

Submission on the Saraji East Mining Lease Project reassessment

Saraji East would emit 16.3 million tonnes of CO₂e from its operations and the use of its coal would emit 340 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

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).¹

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),²

¹ 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/>

² 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.³ 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.⁴ Australia Institute research has shown the Styx project is financially and economically unviable, with major flaws in its assessment documents.⁵

³ 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-qld-coal-mine/101302142>

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

⁵ 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 Saraji East Mining Lease 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 Saraji East 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.

SARAJI EAST MINING LEASE PROJECT

The Saraji East Mining Lease Project would produce an average of 6.2 tonnes of saleable coal annually over its 20 year life. This would result in hundreds of millions of tonnes of greenhouse gas emissions, as summarised in Table 1 below:

Table 1: Saraji East Mining Lease Project

| 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) |
|-------|--------------------|-----------------------------------|---|----------------------------------|---------------------------------|
| Qld | BHP and Mitsubishi | 17,009,080 | 340,181,600 | 810,000 | 16,300,000 |

Sources: BHP (2016) Saraji East Mining Lease Project Environmental Impact Statement; author calculations

To put Table 1 in context, the Saraji East alone would have annual direct emissions of 810,000 tonnes per year, similar to Vanuatu, and annual scope 3 emissions greater than the emissions of Nepal, a country of 30 million people.⁶

Saraji East’s potential 16.3 million tonnes of direct emissions, and more than 340 million tonnes of scope 3 emissions are contrary to the carbon budgeting approach

⁶ Our world in data (2022) *Global greenhouse gas emissions*, <https://ourworldindata.org/greenhouse-gas-emissions>

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

While the current reconsideration relates mainly to climate impacts, the project would directly affect MNES such as the Brigalow threatened ecological community, koala and the greater glider.

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) |
|---|-------|------------------------------------|-----------------------------------|---|----------------------------------|---------------------------------|
| Narrabri Underground Stage 3 Extension | NSW | Whitehaven | 22,727,273 | 250,000,000 | 1,670,909 | 18,380,000 |
| Alpha North | Qld | Waratah Coal | 102,168,000 | 3,065,040,000 | 2,639,579 | 79,187,361 |
| Valeria Coal Project | Qld | Glencore | 39,732,000 | 1,390,620,000 | 989,842 | 34,644,470 |
| The Range Project | Qld | Stanmore Coal | 12,771,000 | 332,046,000 | 329,947 | 8,578,631 |
| Ensham Life of Mine Extension Project | Qld | Idemitsu | 11,493,900 | 103,445,100 | 315,000 | 2,835,000 |
| Baralaba South coal mine | Qld | Baralaba Coal Company (AMCI Group) | 7,946,400 | 238,392,000 | 210,000 | 6,300,000 |
| Spur Hill Underground Coal Project | NSW | Malabar Coal | 16,316,608 | 407,915,200 | 431,200 | 10,780,000 |
| China Stone coal | Qld | Macmines Austasia | 97,059,600 | 4,852,980,000 | 2,507,600 | 125,379,988 |
| Moorlands Open Cut Coal Mining Project | Qld | Cuesta Coal | 4,342,140 | 130,264,200 | 119,000 | 3,570,000 |

| | | | | | | |
|---|-----|----------------------------------|--------------------|-----------------------|-------------------|--------------------|
| Saraji East Mining Lease Project | Qld | BHP and Mitsubishi | 17,009,080 | 340,181,600 | 810,000 | 16,300,000 |
| Winchester South | Qld | Whitehaven Coal | 21,852,600 | 611,872,800 | 544,413 | 15,243,567 |
| Lake Vermont Meadowbrook Project | Qld | Bowen Basin Coal | 15,088,700 | 301,774,000 | 362,942 | 7,258,841 |
| Mount Pleasant Optimisation Project | NSW | Mach Energy | 33,083,000 | 860,145,000 | 617,000 | 16,062,000 |
| Boggabri Mod 8- Increase depth of mining | NSW | Idemitsu | 14,912,744 | 149,127,440 | 663,000 | 6,630,000 |
| Meandu Mine King 2 East | Qld | Stanwell | 13,524,489 | 202,867,335 | 97,000 | 1,455,000 |
| Caval Ridge Mine Horse Pit Extension 2021/9031 | Qld | BMA | 14,892,569 | 461,669,639 | 371,200 | 11,507,200 |
| North West Shelf | WA | Woodside | 80,190,000 | 4,009,500,000 | 2,562,000 | 128,100,000 |
| Gas Supply Security Project - APLNG | Qld | ConocoPhillips, Origin, Sinopec. | 1,077,286 | 53,864,309 | 3,386,040 | 169,302,000 |
| Totals | | | 526,187,389 | 17,761,704,623 | 18,626,672 | 661,514,058 |

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.⁷ 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.

⁷ Our world in data (2022) *Annual CO2 emissions by world region*, <https://ourworldindata.org/grapher/annual-co-emissions-by-region>, excludes land use change.

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 2030.⁸ 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.⁹ 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 CO₂e 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 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.¹⁰
- Even if new entrants to the Safeguard Mechanism are required to offset 100% of their emissions, the mechanism only ever addresses scope 1 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

⁸ RepuTex Energy (2022) *Potential futures for Australia's Safeguard Mechanism*, <https://carbonmarketinstitute.org/app/uploads/2022/06/Potential-futures-for-Australias-Safeguard-Mechanism.pdf>

⁹ 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/>

¹⁰ 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.

- 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.¹¹

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

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".¹²

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.¹³ Multiple studies have shown that 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.¹⁴

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

¹¹ Hemming et al (2022) Op Cit.

¹² 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>

¹³ 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/>

¹⁴ 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>

where coal exports continued indefinitely.¹⁵ The Australia Institute made similar estimates five years earlier.¹⁶

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 Saraji East and all other projects being reconsidered under the EPBC Act.

APPENDIX

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*.

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 CO₂e per tonne of coal produced.

¹⁵ 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_broad_energy_transition_for_the_2021_nsw_intergenerational_report.pdf

¹⁶ 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/>

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/>