

Submission to the IPC regarding the Additional Material for the Narrabri Stage 3 Extension Project

To quote from the Applicant's submission: 'During public exhibition of the EIS in 2020, one written objection to the Project was submitted to the Department of Planning, Industry and Environment (**Department**) regarding the Project's greenhouse gas (**GHG**) emissions and the issue of climate change.' The 'written objection' was in fact a list of questions submitted by Lock the Gate and is addressed in detail by the additional material provided by the applicant.

However, CASES has written an objection on the same grounds, posted on the IPC website under my name Jonathan Milford. While some of the additional materials in both the applicant's and department's submissions are relevant, the main points of our submission have not been addressed. We make them again:

1 It is no exaggeration to say that Australia is suffering the effects of Anthropogenic Global Heating (AGH) and the resulting climate changes more than any other country in the world. This is reflected in the unprecedented intense bushfires and floods, coastal erosion and damage to and loss of life on land and in the oceans, including iconic, some would say priceless, ecosystems such as our coral reefs and tropical rainforests. The Department's *Guidelines for the economic assessment of mining and coal seam gas proposals* states in the Introduction that 'CBA allows for quantification and valuation of the full range of potential impacts, economic, social or environmental (including human health) that might arise from a project. All costs and benefits should be quantified and monetised if feasible and material.' So, the social and environmental costs to NSW suffering these effects from the Project should be estimated in the NSW CBA.

No attempt has been made in Australia to estimate the social and environmental costs of GHG emissions since the ATSE study in 2009 on *The Hidden Costs of Electricity: Externalities of Power Generation in Australia*. The Department admits that 'Valuation of externalities, such as GHG emissions, is inherently difficult to calculate and determine within a CBA. This is particularly difficult in the case of GHG emissions due to the global nature of impacts, the rapidly changing international, Commonwealth and NSW policy and approaches on assessment of these impacts, and the volatility in 'carbon markets'' (page 7 of Department's submission). However, internationally, a lot of extensive studies have been done into the external costs of GHG emissions since the ATSE one. We maintain that the external costs of GHG emissions in the NSW CBA should be based on the latest international estimate of social and environmental cost per tonne of CO₂e, which is currently about \$A600/tCO₂e.

Note that the social and environmental costs should not be based on any 'carbon price' set by any country or current internationally or guessed at by the Applicant or Department (see page 9 of the Department's submission), nor should it be based on any 'carbon cost planning' or 'carbon market data', as these measures are entirely irrelevant to the cost to our country. The *NSW Government Guide to Cost-Benefit Analysis (TPP17-03)* which states that "Market prices should be used as a basis for valuing the costs of carbon emissions, where reliable evidence can demonstrate that those market prices are not significantly biased as a direct consequence of scheme design" is clearly wrong. This Guide and the *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals Technical Note 9* (pages 44 and 48) should be changed to reflect the true external social and environmental costs of GHG emissions.

2 In any fossil fuel mining project, the scope 3 GHG emissions greatly exceed the scope 1 and 2 emissions, unless the burner of the fuel uses Carbon Capture, Utilisation and/or Storage (CCUS). We must assume that they don't as, worldwide, there are extremely few successful CCUS projects. Therefore, we must assume that scope 3 emissions add to AGH. This is not just the burning country's problem; it is a problem for the whole world and Australia in particular (see 1 above). Therefore, we should be costing the effects of scope 3 emissions in the NSW CBA.

The applicant's statement that 'almost all of the Project's Scope 3 emissions will be counted under the *Paris Agreement* as the Scope 1 GHG emissions of the Expected Export Countries in which the coal is used' is equally irrelevant. Also irrelevant is the Applicant's claim that the user might go elsewhere to source the product, which might be dirtier and lead to more GHG emissions, if this project is rejected. Double counting against targets for reducing emissions, 'national accounting rules' and any

government's 'Net Zero Plan', are irrelevant when we are trying to estimate the true external costs in the NSW CBA. Again, this requires changes to *Technical Note 9* (page 45) and also corrects the Department's submission (page 7).

Unfortunately Lock the Gate failed to include scope 3 emissions in their question 3 (page 6), presumably because of the rules against double counting, but we are not concerned with counting the emissions but with costing them.

3 The Department's submission in answer to Lock the Gate question 3 then goes on to discuss apportionment of the external costs to NSW, and lists the approaches that have been taken in various cases in the past. Since the major and most costly effects of AGH are to the environment, rather than the people, we think that, in the NSW CBA, a fairer apportionment than by population or GDP would be by land area, which is 0.52% of the world.

Moreover, it should be noted that the rest of Australia, and in fact the world, will suffer the effects proportionally. We originally suggested in our letters to Environment Ministers that there should be a World CBA, as the benefits to the world, mostly just the receiving country, would most probably be exceeded by the external costs of the GHG emissions. The just published *IPCC Sixth Assessment Report* outlining the increasing damage to the health of people and the environment makes this obvious, see <https://www.climatechangenews.com/2022/02/28/un-report-shows-us-human-costs-of-climate-failure/>. The *Paris Agreement* called for all countries to cut emissions and achieve Net Zero as soon as possible. It will then be necessary to draw down the excess CO₂ in the atmosphere to below 300ppm to stop continued global heating. The CO₂ concentration is currently over 410ppm: the CO₂e concentration is over 500ppm: both are still rapidly rising.

4 To quote from *Technical Note 9*: '1 tonne of methane (CH₄) released into the atmosphere is estimated to have a global warming impact equivalent to 25 tonnes of carbon dioxide (CO₂).' This figure is taken from the Department of the Environment and Energy (July 2017), *National Greenhouse Accounts Factors: Australian National Greenhouse Accounts*. It is accurate for a 100-year period. It is inaccurate for the Timeframe being considered, which is the life of the mine. In fact, we must be concerned with the AGH forcing effect in the short term, certainly no longer than the Project Timeframe of 23 years. The Intergovernmental Panel on Climate Change (IPCC) has indicated a Global Warming Potential (GWP) for methane between 84-87 when considering its impact over a 20-year timeframe (GWP₂₀) and between 28-36 when considering its impact over a 100-year timeframe (GWP₁₀₀), see <https://www.iea.org/reports/methane-tracker-2021/methane-and-climate-change>. We consider that the Department should use the GWP₂₀ figure. This requires a change to *Technical Note 9* (page 47).

We have calculated, by applying the more correct factors from points 1 to 4 above, that the external costs of GHG emissions apportioned to NSW would be an estimated \$1,140M. This exceeds the perceived benefits of \$599M by \$541M: the costs are almost double the benefits. In approving this project, the NSW government is accepting these costs. Who will pay? We object to paying over a billion dollars to repair the damages and save lives as a result of continuing with this project.

We have previously objected to similar mine extension and new mine projects in NSW on the same grounds, though less well argued. As AGH is caused entirely by excessive amounts of GHG emissions, the International Energy Agency (IEA) has said that there should be no new fossil fuel projects, whether mining, transport or power generation. We are also arguing against gas projects in WA and the NT because, as we have indicated, gas is far more enforcing of global heating compared to coal. Indeed, the federal government's 'gas led recovery' from the COVID pandemic will turn into a 'gas led recession', if not our 'gas led demise'.