

I object to this proposal because the proponent has not adequately assessed the likely greenhouse gas (GHG) risks and impacts to NSW. They have not adequately described the scale and impact of recent emissions from the existing BCM operation. Their projected emissions for the proposal make a mockery of any statement or commitment they may make pertaining to reducing GHG emissions. They have not attempted to credibly mitigate likely and significant economic, social or environmental costs and impacts of emissions. They have not demonstrated that they can effectively manage and minimise emissions either now or in the future. The projected emissions demonstrate that the proponent will repeatedly breach the federal Safeguard Mechanism and fail to support NSW Net Zero Plan or legislated emissions reduction targets.

The proposal represents continuing activities that are a leading cause of physical impacts and economic costs already observed and experienced in Australia and documented in recent State of the Environment, State of the Climate, and UN reports. The observed impacts have led the International Energy Agency to declare that there should be no new coal proposals. The Department should reject this proposal because the proponent has not offered any credible mitigation of likely and significant impacts, and has not adequately observed the principles of ecologically sustainable development. The likely impacts of the proposal are unacceptable and it is not in the public interest. The proposal directly conflicts with state and federal policy objectives, the federal Climate Change Act, and international commitments such as the Global Methane Pledge.

#### Recent GHG emissions

Section 4 Amendment Report Appendix B discusses key features of the existing environment including surrounding land uses, sensitive receptors, and local meteorological and air quality conditions. The proponent discloses recent GHG emissions from the existing BCM operation in Table 12 section 4.4 of Amendment Report Appendix B. The proponent asserts: *“GHG emissions from the BCM have fluctuated by up to 12 per cent over these three reporting years.”*

The proponent does not explain these fluctuations, or discuss in any detail the key features of recent GHG emissions and their impacts on surrounding land uses, sensitive receptors, and local meteorological conditions. Taking 2016/17 from the disclosed emissions as baseline for assessment, the Department should note that:

- Scope 1 emissions have not reduced in 2020/21
- Scope 2 emissions have reduced by 5.26% in 2020/21
- Total Scope 1 and Scope 2 emissions have reduced by 0.49% in 2020/21

The proponent does not disclose ROM coal so emissions intensity cannot be assessed. In the absence of any further information to assess their recent performance in managing emissions, I assume that emissions have fluctuated according to coal production, and that Scope 2 emissions have reduced according to changes in the electricity grid. The proponent does not compare their recent GHG emissions performance with similar operations, its industry peers and sector, state and national emissions inventories, so scale and impact of the disclosed emissions cannot be assessed.

The proponent does not disclose their Safeguard Mechanism baseline for the existing BCM operation or its performance compared to the safeguard baseline. Separately, I have validated the disclosed emissions against data published on the Clean Energy Regulator’s website:

Reporting year	Baseline (tonnes)	Reported covered emissions (tonnes)
----------------	-------------------	-------------------------------------

2016/2017	186,032	183,750
2017/2018	186,032	177,065
2018/2019	224,110	203.082
2019/2020	224.110	174,391
2020/2021	202,244	184,492

The proponent has complied with the Safeguard Mechanism over the disclosed period. I could not identify why the baseline for 2018/2019 and 2019/2020 had increased. The determination of this baseline noted that *“Regular maintenance is undertaken on all mobile equipment to minimise air quality impacts and greenhouse gas emissions. Where practical NOx and GHG performance is included as part of the options analysis for the procurement of new equipment.”*

Determination of the most recent baseline valid from July 2020 to June 2023 noted that *“Boggabri Coal Operations Pty Limited have committed to continue to minimise its greenhouse gas emissions in accordance with the measures described within its Air Quality and Greenhouse Gas Management Plan. These include, improving operational efficiencies to minimise diesel usage, regular maintenance of plant and equipment, use of appropriate equipment in consideration of energy efficiency and the training of staff on continuous improvement strategies focussed on enhancing energy efficiencies of its operations.”*

Separately, I have validated the disclosed emissions against the proponents annual environmental management reports and independent environmental audits published on their website. These reports do not provide further insight to the nature and fluctuation of the proponent’s emissions. Notably, the 2017, 2018, 2019, 2020, and 2021 reports all include the exact same text under the heading ‘Improvements and Initiatives’: *“BCOPL continued to target a decrease in fuel burn during 2021 through improved operating conditions and practices, and efficient engine configuration. This initiative involved reviewing existing operating practices and engine configurations as well as, assessing the viability of alternate products through engaging specialist consultants. It is considered that all decreases in fuel burn achieved will improve fuel consumption and therefore GHG efficiencies.”*

The proponent’s 2021 report does disclose new initiatives: *“During 2021, IA conducted an investigation in relation to the potential GHG initiatives which could potentially be implemented across its Queensland and NSW operations, including the BCM. Following on from this work, detailed site specific reviews of existing GHG measures and potential measures available to further reduce direct GHG measures are under consideration for implementation at BCM during 2022, the outcomes of which will be reported within the 2022 Annual Review.”*

The proponent has spent 5 years targeting a decrease in fuel burn by reviewing existing operations and viability of alternatives, and copying and pasting this same text from one annual report to another, without any update or indication of progress. More recently, the proponent is conducting an investigation of existing GHG measures and potential initiatives. The proponent’s determination of safeguard baselines is more informative: initiatives also seem to include maintaining mobile plant and equipment, considering GHG performance when procuring new equipment, minimising diesel usage, training staff, and enhancing energy efficiency. These migrations are all standard practice.

The proponent's management of recent GHG emissions appears lacking urgency, ineffective, and does not seem credible. Their safeguard commitments and plan, audit, and review management processes do not seem adequate mitigation. The proponent's recent performance in reducing total Scope 1 and 2 emissions by 0.49% over the disclosed period is not compatible with NSW Net Zero Plan or the federal Safeguard Mechanism. I suggest the Department carries out detailed inspections and audits of existing conditions of approval associated with GHG emissions from the existing BCM operation. The proponent's lack of urgency and ineffectiveness in managing their emissions suggests that this will not improve any time soon unless strict, meaningful, audited, and ratcheting emissions reduction conditions are attached to the proposal.

#### Forecast GHG emissions

Section 7 of the proponent's Amendment Report Appendix B assesses forecast GHG emissions of the proposal. Table 21 discloses estimated ROM coal and GHG emissions and calculates the incremental emissions of BCM with MOD 8 Amendment. Table 22 presents national and state GHG emissions in context with projected BCM MOD 8 emissions as 0.06% of total Australia emissions and 0.21% of total NSW emissions. The proponent asserts that *"it would be more relevant to present the increment (0.08 Mt CO<sub>2</sub>-e) due to the MOD 8 Amendment, in which case the proportion of Australia's 2020 emissions will be less than 0.02%."* Concerning Scope 3 emissions, the proponent asserts that these will be Scope 1 emissions of countries that *"are either signatories to the Paris Agreement and / or have announced or adopted domestic laws or policies to achieve their emissions targets."*

The proponent does not provide any further assessment of GHG emissions, their projected impacts on the environment including surrounding land uses, sensitive receptors, and local meteorological and air quality conditions, or their projected impacts on state and federal policy and legislation. Notably, the proponent only considers numerical impacts of average annual Scope 1 and 2 emissions as percentage of Australia and NSW emissions. The proponent's presentation in Table 22 misleads the Department: all proposals considered in isolation in this manner will be a small percentage of emissions inventory, which are comprised of many different emissions sources across many different industry sectors around NSW and the country. By presenting small percentages, the proponent gives the impression that the impacts are relatively insignificant and that mitigation is not important. However, all industry sectors must reduce emissions, so proponents should consider emissions for their particular sector, including annual, cumulative and projected emissions from existing operations and current proposals. Proponents should consider proposal emissions relative to their own current operations and to their public commitments to reduce emissions.

The proponent also does not make it clear in Table 22 whether the percentage comparison presented is with average annual Australia and NSW emissions, or with total Australia and NSW emissions over the proposal period 2023 to 2036. The proponent does not consider total cumulative proposal emissions as percentage of Australia and NSW remaining emissions ("carbon budget") that will achieve NSW Net Zero Plan or federal climate change targets.

In comparing proposal emissions to the proponent's current operations, the Department should note that the existing BCM operation is projected to breach its current safeguard baseline in five out of eleven years of operation. The BCM MOD 8 proposal will not comply with its current safeguard baseline in ten out of thirteen years of operation. The proponent does not explicitly disclose this in its assessment. The federal government proposes to progressively reduce safeguard

baselines to meet legislated emissions reduction targets so the proponent's cost of non-compliance will increase in future if it does not take genuine steps to reduce its emissions.

The Department should note that existing BCM operations are projected to reduce Scope 1 and 2 emissions by 26.11% by 2030 compared to 2016/17 emissions. Conversely, BCM MOD 8 proposal will increase Scope 1 and 2 emissions by 47.78% by 2030 compared to 2016/17 emissions. Neither prospect supports NSW Net Zero Plan so the proponent is effectively proposing the emissions abatement burden should be carried by others not identified in the proposal ("free-loading"). The Department should reject the proposal because the existing operation makes best contribution to NSW Net Zero Plan.

The Department should note the proponent is proposing to increase total Scope 1 and 2 emissions by 42.97% and total Scope 3 emissions by 34.82% compared to existing BCM operations. The existing BCM operation is projected to have higher Scope 1 and 2 emissions than 2020/2021 disclosed emissions until 2028, including 67.49% more emissions in 2027. The BCM MOD 8 proposal will have higher Scope 1 and 2 emissions than 2020/ 2021 disclosed emissions until 2034, including 62.56% more emissions in 2027. The proponent's estimated emissions make a mockery of any statement or commitment they may make pertaining to reducing its GHG emissions.

The proponent does not assess impacts of significant proposal Scope 3 emissions. Average annual Scope 3 emissions are estimated to be 17 times higher than Scope 1 and 2 emissions. Scope 3 emissions do not respect international borders or carbon accounting rules, and are just as likely to impact NSW and Australia as other countries. It is correct to avoid double-counting of Scope 3 emissions in accordance with the GHG Protocol, but that protocol is not intended to assess likely and significant impacts in NSW from the proposal. The proponent should be assessing likely and significant impacts of Scope 3 GHG emissions to support the Department in making their decision.

#### Proposed GHG emissions mitigation

Section 9 of the proponent's Amendment Report Appendix B asserts that *"Mitigation of GHG emissions is inherent in the development of the mine plan. For example, reducing fuel usage by mobile plant and equipment is an objective of mine planning and good practice. Hence, savings of GHG emissions are attributable to appropriate mine planning."*

The proponent's proposed mitigation measures largely repeat those included in their annual environmental management reports and determinations of safeguard baselines. Given the proponent's failure to mitigate GHG emissions from 2016/17 to 2020/21, these mitigation measures do not seem effective, especially considering the proposed significant increase in emissions compared to existing operations. The proponent also notes that the progressive transition in the NSW energy mix from coal fired generation to renewable generation will reduce Scope 2 emissions over time. In this case, the proponent relies on mitigation by unidentified others ("free-loading").

A new mitigation appears to be consideration of alternative fuels where economically and practically feasible. In accordance with existing approvals, the proponent *"has been developing reasonable and feasible measures to reduce direct (Scope 1 and 2) GHG emissions from the BCM."* In particular, a workshop in July 2022 to consider additional measures identified short-term and medium-term initiatives that seem to largely involve reviewing, encouraging, developing a policy and road map, assessing, commissioning detailed studies. The proponent concludes that *"The*

*mitigation measures, strategies and initiatives demonstrate that IA and BCOPL are considering the implementation of a range of reasonable and potentially feasible measures to minimise GHG emissions associated with their coal operations."*

The proponent does not seem to have proposed any mitigation measures that may relate to its investigation of existing GHG measures and potential initiatives reported in its 2021 annual environmental management review.

The proposed mitigation measures do not seem credible or likely to be effective given the proposed significant increase in emissions compared to existing operations. The proponent's estimated emissions make a mockery of any statement or commitment the proponent may make pertaining to reducing its GHG emissions. Committing to 'consider', 'review', 'encourage', 'develop', 'assess', 'study', where 'economically and practically feasible' or 'reasonable and potentially feasible', do not amount to tangible mitigation measures that will have any impact on the proponent's emissions performance, or that are *"inherent in the development of the mine plan"*, or a serious *"objective of mine planning and good practice"*. This is evident just by reviewing the proponent's recent emissions management performance. The proponent's lack of urgency and ineffectiveness in managing their emissions suggests that this will not improve any time soon unless strict, meaningful, audited, and ratcheting emissions reduction conditions are attached to the proposal. Furthermore, the proposal and the proposed mitigation measures will not support the proponent in complying with the federal Safeguard Mechanism or in supporting NSW Net Zero Plan and federal legislated emissions reduction targets.

I anticipate the proponent may respond to my submission with the 'drug-dealers defence'. This asserts that the relevant GHG emissions will occur whether the proposal is approved or not, because customers will just buy coal from elsewhere (market substitution). This argument has been widely rejected by courts in Australia and internationally.

I also anticipate the proponent may respond to my submission with the 'high-efficiency-low-emissions coal' or 'clean coal' mitigation. This asserts that Australian coal burns more efficiently and therefore is cleaner than coal from other countries, meaning less GHG emissions compared to an alternative supply of coal. This argument is not supported by scientific research and it has been alleged that some coal companies use fraudulent quality reports to support these claims. I do not allege that the proponent carries out such activity because I have no knowledge of their processes.

### Economic costs of GHG emissions

Section 2 of Amendment Report Appendix G presents the proponent's cost-benefit analysis of the proposal. The proponent includes 'indirect costs and benefits' at section 2.5.2 and estimates the *"present value (at 7% discount rate) of the cost of the MOD 8 Amendment GHG emissions to Australia and NSW is estimated at \$0.07M and \$0.02M respectively, relative to the base case."* The proponent further asserts that *"Scope 3 emissions would be part of a CBA of a different project (e.g. an electricity generation project, with its own set of costs and benefits, including the benefits of electricity) and, consistent with the Technical Notes (NSW Government 2018), have not been included in the Economic Assessment."*

The proponent's economic assessment method follows NSW guidelines in apportioning costs by population. However, the method does not seem adequate given impacts from GHG emissions do not observe population boundaries. Bushfires in regional NSW can and do have significant air

quality and human health impacts on densely populated metropolitan Sydney. Mining projects are highly likely to be in remote locations with low populations so this method will always apportion low costs of GHG impacts to mining projects. In particular, the method does not seem adequate given large actual costs observed in responding to physical impacts from GHG emissions in Australia. For example, the Richmond Valley Flood 2022 Response estimates \$150m recovery costs and \$250m loss of production costs, greater than the net production benefits from the proposal claimed by the proponent. The Insurance Council of Australia estimates \$4.3b insured losses caused by the 2022 floods. While the entirety of these costs and losses cannot be attributed to the proponent's existing or proposed activities, the large observed costs suggest that the proponent's cost provision is grossly inadequate in its economic assessment. NSW guidelines should be updated to support more accurate assessment and provision for economic costs from GHG impacts. This could be achieved by reference to proponent cumulative emissions share of sector or state cumulative emissions inventory and state budgets for adaptation, resilience, and recovery.

The proponent's economic assessment follows NSW guidelines in excluding Scope 3 emissions. However, while consistent with the GHG Protocol, that protocol is not intended to assess likely and significant economic, social, and environmental costs to NSW from the proposal. Impacts from significant Scope 3 emissions do not observe international boundaries, and when emitted as Scope 1 emissions by other countries are just as likely to impact NSW and Australia as anywhere else. Furthermore, the proponent cannot assume that a CBA for a different project in a different country will assess these emissions. The proponent should be assessing likely and significant economic costs of Scope 3 GHG emissions to support the Department in making their decision. NSW guidelines should be updated to reflect the trans-boundary nature of economic, social, and environmental impacts from GHG emissions.

The proponent has not accounted for economic costs of complying with the Safeguard Mechanism in their assessment. The Department should note that the existing BCM operation is projected to breach its current safeguard baseline in five out of eleven years of operation. The BCM MOD 8 proposal will not comply with its current safeguard baseline in ten out of thirteen years of operation. The proponent does not explicitly disclose this in its assessment. The federal government proposes to progressively reduce safeguard baselines to meet legislated emissions reduction targets so the proponent's non-compliance and cost of non-compliance will increase in future if it does not take genuine steps to reduce its emissions.

The proponent does not consider post-2035 local effects in its economic assessment. The coal industry is widely expected to decline and it may be more economically beneficial for the local community in the long-term that the proposal does not proceed. The capital dedicated to the proposal may be better spent by the proponent or others on preparing the local community for the exit of the coal industry. The proponent does not include this in their economic assessment so the Department is unable to assess this.