Submission to the Hunter Valley Operations Continuation Project SSD 11826681

On behalf of CASES, on 24/02/2023

We object to any approval of this project for two reasons:

1 there has been no assessment in the proponent's EIS of the impact of greenhouse gas emissions on the environment, whether NSW, Australia or the world and
2 there is no government consideration of advice from the IPCC and IEA to limit global heating to 1.5ºC by reducing coal and gas mining and reaching net zero emissions by 2035, as advised by the IPCC.

A) Environmental Impact Assessment

The SEAR issued to Hunter Valley Operations (HVO) states that 'an assessment of the likely impacts of the development on the environment' should include 'a description of the existing environment likely to be affected by the development' and 'an assessment of the likely impacts for all stages of the development, including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice'.

The EPBC Act lists 'Loss of climatic habitat caused by anthropogenic emissions of greenhouse gases' as a Key Threatening Process (KTP). The NSW Biodiversity Conservation Act Schedule 4 Key threatening processes lists 'Anthropogenic Climate Change'. Whichever way you look at it, it is obvious that **all environments worldwide are threatened by this KTP**. Yet, the EIS made by Ernst and Young only includes two Economic Impact Assessments, a CBA for the people of NSW and an LEA for the local environment. **Neither of these include the external environmental costs of greenhouse gas emissions**.

The problem is that neither the NSW Guidelines for the Economic Assessment of Coal and CSG Mining nor the Significant Impact Guidelines (SIG) issued by the federal government give advice on costing the impacts of greenhouse gas emissions external to the project. However, the NSW Guidelines recommend that 'winners' and 'losers' should be identified under the heading *Distributional Impacts*. Therefore, in each case where significant emissions are concerned, such as this project, a **Global Impact Assessment (GIA)** should be done for the world environment and the global population, who may be 'losers'. Moreover, the proponent should do a **Cost/Benefit Analysis (CBA) for Australia as a whole**, in addition to the State or Territory CBA.

For this fossil fuel export project, the proponent should be required to give the recipient country the GIA, so that the country can do its own realistic CBA, apportioning the global external social and environmental costs of Scope 1, 2 and 3 greenhouse gas emissions to its people and environment. This should be done before the Australian EIA and **approval of the exporting project should be dependent on both countries' environmental approvals**.

Ernst and Young are to be commended for including the Social Costs in the NSW CBA, in contradiction to the Guidelines and Technical Notes. In Appendix W they say 'The Technical Notes indicate a preference for the European Union credit price as a proxy for carbon costs'. Then, quite rightly, as the price HVO might have to pay is irrelevant to EIA costing, they say '*The use of the US EPA Social Cost of Carbon (whilst not without criticism), however, provides a robust assessment of the costs of GHG emissions on a per-unit basis, allowing for agencies*

to understand the potential social benefits (costs) of reducing (increasing) emissions, whilst not being influenced by domestic policy settings.'

There are a number of problems with this approach:

1. Social Costs do not include Environmental Costs. Indeed, evidence from Europe and the ATSE report is that the environmental costs of emissions greatly exceed the social costs. This becomes obvious when you consider the environmental costs of severe climate change effects in Australia in the last 6 or more years. (I leave the reader to enumerate them.)
2. A recent XDI report put Australia in the top 10 countries suffering the greatest effects of climate change. This makes the use of US EPA figures inadequate in providing a 'robust' assessment of the social costs, let alone the environmental costs.
3. Technical Note 9 says, '*it is noted that the Scope 3 accounting framework is inconsistent with established national accounting rules established under the UN Framework Convention on Climate Change, and could potentially result in 'double counting' of emissions'.* However, there is no doubt that Scope 3 emissions driving climate change affect our public and environment just as much as Scope 1 and 2 emissions. Nobody else is counting our costs, so there is no 'double counting' involved in EIA. 'Double Counting' is only relevant when we are accounting for our emissions against targets set by national governments. It is not relevant to an EIS and therefore **Scope 3 emissions should be included in the external costs**. This is crucial in fossil fuel mining, because the Scope 3 emissions are always much greater than Scope 1 and 2, as can be seen in the HVO project.
4. The effects of fugitive methane emissions on global heating are underestimated. Methane (CH_4) has a Global Warming Potential (GWP) much greater than that of carbon dioxide (CO_2). The Commonwealth Government maintains a set of *National Greenhouse Account (NGA) Factors*, which are used by proponents in calculating their emissions. Appendix 1 of the NGA Factors document shows the 100-year GWP for four different greenhouse gases, which is used to calculate the CO_2 equivalent (CO_2-e). We have recently signed the **Global Methane Pledge** to reduce methane emissions by 30% by 2030. Since we are obviously concerned about the global heating effect of emissions in the short term, **Jacobs should have used the 10-year GWP figure of 100 times CO_2 for CH_4**.
5. Ernst and Young say that 'the total cost of greenhouse gas externalities is apportioned based on the ratio between the population of NSW and Australia, resulting in around 32 per cent of the total indirect costs attributed to the externality arising by greenhouse gas emissions being borne by NSW'. This would be true for Social Costs, assuming they were calculated correctly for Australia, which they haven't been. For Environmental Costs however, the ratio should be based on land area. Moreover, as already expressed, both ratios should apportion the corresponding Global Impact Costs of Scope 1, 2 and 3 emissions.

With these points taken, **the HVO Continuation Project EIS should be rewritten and the project re-assessed before consideration for rejection or approval**.

B) Emissions Reduction

The Commonwealth government has set emission reduction targets for reaching net zero emissions by 2050, in line with the 2015 Paris Agreement. However, the Paris Agreement was to 'substantially reduce global greenhouse gas emissions to limit the global temperature

increase in this century to 2 degrees Celsius while pursuing efforts to limit the increase even further to 1.5 degrees'. The net zero emissions by 2050 target was supposed to give the world a 50/50 chance of limiting the increase to 2ºC. However, pledges by countries signing up to the Agreement were far from adequate to achieve this goal and, even now, after some new pledges in subsequent COPs, are insufficient to stop runaway global heating.

Since 2015, we have seen the IPCC's worst-case scenario exceeded, as there has been no lessening of worldwide greenhouse gas emissions and they did not envision that tipping points would be reached so quickly. Glaciers and ice sheets are melting faster and will cause over a metre of sea level rise this century. Permafrost and clathrates thawing are also irreversible and adding methane to the increasing amounts from deforestation and livestock farming. Global temperatures are now approximately 1.2ºC above pre-industrial levels and 1.4ºC in Australia. The increases in sea temperatures in our region are even greater. The result is that, since 2015, Australia has suffered greatly from the dramatic effects of ocean heating, including increases in the severity of droughts, floods, fires, coral bleaching, coastal erosion and island inundation.

Much work has been done by the IPCC to estimate what is required to limit the increase to 1.5ºC. Their latest report points out the dire consequences of not taking urgent action to reduce greenhouse gas emissions to meet this target. Two specific recommendations are:

1. to not open any new coal and gas mines or, as the IEA puts it, there should be **'no new oil and gas fields approved for development in our [1.5ºC] pathway'.** The island inundation threat is so bad around Australia that Pacific Island countries and Torres Strait Islanders are in agreement with the IEA and IPCC, and are demanding that Australia stop opening new coal and gas mines. The Torres Strait 8 have even taken their case to the UN Human Rights Committee and won.
2. to work collectively, with other signatories of the Global Methane Pledge, to **'reduce global methane emissions across all sectors by at least 30% below 2020 levels by 2030'**. The Australian Labor government signed this Pledge in October, 2022, after the previous Coalition government refused to do so. The NSW government have set a target to reduce emissions by 70% by 2035. However, there has been no attempt to rein in the expansion of coal and gas extraction, or even of exploration. (The issuing of licences to explore for yet more gas is an obscenity.)

The continuation of existing coal mining in NSW might be necessary to meet contract commitments for a few years, but the HVO's plans are to not only extend the mining project beyond current commitments but to increase the rate of extraction. Annual Scope 1 fugitive methane emissions, which have a GWP 100 times that of carbon dioxide, are set to triple by 2030. Any suggestions of **expanding the rate of extraction and continuing it beyond existing contract dates are completely incompatible with these two IPCC recommendations and the world's attempts to limit global heating to 1.5ºC by reducing greenhouse gas emissions**.