

# Submission on Moorlands Open Cut Coal Mining Project reassessment

***The Moorlands project would emit 3.6 million tonnes of CO<sub>2</sub>e from its operations and the use of its coal would emit 130 million tonnes. This substantial contribution to climate change would harm matters of national environmental significance and so the project should be refused by the Federal Minister for the Environment, Tanya Plibersek.***

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## INTRODUCTION

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In early November 2022, Federal Environment Minister Tanya Plibersek agreed to reassess 18 fossil fuel projects that had previously been approved under the Environmental Protection and Biodiversity Conservation (EPBC) Act. The reassessment was requested by the Environment Council of Central Queensland (ECoCeQ), represented by the law firm Environmental Justice Australia (EJA).<sup>1</sup>

Major projects, such as gas and coal mines, require approval under the EPBC Act if they impact on matters of national environmental significance, such as World Heritage sites and endangered species. The Act allows for reconsideration of approvals if new information has become available. ECoCeQ and EJA compiled recent research on the impacts of climate change on Matters of National Environmental Significance (MNES),<sup>2</sup>

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<sup>1</sup> EJA (2022) *Woodside, Whitehaven plans among 18 major coal, gas proposals Federal Environment Minister will reassess for climate harm*, <https://envirojustice.org.au/blog/mediareleases/woodside-whitehaven-plans-among-18-major-coal-gas-proposals-federal-environment-minister-will-reassess-for-climate-harm/>

<sup>2</sup> EJA (2022) *Analysis of research on climate change and its impacts on Matters of National Environmental Significance under the EPBC Act*, <https://livingwonders.org.au/wp-content/uploads/2022/11/Annexure-2.pdf>

and applied for reconsideration of 19 fossil fuel projects on the basis of this new information. The projects are:

- North West Shelf extension (gas)
- Alpha North Coal Mine Project
- Valeria Coal Project
- Saraji East Coal Mine
- Narrabri Coal Mine Expansion
- Meandu Coal Mine Expansion
- Mt Pleasant Coal Mine Expansion
- Baralaba South Coal Mine
- Lake Vermont/Meadowbrook Coal Project
- The Range Coal Mine Expansion
- Caval Ridge Coal Mine – Horse Pit Extension
- Boggabri Coal Mine Expansion
- Australia Pacific LNG – Gas Supply Security Project
- Moorlands Open Cut Coal Mine
- China Stone Coal Mine
- Winchester South Coal Mine
- Spur Hill Underground Coal Mine
- Ensham Coal Mine Expansion
- Styx/Central Queensland Coal Project

The Minister agreed to reassess 18 of these 19 projects. Only the Styx Coal Project is not being reassessed as Minister Plibersek has already indicated her intention to refuse it.<sup>3</sup> This Clive Palmer-backed proposal would mine coal close to the Great Barrier Reef Marine Park and has already been assessed as “not suitable to proceed” by the Queensland State Government.<sup>4</sup> Australia Institute research has shown the Styx project is financially and economically unviable, with major flaws in its assessment documents.<sup>5</sup>

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<sup>3</sup> Slezak (2022) *Tanya Plibersek proposes blocking Clive Palmer's Queensland coal mine on environmental grounds*, <https://www.abc.net.au/news/2022-08-04/environment-minister-proposes-blocking-palmer-qlld-coal-mine/101302142>

<sup>4</sup> Queensland Government (2021) *Central Queensland coal project EIS assessment report*, <https://www.qld.gov.au/environment/management/environmental/eis-process/projects/completed/central-qlld-coal-project#eis-process>

<sup>5</sup> Shields and Campbell (2017) *Styx Coal Project: Submission*, <https://australiainstitute.org.au/report/styx-coal-project-submission/>

The Australia Institute welcomes the opportunity to make submissions on the other 18 projects open for reassessment. All of these projects should be refused. Each project represents significant new sources of greenhouse gas emissions from both their operations (scope 1 emissions) and the end use of the fossil fuels they would produce (scope 3 emissions). These emissions exacerbate climate change which, as abundantly demonstrated in the EJA report, is damaging matters of national environmental significance.

This submission is specifically on the Moorlands Open Cut Coal Mining Project, highlighting the impacts of this project and the context of the other projects being considered by the Minister. We have estimated the emissions from the Moorlands project and the other 17 proposals and compare them to the abatement potential of Australia's current main climate policy, the Safeguard Mechanism. Beyond emissions calculations, most of these projects also have other undesirable aspects that strengthen the case for their refusal.

## MOORLANDS OPEN CUT COAL MINING PROJECT

The Moorlands Open Cut Coal Mining Project would produce an average of 1.7 million tonnes per year of saleable coal over its 30 year life.<sup>6</sup> This would result in millions of tonnes of greenhouse gas emissions, as summarised in Table 1 below:

**Table 1: Moorlands Open Cut Coal Mining Project**

State	Proponent	Annual scope 3 emissions (t/CO <sub>2</sub> e)	Life of mine scope 3 emissions (t/CO <sub>2</sub> e)	Direct emissions annual (t/CO <sub>2</sub> e)	Direct emissions total (t/CO <sub>2</sub> e)
QLD	Cuesta Coal	4,342,140	130,264,200	119,000	3,570,000

Sources: Cuesta Coal (n.d) *Moorlands*; author calculations

To put Table 1 in context, the Moorlands project alone would have annual direct emissions of 0.1 million tonnes per year, similar to the nation of Kiribati, and annual scope 3 emissions larger than Montenegro, a country of 600,000 people.<sup>7</sup>

The Moorlands project's potential 3.6 million tonnes of direct emissions and 130 million tonnes of Scope 3 emissions are contrary to the carbon budgeting approach

<sup>6</sup> Cuesta Coal (n.d) *Moorlands*, <http://www.cuestacoal.com.au/projects/west-bowen>

<sup>7</sup> Our world in data (2022) *Global greenhouse gas emissions*, <https://ourworldindata.org/greenhouse-gas-emissions>

inherent in the Paris Agreement and Australian climate targets, not to mention the Queensland Government's commitment to net zero emissions.

The Moorlands project appears to have been on hold since 2015. This kind of 'zombie project', which is not progressing but never dies, is damaging. It creates uncertainty for other local land users and industries, preventing beneficial development. The ongoing presence of such projects gives the impression that Australian governments are supportive of new fossil fuel projects, regardless of their economic merit. This is damaging for Australia's credibility in the Pacific region and in wider climate negotiations.

The Moorlands project directly threatens EPBC listed species and threatened ecological communities (TECs). Specifically, the project could impact four TECs, 15 listed threatened species and eight listed migratory species. While the current reconsideration relates mainly to climate impacts, the project will directly place at risk MNES species such as the Star Finch, South-eastern Long-eared Bat, the endangered TEC Weeping Myall Woodlands, Retro Slider and the Fitzroy River Turtle.<sup>8</sup>

## ALL PROJECTS UNDER REASSESSMENT

The projects being reassessed under the EPBC Act cumulatively represent a major increase in greenhouse gas emissions. Table 2 below estimates these emissions based on documents from proponents and approval authorities.

**Table 2: Emissions from 18 fossil fuel projects under reassessment**

Project name	State	Proponent	Annual scope 3 emissions (t/CO2e)	Life of mine scope 3 emissions (t/CO2e)	Direct emissions annual (t/CO2e)	Direct emissions total (t/CO2e)
<b>Narrabri Underground Stage 3 Extension</b>	NSW	Whitehaven	22,727,273	250,000,000	1,670,909	18,380,000
<b>Alpha North</b>	Qld	Waratah Coal	102,168,000	3,065,040,000	2,639,579	79,187,361
<b>Valeria Coal Project</b>	Qld	Glencore	39,732,000	1,390,620,000	989,842	34,644,470
<b>The Range Project</b>	Qld	Stanmore Coal	12,771,000	332,046,000	329,947	8,578,631

<sup>8</sup> Australian Government (2014) *EPBC Act Protected Matters Report – Appendix A*

<b>Ensham Life of Mine Extension Project</b>	Qld	Idemitsu	11,493,900	103,445,100	315,000	2,835,000
<b>Baralaba South coal mine</b>	Qld	Baralaba Coal Company (AMCI Group)	7,946,400	238,392,000	210,000	6,300,000
<b>Spur Hill Underground Coal Project</b>	NSW	Malabar Coal	16,316,608	407,915,200	431,200	10,780,000
<b>China Stone coal</b>	Qld	Macmines Austasia	97,059,600	4,852,980,000	2,507,600	125,379,988
<b>Moorlands Open Cut Coal Mining Project</b>	Qld	Cuesta Coal	4,342,140	130,264,200	119,000	3,570,000
<b>Saraji East Mining Lease Project</b>	Qld	BHP and Mitsubishi	17,009,080	340,181,600	810,000	16,300,000
<b>Winchester South</b>	Qld	Whitehaven Coal	21,852,600	611,872,800	544,413	15,243,567
<b>Lake Vermont Meadowbrook Project</b>	Qld	Bowen Basin Coal	15,088,700	301,774,000	362,942	7,258,841
<b>Mount Pleasant Optimisation Project</b>	NSW	Mach Energy	33,083,000	860,145,000	617,000	16,062,000
<b>Boggabri Mod 8- Increase depth of mining</b>	NSW	Idemitsu	14,912,744	149,127,440	663,000	6,630,000
<b>Meandu Mine King 2 East</b>	Qld	Stanwell	13,524,489	202,867,335	97,000	1,455,000
<b>Caval Ridge Mine Horse Pit Extension 2021/9031</b>	Qld	BMA	14,892,569	461,669,639	371,200	11,507,200
<b>North West Shelf</b>	WA	Woodside	80,190,000	4,009,500,000	2,562,000	128,100,000
<b>Gas Supply Security Project - APLNG</b>	Qld	ConocoPhillips, Origin, Sinopec.	1,077,286	53,864,309	3,386,040	169,302,000
<b>Totals</b>			<b>526,187,389</b>	<b>17,761,704,623</b>	<b>18,626,672</b>	<b>661,514,058</b>

Sources: Company and government approval documents. Where emissions estimates not provided, these have been estimated based on production estimates – see appendix.

As shown in Table 2 these projects would cumulatively produce fossil fuels that would create 17.8 billion tonnes of carbon pollution. For context, world emissions in 2021 were 29.6 billion tonnes.<sup>9</sup> The direct emissions from the operation of these projects combined would reach 662 million tonnes, more than all of Australia's annual emissions.

Not all of these projects will go ahead. Some have stalled in their development for many years, for example Spur Hill and The Range coal projects have been on hold since 2014. But Australia cannot rely on the changing priorities of project proponents to avoid large increases in emissions. These projects should be refused due to the damage their huge scope 1 and scope 3 emissions would cause to MNES.

It is important to consider these projects in the context of the aims of wider climate policy. Australia's climate policy is centred on the Safeguard Mechanism – a framework designed specifically to address Australia's growing industrial emissions. This policy is aiming to achieve cumulative abatement of 170 million tonnes between 2022 and 2030.<sup>10</sup> It is clear from Table 2 that any abatement by the Safeguard Mechanism could be swamped by these new fossil fuel projects – which are just 18 of 114 new projects in development. Previous Australia Institute research has shown that just two gas projects and the 22 coal projects currently seeking EPBC approval are projected to emit almost 120 million tonnes of carbon pollution to 2030, more than Australia's annual output.<sup>11</sup> Further challenges include:

- The carbon budget for the Safeguard Mechanism is currently shared by the 212 facilities covered under the scheme. However, if new projects emitting more than 100,000 tonnes CO<sub>2</sub>e annually begin operating before 2030, the carbon budget must either be shared amongst a larger number of facilities (forcing steeper and more expensive emissions reduction requirements on existing facilities) or greater emissions reduction efforts will be needed from other sectors of the economy.
- The Australian Government has not definitively answered how it plans to address the emissions from new gas and coal projects. It also remains unclear how the reformed Safeguard Mechanism will deal with new entrants. The recent consultation paper makes no mention of limiting new entrants or how

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<sup>9</sup> Our world in data (2022) *Annual CO<sub>2</sub> emissions by world region*, <https://ourworldindata.org/grapher/annual-co-emissions-by-region>, excludes land use change.

<sup>10</sup> RepuTex Energy (2022) *Potential futures for Australia's Safeguard Mechanism*, <https://carbonmarketinstitute.org/app/uploads/2022/06/Potential-futures-for-Australias-Safeguard-Mechanism.pdf>

<sup>11</sup> Hemming et al (2022) *Trade with no cap: Submission to draft legislation for Safeguard Mechanism Credits*, <https://australiainstitute.org.au/report/trade-with-no-cap/>

they will be managed. All but one of the projects listed above will be covered by the Mechanism on the basis of their scope 1 emissions.<sup>12</sup>

- Even if new entrants to the Safeguard Mechanism are required to offset 100% of their emissions, the mechanism only ever addresses scope1 emissions (requiring them to be reduced or offset with emissions intensity credits or Australian Carbon Credit Units). The remainder of emissions from an entity are unaddressed meaning the net result is an increase in total emissions.
- The credits used to offset emissions are also in question:
  - Potential introduction of Safeguard Mechanism Credits builds an opportunity for high-polluting facilities to exploit their baselines and potentially creates perverse incentives for facilities considering closure and for potential new entrants in establishing high-emitting projects.
  - Australia's existing carbon credit system is deeply flawed and riddled with integrity problems.<sup>13</sup>

Put simply, Australia's climate targets cannot be achieved if projects such as the 18 being reconsidered proceed. The Safeguard Mechanism is not able to deal with large new polluters and even if offsets at these volumes were available, their integrity cannot be guaranteed.

## CONCLUSION

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The International Energy Agency (IEA) Executive Director Fatih Birol warned in 2021 that "If governments are serious about the climate crisis, there can be no new investments in oil, gas and coal, from now – from this year".<sup>14</sup>

Not only are new fossil fuel projects disastrous for the climate, and therefore matters of national environmental significance, they are simply not needed – existing mines are able to cover forecast demand in the medium to long term. For example, Australia Institute research in 2021 found that mines in the Upper Hunter Valley were producing 91.5 million tonnes under their approved capacity.<sup>15</sup> Multiple studies have shown that

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<sup>12</sup> The only exception is the Meandu Mine. However, this mine produces coal directly and exclusively for the Tarong Power Station which is covered by the Safeguard Mechanism. Both mine and power station are owned by Queensland's publicly owned Stanwell Corporation.

<sup>13</sup> Hemming et al (2022) Op Cit.

<sup>14</sup> Harvey (2021) *No new oil, gas or coal development if world is to reach net zero by 2050, says world energy body*, <https://www.theguardian.com/environment/2021/may/18/no-new-investment-in-fossil-fuels-demands-top-energy-economist>

<sup>15</sup> Campbell and Carter (2021) *Mind the gaps: Unused capacity and unfunded rehabilitation in Upper Hunter coal mines*, <https://australiainstitute.org.au/report/mind-the-gaps/>

fossil fuel production can be phased out with minimal economic impact. According to the Reserve Bank of Australia:

Based on emission scenarios consistent with [net zero] commitments, we find that Australia's coal exports could decline significantly by 2050, with a more modest effect likely for liquefied natural gas exports; both may be offset to some degree by increases in green energy exports. The effect on overall Australian GDP is expected to be relatively small and gradual.<sup>16</sup>

Similarly, NSW Treasury modelled a phase out of coal production by 2042 finding that the state's economic output would be just 0.9% lower in 2041 than a reference case where coal exports continued indefinitely.<sup>17</sup> The Australia Institute made similar estimates five years earlier.<sup>18</sup>

An end to new fossil fuel projects is good climate policy, good economic policy and would protect Australia's matters of national environmental significance. We urge the refusal of Moorlands and all other projects being reconsidered under the EPBC Act.

## APPENDIX

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### *Estimation of scope 3 emissions from production figures*

Where published estimates of scope 3 emissions are not available, we have estimated project emissions based on:

- Coal production volume.
- The likely energy content of product coal, based on Department of Industry, Science, Energy and Resources (2021) *Guide to the Australian Energy Statistics*.
- Energy to emissions factors for coal based on IPCC (2006) *Guidelines for National Greenhouse Gas Inventories - Volume 2 Energy*.

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<sup>16</sup> Kemp et al (2021) *Towards Net Zero: Implications for Australia of Energy Policies in East Asia*, <https://www.rba.gov.au/publications/bulletin/2021/sep/towards-net-zero-implications-for-australia-of-energy-policies-in-east-asia.html#fn0>

<sup>17</sup> Wood et al (2021) *The sensitivity of the NSW economic and fiscal outlook to global coal demand and the broader energy transition for the 2021 NSW Intergenerational Report*, [https://www.treasury.nsw.gov.au/sites/default/files/2021-05/2021\\_igr\\_ttrp\\_-\\_the\\_sensitivity\\_of\\_the\\_nsw\\_economic\\_and\\_fiscal\\_outlook\\_to\\_global\\_coal\\_demand\\_and\\_the\\_broader\\_energy\\_transition\\_for\\_the\\_2021\\_nsw\\_intergenerational\\_report.pdf](https://www.treasury.nsw.gov.au/sites/default/files/2021-05/2021_igr_ttrp_-_the_sensitivity_of_the_nsw_economic_and_fiscal_outlook_to_global_coal_demand_and_the_broader_energy_transition_for_the_2021_nsw_intergenerational_report.pdf)

<sup>18</sup> Denniss et al (2016) *Never gonna dig you up!: Modelling the economic impacts of a moratorium on new coal mines*, <https://australiainstitute.org.au/report/a-coal-moratorium-and-the-australian-economy/>



For a full explanation and worked examples of this methodology see Ogge et al (2021) *Undermining Climate Action: The Australian Way*, available at <https://australiainstitute.org.au/report/undermining-climate-action/>

*Estimation of direct emissions from production figures*

Where published estimates of direct emissions are not available, we have estimated project emissions based on the average emissions intensity of production for mines that have published emissions estimates. The 27 mines included in other Australia Institute research would produce 257 million tonnes of coal each year and 18.6 million tonnes of emissions, for an average of 0.07 tonnes of CO<sub>2</sub>e per tonne of coal produced.

See Hemming et al (2022) *Trade with no cap: Submission to draft legislation for Safeguard Mechanism Credits*, <https://australiainstitute.org.au/report/trade-with-no-cap/>