhere in the order of between negative $94 million and $1.15 billion. The global impacts amount to over $3 billion if a price of carbon is applied to Scope 3 emissions and the Project would a loss making enterprise if they were to pay for the costs of that pollution.

296. In DPE adopting a "range of benefits" approach, one may infer that they have accepted the net benefits to be somewhere in between what they say are the worst-case and best-case estimates

provided by the CIE and the proponent to arrive at their conclusion that this Project will likely result in a net, benefit to NSW.[270]

297. The Department may say such an inference is mischaracterized and it did not simply add the figures together and divide by two to reach a positive net benefit but rather accepted there may be a "range" of so-called benefits.[271]

298. During DPE's meeting with the Commission it acknowledged the different assumptions relied on by the Proponent and the CIE.[272] When asked how the DPE rationalised such differences when each purport to follow the NSW Economic Assessment Guidelines, the DPE responded that consultants have varying views on the guidelines and adopt a range of different methodologies.[273] In response to those of those varying views and differences, the Department's considers, for example in relation to GHG emissions, the different apportionment methodologies inform a range of net benefits compared to a baseline sort of assessment.[274] The DPE says it looking for a positive net benefit.[275] As Preston CJ set out in *Rocky Hill*, a positive net benefit does not indicate a project is in the public interest.[276]

299. It is our clients' position that the approach taken by the Department was incorrect. In adopting a "range of benefits" approach it means they never made a finding on the evidence as to the economic benefits of the Project. It also hides the potential for the Project to have adverse economic impacts by suggesting this is just part of a "range".

300. The correct approach requires the Commission, to turn its own mind to the question of economic impact and make a finding on the evidence before it, in the course of engaging in the process of intuitive synthesis set out by Preston CJ in *Bulga Milbrodale*.

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[270] DPE, 'Glendell Continued Operations Project' State Significant Development Assessment (SSD 9349) (February 2022) page ix.
[271] Transcript of proceedings – public hearing day 1 (18 March 2022) re: Glendell continued operations project (SSD-9349) and Mount Owen continued operations mod 4 project (SSD -5850 -Mod 4) p-09 at [39]-[41] and p-10 at [1]-[39].
[272] IPC meeting with Department of Planning and Environment re: Glendell continued operations Project (SSD-9349) and Mount Owen continued operations Mod 4 Project (SSD-5850-MOD-4), "Transcript of Proceedings" page 28 at [24]-[27]. ("IPC meeting with DPE")
[273] IPC meeting with DPE page 28 at [20]-[25]; Public hearing transcript page 18 at [39]-[40] and 19 at [1]-[8].
[274] IPC meeting with DPE page 29 at [01]-[09].
[275] IPC meeting with DPE page 29 at [18]-[20], [21]-[24].
[276] *Rocky Hill Case* [687].

301. On the evidence before the Commission, the economic impacts of the Project are, at best, uncertain. Where such uncertainty arises, the preferrable approach is to look at the unquantified impacts of the Project to determine the application for consent.[277]

302. A billion dollars is a considerable difference to even the CIE's central case estimate of $151 million. Particularly when one considers the impact the Project will have on cultural heritage and catastrophic climate change through scope 3 emissions, neither of which was valued in the CBAs provided to the Commission.

303. Looking deeper into the figures that make up the CBA, suggests that the proponent has inflated the benefits and reduced any costs to make it appear approving the Project is in the public interest.

304. As such, the evidence before the Commission strongly supports a finding that the economic impacts of the Project are, at best, uncertain and in any event substantially overstated by the proponent.

4.3.1 The uncertain or substantially overstated economic impacts mean the Project is not in the public interest

305. In *Bulga Milbrodale*, Preston CJ observed, "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."[278] The CBA does not "displace the tasks of the approval authority to weight and balance all of the relevant matters so as to determine whether the preferable decision is to approve or disapprove of the project application."[279] His Honour goes on to say:

> economic analyses are not a substitute because, first, the decision-maker's statutory duty is to apply weight to and balance the relevant matters, and this cannot be subordinated to the process and outcome of economic analyses (such as by cost benefit analysis); secondly, not all relevant matters required to be considered have a market value and are therefore not able to be objectively weighted by the marketplace by assigning a monetary value; and thirdly, the assigning of non-market values to relevant matters that have no market value imperfectly captures and undervalues these matters.[280]

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[277] *Rocky Hill Case* [668].
[278] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48 [41] ("*Bulga Case"*)
[279] *Bulga Case* [452].
[280] *Bulga Case* [41].

306. While there was value in attempting to quantify impacts of a proposed development by preparing a CBA, his Honour agreed that deficiencies lessen their usefulness.[281] His Honour, also found that the CBA did not consider adequately or accord sufficient weight to the principle of intergenerational equity, which is a traditional limitation of the CBA analysis.[282]

307. His Honour was not satisfied on the evidence before the Court that the economic analysis relied on by the proponent and the Minister adequately addressed the social and environmental impacts of the project.[283] On balancing the significant adverse environmental and social impacts against the material economic and social benefits, his Honour concluded the project had "not been established to be justified on environmental, social or economic grounds."[284]

308. On appeal, the NSW Court of Appeal determined that Preston CJ was entitled to accept, reject, or determine the adequacy of evidence as part of that process.[285] Evidence is either persuasive or not. It is incumbent upon parties to adduce such evidence as they consider adequate to make out their respective claims.[286] Given that the sufficiency and cogency of the Benefit Cost Analysis and further, that the interdependence of various impacts was intrinsic to the exercise his Honour was undertaking, there was no failure to afford procedural fairness.[287]

309. In the *Rocky Hill case*, Preston CJ said the issue of distributive equity also needs to be considered, being the benefits and the cost burdens of a project in relation to the distributional inequity between the current generation (intragenerational equity) and present and future generations (intergenerational equity).[288] This includes current generation receiving economic benefits but future generations experiencing economic costs.[289]

310. There is no discussion about intragenerational or intergeneration equity in the proponent's economic assessment. Despite this, the proponent when discussing intergenerational equity, states the Project

[281] *Bulga Case* [469].
[282] *Bulga Case* [493].
[283] *Bulga Case* [19], [450].
[284] *Bulga Case* [20].
[285] *Warkworth Mining Limited v Bulga Milbrodale Progress Association Inc* [2014] NSWCA 105 [169].
[286] *Warkworth Mining Limited v Bulga Milbrodale Progress Association Inc* [2014] NSWCA 105 [169].
[287] *Warkworth Mining Limited v Bulga Milbrodale Progress Association Inc* [2014] NSWCA 105 [169].
[288] *Rocky Hill Case* [669].
[289] *Rocky Hill Case* [669].

will have significant economic benefits for both the State and the local region which is expected to contribute to the wealth of both current and future generations.[290]

311. There is no mention of the cost burden imposed on future generations that is likely to arise as a consequence of the Project's contribution of climate change. As Professor Sackett's evidence highlights the climate change externalities of the Project will be borne disproportionately by younger and future generations, with no clear recourse or path to remediation see above at para [168]

312. Preston CJ found in the *Rocky Hill case*, that while the estimated net benefit was positive, there was "still considerable uncertainty as to the magnitude of the net economic benefits of the project"[291] and the unquantified impacts including the social impacts are significant and "need to be assessed qualitatively and balanced against the quantified net economic benefits."[292] After balancing the benefits and the impacts of the Rocky Hill Coal Project, his Honour found that the negative impacts of the Project outweighed any economic or other benefits.[293]As such, the project was deemed to be "contrary to the public interest and the development application for the Project should be determined by refusal of the consent application."[294]

313. When questioned about the rational decision-making the DPE undertook to weigh up the economic benefits with the environmental and social impacts of the Project to determine whether it was in the public interest, the DPE did not consider that there was much difference between the net-benefit figures because they determine there was still a significant net benefit for the Project when looking at the sensitive view range, as such the conclusion is the Project should be approved. As set out in *Rocky Hill Case*, a net benefit does not mean a project is in the public interest.

314. As outlined above at [299], the approach adopted by the Department was incorrect. In adopting a "range of benefits approach" they failed to make a finding on the evidence as to the economic benefit of the project.

315. Our clients' position that it is incumbent on the Commission to make an express finding on the best available evidence as to what the economic benefits are (if any), when those benefits would be

[290] Glencore, "Glendell Continued Operations Project – Environmental Impact Statement" (November 2019) page 562 [8.3.2].
[291] *Rocky Hill Case* [667].
[292] *Rocky Hill Case* [668].
[293] *Rocky Hill Case* [688].
[294] *Rocky Hill Case* 688].

expected to be realised and what temporal limits apply to those, in order to bring those findings into a synthesis with the long term adverse environmental impacts.

316. Our clients say the evidence before the Commission strongly suggests the economic impacts are, at best, uncertain and in any event substantially overstated by the proponent. An in-depth analysis suggests the best available evidence is the CIE's economic assessment of the Project.

317. Although, our clients note the CIE's review does not consider any principles of ESD such as intergenerational equity and the costs borne by future generations as a consequence of catastrophic climate change. Nor does the review sufficiently address the loss of cultural heritage.

318. As Preston CJ set out in the *Rocky Hill Case*, some impacts are difficult to quantify objectively.[295] As such a CBA assists but it is not a substitute for intuitive synthesis required of the consent authority in determining the development application[296] and the "unquantified impacts of the Project should the determinative of the application for consent."[297]

319. The evidence before the Commission demonstrates if the Project proceeds, the impact on cultural heritage will be significant, not to mention the reasonably foreseeable damage caused to the NSW environment via the Projects scope 3 emissions. Both impacts are either not addressed or in relation to cultural heritage are inadequately addressed in the EIA.

320. As Professor Sackett's evidence highlights, the Northeast NSW is expected to face the greatest increase in costs from natural disasters as the frequency and severity of some natural disaster event's increase as a consequence of continued warming induced by further CO2 emissions.[298]As addressed above in more detail at [247], in Professor Sackett's opinion any justifiable estimate of the cost to New South Wales resulting from climate change is likely to be an underestimate because not all damages due to climate change can be quantified.

321. This mine is in the wrong place at the wrong time and in the circumstances, any decision the Commission makes to refuse the Project on public interest ground is justified on the facts before it.

[295] *Rocky Hill Case* [565].
[296] *Rocky Hill Case* [687].
[297] *Rocky Hill Case* [668].
[298] Professor Sackett Report pages 115 at para [326].

4.4 Impacts on water resources

322. The Project will remove both groundwater and its source aquifer in the regions of open-pit mining. Ongoing seepage into the mining pit will cause depressurization of adjacent groundwater resources. Intersection of two tributaries to the Hunter River will require interruption of the natural water course and construction of artificial diversions (Pells Expert Report, 2022).

323. The Department's Assessment report states "that the assessments have been prepared in accordance with applicable guidelines and standards, and are "fit for purpose" to assess the water related impacts of the Project.

324. Our client contends that there are a number of issues that warrant further investigation, as detailed by Dr Steven Pells during his presentation to the Commission Hearing and within his expert report. However, it is our client's considered position, supported by the expert opinion of Dr Steven Pells that the impacts to water resources are not able to be mitigated or remediated.

325. The proponent seeks to minimise the impacts on groundwater, through the re-categorisation of "highly productive groundwater" as defined by DPI Water (2012)[299] (shown below in Figure 2 (Left)), so that it no longer intersects with the footprint of the mine extension (Figure 2 (Right)).

[299] DPI Water (2012) - http://www.water.nsw.gov.au/__data/assets/pdf_file/0008/547343/law_use_groundwater_productivity_nov_2012.pdf

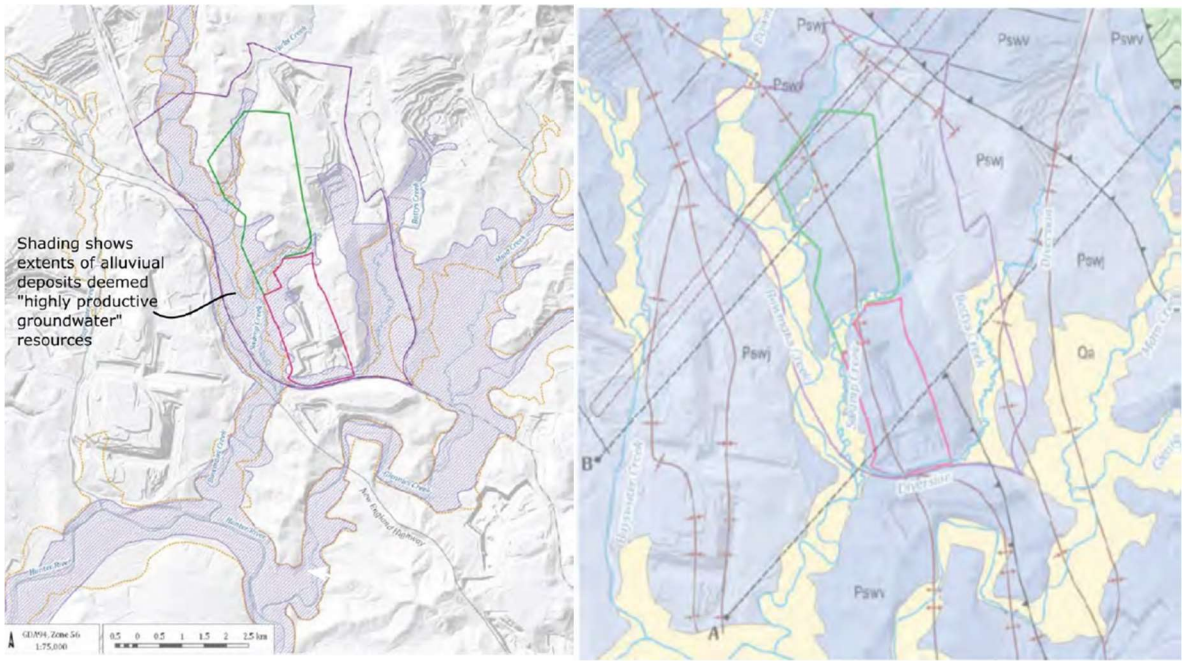

Figure 2 – (Left) Overview of the Alluvial deposits identified as "highly productive groundwater" based on DPI Water (2012) (modified from Figure 2-2 of Appendix 16 of the EIS)(reproduced from Dr Steven Pells Expert Report) (Right) Recategorization (shown in yellow) based on proponents interpretation which hasn't been peer reviewed (reproduced from Appendix 16 EIS)

a Dr Steven Pells states that *"the basis of this reinterpretation is test pits…..[which] are not presented in the EIS for review, and the interpretation of the extents of the alluvium was not subject to peer review"*

326. It is our clients' considered position that these should not be considered "fit for purpose" as suggested in the Assessment report, and that contrary to what the proponent reports, large portions of the Highly Productive alluvial groundwater resources will be removed by this project extension. Dr Steven Pells has stated in his expert opinion these aspects "*are not given detailed enough assessment or presentation in the EIS"* and that he was *"concerned that the assessment of environmental impacts has not appropriately quantified effects to the alluvial groundwater resources.* In his considered expert opinion, Dr Steven Pells stated that there are no suitable mitigation options that exist for such disruption.

327. Dr Steven Pells in his expert opinion stated that it was unclear what the Proponent meant by "drawdown" within the EIS, and that it appeared to be conflated with other groundwater metrics such as dewatering, depressurisation and desaturation. Dr Steven Pells states "*The mechanics of groundwater flow is such that removal of groundwater from the pit may induce vertical downward flow from the alluvium. Under such conditions,* ***it is possible that a significant reduction in pressure (and even saturation) of the alluvium can occur without a significant change in the elevation of the***

***water table in the alluvium**, particularly if recharge over the alluvium is large enough to maintain the water table level."*

328. Dr Steven Pells expert opinion stated that he was concerned that the predicted drawdown within the EIS, as shown in their maps, were simply plotting the change to the water table, and not giving adequate representation to the actual impacts to the alluvial groundwater, which would be through depressurisation and desaturation.

329. By the proponent's own admission, in Appendix 16 to the EIS, the drawdown predicted in the EIS could very well be an underprediction.

a Peer review of the groundwater assessment, undertaken by Dr Noel Merrick of HydroAlgorithms (contained within Appendix 16 of the EIS) has stated that:

- On page 5 that "*During operations, it is noted that "Recharge rates to the spoil were not enhanced as the spoil is conceptualised to be very free draining…". More realistically, **infiltration is likely to be enhanced, but then the model would report extra pit inflow** to be licensed as "take" when the water is really rainfall that is exempt from licensing.*" [Emphasis added], and
- On page 6 that, "*The reviewer considered that the adopted specific yields for Permian model layers are at the low end of what is physically reasonable……[and that] the adoption of low Sy values would have the **effect of underestimating mine inflow**, overestimating near field environmental effects and over-estimating the spatial extent of drawdown"* [Emphasis added]

330. Dr Steven Pells says in his expert report that "it is expected that this drawdown will pass under regions of the alluvial aquifers, and potentially induce downward seepage flow from these alluvial aquifers, causing pressure to drop in the alluvial aquifers and inducting a loss of water from the aquifers".

331. Dr Steven Pells did note that the work undertaken within the modelling for this project was of a very high calibre, however, he did note some other deficiencies that could impact on the accuracy of predicted water impacts:

a That a 40-m grid size is not adequate to simulate detailed exchange of flows with streams; and that a more detailed sub-study is necessary to examine these processes, and therefore determine the real level of impact.

b These alluvium regions are very complex but have been represented with a single model layer which does not allow detailed examination of changes to pressure and saturation within the alluvium

c That the groundwater modelling fails to clearly represent the details of the alluvium regions that will be impacted and that a suitable cross cross-section of the structures could be utilised to understand why such a small amount of depressurisation is realised.

332. Furthermore, the Proponent places emphasis on the impacts to water resources from this project, in the context of the impact that has been authorised by the surrounding approved mines, rather than to the baseline environmental conditions (pre-mining).

333. Our client is of the view, as supported by the expert evidence by Dr Steven Pells, that the impact on water resources should consider the cumulative impact of all the approved mines in the region, and provide environmental protection at the point when that cumulative impact has reached sufficient level.

334. Our client argues that this project reaches that level, that these impacts are not able to be remediated or mitigated and therefore, this extension should be refused.

4.5 Workforce impacts

335. The Proponent suggests that one of the main benefits of this Project is the continued availability of the 300 jobs for their staff at Glendell Coal Mine (Glencore IPC presentation 2022 – Day 1), which will in turn support the wider Hunter Valley economy.

336. The Economic Impact Assessment (Appendix 39) states that in addition to the currently approved operations jobs, that this project will support an additional 75.6 jobs in 2021, 429 jobs in 2026, 687 jobs in 2033 and 423 jobs in 2038.

337. Glencore have built their argument of economic benefits to the State of New South Wales on the premise that if this project does not go ahead, their employees are "*not going to find an alternate job in that coal sector"* because "*there's really no other job in the coal industry for them to go to in New South Wales"*[300]

338. In his expert opinion, Dr Phelan considered that despite the project's assessment claiming otherwise, there is no real prospect of the mine offering continued employment opportunities into the long term, because the national and international policy context within which it operates is changing at an accelerating rate.

339. Dr Phelan's expert opinion indicated that the Hunter Valley region is already engaging in the process to transition away from coal, and that approval of this extended operations would undermine the work currently underway.

340. The NSW government has announced a package to create 3700 new jobs in the clean energy sector in the wake of the closure announcement for the coal fired Eraring Power Station in Lake Macquarie, along with a $250m investment over 5 years to create a further 500 jobs in local manufacturing for components for the renewable energy sector, with a further $300m spend over 10 years to create 500 more jobs through expansion of the states clean manufacturing base.

[300] Transcript of Proceedings, RE: Glendell Continued Operations Project (SSD-9349) and Mount Owen Continued Operations Mod 4 Project (SSD-5850-MOD-4) – Applicant Meeting via Video Conference, 1130am on Thursday 10th March 2022. Available at https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/transcripts-and-material/2022/glendell/220310_glendell_applicant-meeting-transcript.pdf

341. Dr Phelan's expert evidence states that "*The concept of just transition is helpful in planning and executing a shift away from coal mining (Evans and Phelan, 2016). A just transition is one where workers and communities that have been strongly dependent on fossil fuel exploitation aren't left behind through the transition of a workforce from the coal industry to alternative employment offering good jobs and dignity of work."*

342. In addition to the above additional employment creation initiatives, the NSW government has also recognized the need for a just transition away from coal through their announcement of $25 million a year for its "Royalties for Rejuvenation Fund" which is intended to "*ensure coal mining communities have the support they need to develop other industries in the long-term".*

343. Dr Phelan's expert evidence provided insight into the Hunter communities views with regards to continuation of coal mining and the need for proper planning of the change that is coming. His evidence stated that the Hunter communities identified 3 key priorities for a just transition:
    a. the need for a local coordinating authority
    b. funding for a "flagship" job-creation project, and
    c. more resources for technical and vocational education.

344. In his expert opinion, Dr Phelan stated that "*approval of the Glendell proposal will serve to undermine the Hunter's transition away from fossil fuels."*

345. The Glencore proposal also does not consider the additional employment risks posed by climate change and the associated costs or loss of earnings that will be realised by staff due to an increase in temperatures too hot to work outside.

346. In his expert opinion, Dr Phelan stated that "*partial, conservative calculations found today's children will forego between A$125,000 and A$245,000 each due to the climate impacts noted above, with the most likely cost at around A$170,000 for each child. However, the Project's assessment makes no mention of the wider loss of earnings to which the Project will contribute*."

5. PUBLIC INTEREST

5.1 The Project is not in the public interest

347. It is submitted that, in addition to the findings referred to above, the Commission should also make the following findings.

5.1.1 Findings in respect of the objects of the EP&A Act

348. In our clients' submission, the Project, if approved at this time, would not achieve *any* of the objects of the Act.

349. **The Project does *not* promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources**.

350. The evidence before the Commission demonstrates that the Project, if approved, would not "promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources."

351. As set out at paragraphs [81]-[132] above, the Project proposes to destroy a site with Aboriginal and non-Aboriginal heritage values sufficient to be listed as of State heritage significance. The Project (including the proposed relocation of the Homestead) "will result in the irreversible loss of its state significance in the form of its significantly intact fabric, archaeology, Aboriginal and colonial landscape setting, and views". This is not the proper management and conservation of the State's natural or cultural resources.

352. The Project proposes to increase usage of coal at a time when it is projected that the world will be in the final stages of phasing out the use of this resource. The world is on the pathway to decarbonisation, and the science is clear – the carbon budget simply cannot make room for the emissions estimated to be generated by the Project in the years that it is intended to cause continued greenhouse gas emissions (ie from 2031, and beyond 2050). Contributing to the climate crisis by approving further emissions arising from the Project during that timeframe does **not** promote the social and economic welfare of the community, which depends on a safe climate for its very

existence. It certainly does **not** promote a **better** environment, to permit further greenhouse gas emissions in 2031, and beyond 2050, that will arise from this Project, when we know that catastrophic climate impacts are already being felt today.

353. The 2019/2020 Australian bushfire crisis (and the more recent 2022 floods), and all of its consequential environmental impacts, is one example of how more emissions do not, and cannot, ever promote a better environment.

354. Finally, the evidence does not establish that approval of the Project constitutes "the proper management, development and conservation of the State's natural and other resources," when all the evidence points to the cold hard fact that coal is being phased out of production already, and that in order to limit global temperature rise to 1.5 degrees Celsius, there is no room for extensions of existing mines. The only reasonable pathway towards a safer climate is the rapid phasing out of coal mines, not further extensions post-2030, as the Project proposes.

355. The correct and preferrable decision for the Commission is that the Project does not achieve the object at s1.3(a) of the EP&A Act.

356. **The Project does *not* facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment.**

357. None of the evidence before the Commission demonstrates that approval of the Project would "facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment." The principles of ESD are addressed at [46]-[74] above, and the failure of the Project to facilitate those principles with respect to cultural heritage and climate change are addressed in further detail above at [122]-[**Error! Reference source not found.**] and [240]-[0] respectively.

358. The Commission should find that the Project does not achieve the object at s1.3(b) of the EP&A Act.

359. **The Project does *not* promote the orderly and economic use and development of land**

360. None of the evidence before the Commission demonstrates that approval of the Project would "promote the orderly and economic use and development of land". On the evidence before the

Commission, any economic benefits the Project is said to have on the NSW economy is at best uncertain and/or at worst substantially overstated by the proponent.

361. Where there is uncertainty surrounding the economic benefit, the Commission would be justified in relying on evidence that is certain about the impacts of the Project, when making any decision to refuse the Project. Such as the impact the Project will have on:

    a heritage, both Aboriginal and non-Aboriginal, as set out above at paragraphs [81]-[132] above; and
    b the NSW environment because of the GHG emissions associated with its approval including Scope 3 emissions as set out above at [170].

362. At a time when the world is transitioning away from fossil fuel use towards renewable energy sources, approval of this Project would allow the mine to delay closure of its site until at least 2043. There is no evidence that there will be a demand for coal produced by the Project between 2031 and 2043. However, the Commission is well aware of the fact that during that timeframe, coal usage must be rapidly phased out (not increase) in order to meet global climate targets and to limit global temperature rise to 1.5 degrees Celsius.

363. If the remaining climate budget only permits a very limited amount of fossil fuel development, it must be certain those Projects provide a net benefit and strong return for the people of NSW while implementing sufficient measures to limit the Projects impact on the NSW environment.

364. Based on the evidence before the Commission, there is uncertainty created around the economic benefits the Project will have. Conversely, it is reasonably certain that the Project will have a detrimental impact on cultural heritage and the NSW environment. The recommended Conditions of Consent do not adequately address these concerns.

365. This mine is in the wrong place, at the wrong time. In the circumstances, the facts provide strong justification for any decision of the Commission to refuse consent.

366. The Commission must find that the Project does not achieve the object at s1.3(c) of the EP&A Act.

367. **The Project does *not* protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats.**

368. The weight of evidence demonstrates that the Project does not protect "the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats."

369. In Professor Sackett's opinion, the speed of global warming makes it difficult, or in some cases impossible, for species and ecosystems to adapt. A study of 105,000 species found that even at 1.5°C of warming, 6% of insects, 8% of plants, and 4% of vertebrates are likely to lose over half of their climatically determined geographical area; the percentages double for 2°C of warming.[301]

370. Already some losses are irreversible, such as the first species extinctions driven by climate change.[302] A recent meta-analysis of 27 studies concerning a total of 976 species found that 47% of local extinctions reported across the globe during last century could be attributed to climate change.[303] Of more than 4,000 species examined in studies that assessed attribution, about half had shifted their geographical locations poleward or to higher altitude due to human induced climate change.[304]

371. A very high extinction risk for endemic species in biodiversity hotspots is projected to at least double from 2% between 1.5°C and 2°C global warming levels and to increase at least tenfold if warming rises from 1.5°C to 3°C.[305]

372. At 5°C of warming or above, which is possible in the highest emissions scenario SSP5- 8.5 by the end of the century, it has been estimated that a mass extinction would occur comparable to the 'big five' mass extinctions over the past 450 million years that resulted in extinction of 75% of all marine species.[306]

[301] Professor Sackett Report page 21 at para [71].
[302] Professor Sackett page 24 at para [83].
[303] Professor Sackett page 53 at para [152].
[304] Professor Sackett page 53 at para [153].
[305] Professor Sackett page 58 at para [173].
[306] Professor Sackett page 60 at para [181].

373. Professor Sackett opines that the most devastating risk of continued global warming is that some of Earth's subsystems will (e.g., Arctic sea ice, ocean circulation, the Amazon rainforest, or coral reefs, for example) will become unstable and `tip' irreversibly into new states that accelerate the effects of climate change, dubbed the 'Hothouse Earth' future. It is uncertain as to where this threshold lies and could be as close as a few decades away.[307] If such a future eventuates, it would have devastating consequences with the potential to irreversibly change ecosystems and processes in the Earth system, including the possibility of cascading to an unimaginably hostile world.[308]

374. The Commission should find that the Project does not achieve the object at s1.3(e) of the EP&A Act.

375. **The Project does *not* promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)**

376. The weight of evidence, as set out above at paragraphs [81]-[132], before the Commission is that approval of the Project would not "promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)." In fact, the evidence indicates that the opposite would occur.

377. The Commission should find that the Project does not achieve the object at s1.3(f) of the EP&A Act.

378. **The Project does *not* promote good design and amenity of the built environment.**

379. The weight of evidence before the Commission is that the Project, if approved, would not "promote good design and amenity of the built environment." To the contrary, the evidence indicates that the Project would delay closure and rehabilitation of the site until 2044, thus prohibiting other development that would promote good design and amenity of the build environment, including surrounding residential areas. Coal mines do not generally promote good design and amenity of the built environment. Rather, they are a blight on the landscape, they are noisy, they are dusty and they generate heavy traffic that is not conducive to enjoyment of the rural built environment.

380. The Commission should find that the Project does not achieve the object at s1.3(g) of the EP&A Act.

[307] Professor Sackett page 28 at para [93].
[308] Professor Sackett page 19 at para [63].

381. **The Project does *not* promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants.**

382. The weight of evidence before the Commission is that the Project, if approved, would not Commission "promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants." It is well established that emissions that contribute to climate change exacerbate the effects of global heating, including the health and safety impacts of climate change on residents across NSW. For example, it is very well established that climate change is causing an increase in the number of hot days in NSW, and the incidence of heatwaves, which will worsen as more emissions are added to the atmosphere. As a result of rising emissions, buildings will become more difficult to insure, and maintain, and become less suitable for protecting the health and safety of their occupants (for example, because of lack of internal cooling such as air conditioning).

383. The Commission should find that the Project does not achieve the object at s1.3(h) of the EP&A Act.

384. **The Project does *not* promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State.**

385. This object is of minimal relevance to the Commission's determination of the Project application. In any event, the weight of evidence before the Commission is that the Project, if approved, would not promote the sharing of responsibility of environmental planning and assessment between the different levels of government in NSW. To the contrary, the evidence indicates that the Project, by dint of its contribution to global emissions at a time when nothing less than urgent and deep emissions reductions are required, will make environmental planning more difficult, as all levels of government experience unprecedented and unplanned for climate events, such as catastrophic bushfires, floods and extreme weather events.

386. The Commission should find that the Project does not achieve the object at s1.3(i) of the EP&A Act.

387. **The Project does *not* provide increased opportunity for community participation in environmental planning and assessment.**

388. This object is of minimal relevance to the determination of the Project by the Commission, as the opportunities for community participation are provided by the Act itself, rather than individual projects. In any event, approval of the Project does not achieve the object at s1.3(j) of the EP&A Act.

5.1.2 Findings in respect of likely impacts on the environment (heritage)

389. The Court has found that, given the breadth of the statutory definition of 'environment', "Aboriginal artefacts and cultural heritage can be described as forming part of the environment"[309]

390. Therefore, the Commission should having regard to paragraphs [81]-[132] above, find that the Project will have unacceptable impacts on the environment, insofar as it relates to Aboriginal cultural heritage.

5.1.2 Findings in respect of climate change and likely impacts on the environment

391. The Commission should make each of the findings set out in above, based on the admissions of the EPA in *Bushfire Survivors* and the findings of the Land and Environment Court in *Gloucester Resources*.

392. The proponent's evidence indicates that emissions from the Project over the life of the Project will be over 227.3 mt of CO_2 . The proponent says the total emissions for the Project over the life of the mine will be:
    a Scope 1 emissions - 9,932,087 tonnes CO_2
    b Scope 2 emissions – 457,710 tonnes of CO_2
    c Scope 3 emissions - 220,423,822 tonnes of CO_2

393. The Commission should make a finding that these figures comprise the minimum likely emissions from the Project.

[309] *Kennedy v NSW Minister for Planning* [2010] NSWLEC 240, [80].

394. The Commission should reject the Proponent's proposition that Scope 2 and 3 emissions should not be considered because they are emissions of other parties.

395. The Commission should find that Scope 2 and 3 emissions are relevant to the assessment of the impact the project will have on the environment because from a scientific perspective, all emissions irrespective of how they are characterised, lead to global warming and climate change that impacts the NSW environment.

396. The Commission should find that the Scope 1 and 2 emissions of the Project will likely comprise at least 0.33% of Australia's total emissions during the years of the Project's operation.

397. The Commission should find that the total greenhouse emissions of the Project are significant.

398. The Commission should find that the Project will contribute to total anthropogenic greenhouse gas emissions and will thereby contribute to climate change.

399. The Commission should find that climate change is causing, and will cause, significant, irreversible harm to the environment.

400. The Commission should find that the Project, if approved, will contribute to causing climate change and therefore to causing significant, irreversible harm to the environment.

401. The Commission should find that it is contrary to the public interest for the Project to contribute to causing significant irreversible harm to the environment.

402. The Commission should find that the proponent has not identified any measures to minimise the Scope 3 emissions of the Project.

403. The Commission should find that the proponent has not identified any measures to minimise the greenhouse gas emissions, including the Scope 3 emissions, of the Project to the greatest extent practicable.

404. The Commission should find that the absence of measures of minimise greenhouse emissions means that it is unable to discharge the function given to it by clause 14(1) of the Mining SEPP.

5.1.3 Findings in respect of the coal market and economic impacts

405. The Commission should find that there is a terminal, structural decline for demand for coal as an energy commodity.

406. The Commission should make the following findings about the cost-benefit analysis for the Project:

a Values attributed to coal price were inflated and did not adequately reflect the degree of uncertainty in the long-term coal price forecast due to the global shift away from coal in line with net zero by 2050 targets.

b As the coal price impacts the amount of royalties paid, the proponent's forecast royalties are likely to be lower than projected as the future coal price is uncertain.

c The benefits of company tax should be accepted to be zero ($0) as it is impossible to determine what income tax will be payable by the proponent. It is likely the proponent will minimise the amount of tax they are required to pay – there is no evidence such as financial records that demonstrates otherwise.

d There is no evidence to support the proponents estimates related to Payroll tax, and due to offsetting reductions applied as works transfer between different employers there is likely to be no net impact on the NSW economy.

e The proponent's approach to the net economic benefit to NSW workers was inconsistent with the NSW guidelines and the average wage for the Project was significantly higher than the existing average mine wage and wage paid at the proponent's Liddell site. It is unlikely that the Proponent would pay its workforce significantly more than other existing mines in the region As such, the net economic benefits to NSW workers is likely to be $0.

f The supplier benefits are immaterial and should not form part of the benefits attributable to the Project. As such, the estimate of net economic benefits to NSW suppliers should be zero ($0).

g The appointment of GHG emissions was unsound and inconsistent with the method required by the NSW guidelines. As such the full cost of Scope 1 and 2 emissions should be attributed to the Project. As such the cost of GHG emissions is likely to be in the upper range of the CIE assessment.

407. The Commission should find that overall, the total direct and indirect benefits of the Project are likely to be much lower than the Proponent claimed and the total costs including indirect costs are likely to be much greater than those assessed.

408. The Commission should find as a consequence of the significantly smaller direct and indirect benefits and the significantly greater costs there is a significantly reduced net economic benefit of the Project.

409. The Commission should also consider other indirect costs that were not either not/or inadequately addressed in the proponent's CBA including but not limited to:
    a Scope 3 emissions;
    b Cultural heritage;
    c Water impacts.

410. The Commission should the CBA or the EIA did not adequately address the principles of ESD as required including:
    a Intergenerational equity;
    b Polluter pays principle;
    c Conservation of biological diversity and ecological integrity; and
    d The precautionary principle.

411. Scope 3 emissions should be considered as part of the polluter pays principle.

412. The Commission should find that the Project is economically inefficient under plausible scenarios regarding the future cost of CO_2 emissions.

413. The Commission should find that the proponent has failed to establish that the Project is economically efficient.

414. The Commission should find that the economic impacts of the Project are, at best, highly uncertain and in any event substantially overstated by the Proponent.

5.1.4 Findings in respect of social impacts

415. With respect to the Project's social impacts relating to heritage, the Commission should find that:
    a. the Project area has extremely high heritage values of the Project area, both Aboriginal cultural heritage values and historic heritage values for the whole of New South Wales.

b. the proposed mitigation measure of relocating the physical structure of the Homestead will not mitigate those impacts;

c. the Project would result in the irreversible loss of its state significance in the form of its significantly intact fabric, archaeology, Aboriginal and colonial landscape setting, and views.

d. the Project will have unacceptable social impacts arising from its impacts on Aboriginal and non-Aboriginal heritage.

416. With respect to social impacts arising out of the Project's climate change impacts, the Commission should find that:

a. the effects of anthropogenic climate change are expected to include serious public health impacts (e.g. infections and morbidities), rising death rates, mass population movements, loss of livelihoods, eroding shorelines, extreme weather conditions (including flooding and drought), poverty, social distress and civil violence.

b. social impacts from climate change are already being felt.

c. climate change will impact hardest on the most vulnerable in the community, including through impacts to health and wellbeing, and young people today will experience significant social impacts as a consequence of climate change in the future.

d. the Project will negatively impact on aspects of Aboriginal cultural heritage both in terms of impacts on sites of scientific value and through the impacts of climate change on culture and on Country.

417. The Commission should find that there will be no new social benefits arising from the Project and that the social costs have been under-estimated.

5.1.6 Findings in respect of water resources

418. The Commission should make findings in accordance with the evidence of Dr Steven Pells.

419. The Commission should find that that the actual impacts to the regional groundwater resources from the will be significantly larger than predicted due to inappropriate aspects of the groundwater modelling.

420. The Commission should find that the cumulative impacts to the regional groundwater resources from the Project and the Narrabri Gas Project will be significantly larger than predicted due to inappropriate aspects of the groundwater modelling.

421. The Commission should find that there is no feasible means for cessation of groundwater drawdown impacts during the ongoing undertaking of approved mine works.

422. The Commission should find that there is no feasible means for remediation of such impacts after mining other than a very long passage of time.

423. The Commission should find that the assessment of impacts to stream and creeks above the Project is inadequate.

5.1.7 Findings in respect of biodiversity

424. The Commission should find that the Project will generate the substantial clearance and fragmentation of nationally significant native vegetation communities (including a range of Threatened Ecological Communities).

425. Conservation of biological diversity and ecological integrity is purportedly addressed by the proponent at EIS 8.3.3, however there is no mention of the impacts of climate change on biological diversity and ecological integrity.

426. The Commission should find that the Project will alter hydrological and fire regimes, thereby causing long-term shifts in vegetation community and irreversible ecosystem degradation.

427. The Commission should find that the Project will contribute to anthropogenic climate change, which is recognised as a key threatening process under NSW legislation concerning .

5.1.9 Other findings in respect of the public interest

428. *"[T]he tragedy of Juukan Gorge must not be repeated. While arguments might be had about the details of events and the impacts of laws, the ultimate cause of the destruction of the caves was that insufficient value has been placed on the preservation of Indigenous culture and heritage—a living culture with a timeless heritage."*[109]

429. On 24 May 2020, Rio Tinto, as part of its iron ore mining operations in Western Australia's Pilbara, destroyed the 46,000-year-old Juukan Gorge – a place of immense cultural significance for the Puutu Kunti Kurrama and Pinikura peoples.

430. Following this incident there has been an outpouring of anger and grief across Australia, and a recognition that the treatment of Aboriginal cultural heritage in Australia, particularly by the extractive sector, is wholly inadequate.

431. The parliamentary inquiry into the destruction of the 46,000-year-old caves at Juukan Gorge (Juukan Gorge Inquiry) has heard evidence from First Nations communities across Australia attesting to the grave consequences – both personal and within communities – of the cumulative destruction of Aboriginal heritage sites across Australia.

432. The Commission has the opportunity to draw a line in the sand on the unrestrained destruction of Aboriginal cultural heritage criticised by the Juukan Gorge Inquiry.

433. As the Juukan Gorge Inquiry noted, any decision will involve a balancing act, which is often considered to be Aboriginal cultural heritage on one hand and the perceived or purported economic benefits on the other. Until now, this balancing act has almost always been to the detriment of First Nations peoples. We urge the Commission to place appropriate weight on both the preservation of Aboriginal cultural heritage, but also realistic weight on the purported economic benefits of the Project. These "benefits" are highly uncertain, whereas the cultural heritage impacts of approval of the Project are unequivocal. The Project area, in addition to being a pocket of culturally significant plains land with an undisturbed landform in an area that has been heavily modified by mining, also

as a site of conflict and loss as part of the Frontier Wars. It is therefore a site of significance to Aboriginal and non-Aboriginal Australians alike to further understand our history.

434. With respect to the climate change impacts of the Project, based on the above proposed findings, the Commission should find that, overall, approval of the Project is not in the public interest.

5.1.10 Overall findings

435. Further, based on the above proposed findings, the Commission should conclude that the appropriate decision is that consent be refused.

6. CONCLUSION

436. 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.

437. 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 our clients' 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.

438. 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.

439. Issues concerning a polycentric problem are interlinked:[310]

> 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).

440. Further, the criteria to be considered in determining a polycentric problem are numerous, cannot be objectively weighted, and are interdependent:[311]

> 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).

441. Preston CJ outlines the approach to determining a polycentric problem as follows:[312]

> … 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.

442. The fourth process, the balancing of the weighted matters:[313]

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[310] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [33].
[311] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [35].
[312] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [36].
[313] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Ltd* (2013) 194 LGERA 347, [41].

> 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.

443. 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.

444. 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 Mining Ltd* (2013) 194 LGERA 347, the decision to approve or refuse consent to the Project is a polycentric problem.[314]

445. Importantly, the proponent and DPE have not been able to demonstrate that any need outweighs the significant cultural and environmental impacts that are likely to be caused.

446. 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 heritage impacts, including Aboriginal cultural heritage

    b. Adverse climate change impacts;

    c. Highly uncertain economic benefits amidst a coal market in structural decline;

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

d. Adverse impacts on water resources.

447. In the final analysis, there is substantial evidence demonstrating the Project is not in the public interest and contrary to the principles of ESD. Each of the findings set out in paragraphs above support any exercise of the Commission's discretion to refuse the proponents development application.

448. Accordingly, the correct and preferrable decision of the Commission is to refuse consent in the circumstances.

7. ATTACHMENTS

Attachment A Submissions by Mark Seymour of Counsel in relation to the assessment of heritage impacts of the project

Attachment B Draper Report 2022 (attaching Draper 2020a and Draper 2020b)

Attachment C Sackett Report on climate change impacts of Project

Attachment D Davey Report on economic impacts of Project

Attachment E Pells Report on impact of Project on water resources

Attachment F Phelan Report on workforce issues

Attachment G Bundle of additional climate change documents

[Note that the independent expert reports at Attachments B – F inclusive were provided to the Commission on 28 March 2022 by way of email.]