

Submission against proposed expansion of coal exports from Kooragang Coal Terminal (06_0189)



Introduction and recommendations

This is a submission against the proposed expansion of coal exports at the Kooragang Coal Terminal (“the Project”). Rising Tide Newcastle submits that:

- The Environmental Assessment (EA) for the Project is inadequate for the following reasons:
 - 1) The greenhouse gas (GHG) assessment fails to account for all relevant Scope 3 emissions.
 - 2) The EA fails to take into account the cumulative impacts of the GHG emissions arising from the Project and the impacts of these emissions through climate change.
 - 3) The EA fails to assess the full impacts of the Project resulting from an increase in coal mining in NSW.
 - 4) As such, the EA fails to pay sufficient regard to the principles of Ecologically Sustainable Development (ESD), which it is required to do under the *Environmental Planning and Assessment Act 1979*
- The EA must be rejected by the Department of Planning
- When the full impacts of the Project are assessed, the approval of the project becomes unjustifiable. The Project must not be approved.
- There needs to be a cumulative and full life-cycle impact study of all coal mining proposals in NSW, together with all proposals to expand coal export operations.

More mines

A major expansion of coal exports from Newcastle, which is the purpose of the Project in question, would be pointless if it were not for an associated increase in rail infrastructure and a commensurate increase in mining activity. In the words of Anthony Pitt, General Manager of the Hunter Valley Coal

Chain Logistics Team, “The recognition of the coal chain as a system really demonstrates that, if one part of the system increases in capacity then the whole system needs to increase in capacity if we are going to get more coal through the system”¹. That is the objective of the Project, to get more coal through the system.

While the proponents of the Project wish to emphasise a systems approach to the export expansion plans when it suits them to do so, they maintain a piecemeal approach to the assessment of the environmental impacts of the activities involved in order to mask the cumulative impacts of the numerous contingent developments. For example, while the EA fails to even acknowledge, much less assess, the impacts from the inevitable increase in coal mining from the KCT expansion, when considering the supposed socio-economic benefits of the project the bow is drawn long enough to include an increase in the number of people employed in metal fabrication in NSW.

It is inconceivable that this Project would be proposed and built without a significantly increased quantity of coal being made available for export. Since the operation of the Project is dependant upon this supply, the environmental impacts generated by the mining of this extra coal can reasonably be considered to be caused by the construction and operation of the loader itself. If the Project did not go ahead, specific coal mines would also not go ahead.

The proponent of the KCT expansion, Port Waratah Coal Services Ltd, is entirely made up of coal-mining companies². Three large transnational coal-mining companies in particular dominate PWCS:

- Xstrata
- Rio Tinto
- Anglo Coal

That in itself is enough evidence to indicate that the project is an extension of mining projects, but very superficial investigation reveals that these companies are not only the proponents of the KCT expansion, but of major coal mine proposals in NSW.

The following coal-mining proposals by PWCS companies are currently before the NSW Department of Planning for consideration.

1 Official Committee Hansard, House of Representatives Standing Committee on Transport and Regional Services, Reference: Transport networks inquiry (30/1/2006) p.5.

2 NSW Department of Primary Industries, NSW Coal Industry Profile 2005

- Liddell open-cut extension: an Xstrata proposal to increase run-of-mine coal production from 4.5 to 8 million tonnes of coal per year at the existing mine near Singleton. Status: Environmental Assessment on exhibition until 2nd February 2007.
- Hunter Valley Operations South Project: Rio Tinto proposal to extend and consolidate 25 existing consents in the Hunter Valley, to produce 16 million tonnes per annum. Status: Preliminary Assessment conducted, no Environmental Assessment Requirements provided yet.
- Drayton extension: an Anglo Coal proposal to expand the Drayton open-cut near Muswellbrook, increasing annual run-of-mine coal production from 5.5 to 8 million tonnes. Status: Environmental Assessment Requirements have been provided.

At the very least, the KCT expansion project should be assessed as one with the mining proposals listed above, since they are all currently being assessed anyway, and can be reasonably considered as one project.

That however, would still not be sufficient to ensure proper consideration of Ecologically Sustainable Development Principles in decisions about coal mining and exports in NSW. Currently, there are proposals to massively increase coal mining all up the Hunter Valley and beyond, into the Gunnedah Basin. Together, the proposed KCT expansion and the proposal to construct a new Coal Export Terminal next door, would double the amount of coal exported from Newcastle – thus doubling our already major contribution to climate change. Rising Tide Newcastle submits that all coal mining proposals in NSW, together with all proposals to expand coal export operations, should be brought in and assessed under one cumulative and full-life-cycle impact study.

We submit that it is clear to any reasonable person that the KCT expansion proposal is one part of a larger project, and that that project includes an expansion of coal mining in NSW. As such, the Environmental Assessment for the proposal is flagrantly inadequate, as it fails to address the impacts of more mining in NSW.

The Environmental Assessment must be rejected for this failure. It must be resubmitted with the impacts of mining included. These impacts include, but are in no way limited to

- destruction of threatened species habitat and biodiversity corridors
- damage to and destruction of surface waterways and aquifers

- loss of community in areas affected by coal mining.

Greenhouse omissions

The proponents acknowledge that climate change, caused by the burning of coal from the project, was raised as a key issue during community consultation (page 5.3 of the EA). Yet, the proponents have ignored the concerns of the community and submitted an EA that fails to even remotely address the devastating impact that will result from the combustion of the 43 million tonnes of coal per year from the project.

This combustion is a deliberate and unavoidable consequence of the planned increase in coal exports – a fact which the proponents of the Project, and the Department of Planning, know full well – and would directly result in the release of more than 100 million tonnes of equivalent carbon dioxide p.a., an equivalent to doubling the emissions from the NSW stationary energy, transport, and mining sectors.³

The climate change impacts on the NSW, Australian and global environments, fuelled by the GHG emissions resultant from the Project, are nowhere mentioned in the EA; there is no reference to the cumulative impacts of the GHG emissions resultant from the proposal. This last is a startling omission, considering that the very concept of cumulative impacts is perhaps more pertinent to the greenhouse phenomenon than to any other environmental issue. The failure to include an assessment of the amount of GHGs destined to be released by the combustion of the coal won from the mine is in clear contravention of the reporting framework apparently chosen by the author – the WBCSD Greenhouse Gas Protocol⁴.

The “Greenhouse gas and energy assessment” (Appendix 6) of the EA explains that there are three “scopes” of greenhouse emissions:

- direct emissions from a project (Scope 1),
- indirect emissions resulting from a project's consumption of electricity (Scope 2),
- indirect emissions resulting from a organisation's activities, that are not carried out by the organisation (Scope 3).

3 Emissions calculated from the AGO Factors and Methods Workbook (2005). The figures for NSW sectoral GHG emissions are based on the latest data released by the AGO.

4 World Business Council for Sustainable Development and World Resources Institute (2004), Greenhouse Gas Protocol

The EA goes on to state that:

“Scope 3 Emissions have not been included in the inventory calculation for the Project as they are produced by third part organisations outside the Project Area.” That is to say, Scope 3 emissions have not been included because they are Scope 3 emissions. This is obviously no justification for the absence of Scope 3 emissions from the EA.

It is a fatuous argument, and presumably the authors perceive that it is such, since they go on to plead that the Greenhouse Gas Protocol, “considers the reporting of Scope 3 emissions to be optional. If an organisation believes that Scope 3 emissions are a significant component of the total emissions inventory, these can be reported along with Scope 1 and 2”.

The Scope 3 emissions from the mine are indeed a significant component of the total emissions resultant from the mine’s operation. The EA concludes that: “The annual greenhouse emissions for the operation at 120 Mtpa throughput capacity are estimated at 119,957 [tonnes of carbon dioxide equivalent]”.

This figure is marginal compared to the annual 100 million tonnes of equivalent carbon dioxide that would result from the burning of the 43 Mtpa of coal, the loading of which is the sole purpose of the Project. It clearly ranks not only as a “significant component” of the total emissions of the project – it dwarfs all other components, and it must therefore have been included according to the very document cited in the Environmental Assessment.

The EA also fails to include the emissions generated by the transportation of coal after it is loaded, which is an emission source also defined as Scope 3 by the GHG Protocol. Considering that the all of the coal will be carried overseas on massive diesel ships, and that the EA acknowledges there would be one extra shipment every day should the Project be approved, this is another significant source of emissions. Nowhere does the EA attempt to quantify the amount of relevant emissions that it has failed to include in the inventory; we note that the GHG Protocol also states that: “For cases where emissions have not been estimated, or estimated at an insufficient level of quality, it is important that this is transparently documented and justified.”(GHG Protocol, p.8). The EA has neither documented, nor reasonably justified its omission of Scope 3 emissions.

There are other reasons suggested by the GHG Protocol for the advisability of including Scope 3 emissions in the inventory, reasons that conveniently go unmentioned in the EA. In addition to the “significant component” suggestion, the GHG Protocol suggests the inclusion of Scope 3 emissions

when “They contribute to a company’s GHG risk exposure” and/or “They are deemed critical by key stakeholders (eg. feedback from customers, suppliers, investors or civil society)”. Obviously, at a time when the need for “carbon price signals” is being espoused by everyone from NSW politicians, to environmentalists, to international financiers, the Scope 3 emissions would certainly contribute to the company’s GHG risk exposure. As for feedback from civil society, the contribution of Newcastle coal exports to global climate change is an extremely topical issue now, not just in Newcastle but on a national and even international stage. The proponents would be very well aware that civil society regards their Scope 3 emissions as significant, not least because they have been directly informed of such by members of the public, including members of Rising Tide Newcastle.

However, as the Department of Planning would be well aware, the debate over the inclusion of Scope 3 greenhouse gas (GHG) emissions in the assessment of coal projects in NSW has ended, with a recent decision in the NSW Land and Environment Court⁵.

Justice Nicola Pain judged that:

... there is a sufficiently proximate link between the mining of a very substantial reserve of thermal coal in NSW, the only purpose of which is for use as fuel in power stations, and the emission of GHG which contribute to climate change/global warming, which is impacting now and likely to continue to do so on the Australian and consequently NSW environment, to require assessment of that GHG contribution of the coal when burnt in an environmental assessment under Pt 3A. [paragraph 100]

Justice Pain went on to observe that it is a requirement of the *Environmental Planning and Assessment Act 1979* that Principles of Ecologically Sustainable Development must underpin the approval or otherwise of a project under that act (such as the KCT project in question). Justice Pain judged that in order for ESD Principles to be included in the Minister's decision, a full assessment of greenhouse gas emissions (including Scope 3), and an assessment of the climate change impacts of these emissions, must be included in the Environmental Assessment for a project.

The key purpose of environmental assessment is to provide information about the impact of a particular activity on the environment to a decision maker to enable him or her to make an informed decision based on adequate information about the environmental consequences of a particular development. This is important in the context of enabling decisions about environmental impact to take into account the various principles of ESD including the

⁵ Gray v The Minister for Planning and Ors [2006] NSWLEC 720

principle of intergenerational equity. [118]

Environmental assessment is intended to enable decision makers to be properly informed about the future environmental consequences of the project before them. The environmental assessment is a prediction of what the impacts might be given that the project is yet to be built. It is not appropriate to limit the scope of the environmental assessment on the basis that GHG emissions may or may not be subject to regulation in the future whether in NSW or overseas. The fact that it is difficult to quantify an impact with precision does not mean it should not be done. In any event, scope 3 emission methodology has been developed and can be applied and its limitations as identified in various protocols taken into account in the environmental assessment process. [138]

While the case involved a coal mining proposal, rather than a coal loading proposal, as is the case with the Project in question, we submit that the judgement could easily apply to a proposal of which the sole purpose is to increase the amount of coal being exported from Newcastle for subsequent burning.

We submit that it is clear from the Pain Judgement that the Environmental Assessment for the proposed KCT expansion is inadequate. A decision by the Planning Minister on the Project cannot be based on ESD Principles unless the full greenhouse and climate change impacts of the Project have been assessed and presented to the Minister. They clearly have not been, and we believe a decision based on this EA could be subjected to legal challenge.

Climate change

As shown above, the EA for the KCT expansion must include an assessment of the full life-cycle impacts of the project for the Minister to make an informed decision in line with the requirements of the EP&A Act. Specifically the EA must include an assessment of the climate change caused by the burning of the coal after it is sold.

Rising Tide Newcastle submits that when these impacts are taken into account, the Project becomes utterly unjustifiable.

The climate change impacts of the project would include, but would be far from limited to:

- impacts on threatened species, in NSW and around the world.

Climate change, caused by anthropogenic greenhouse emissions from burning coal and other fossil fuels, is now seen by many scientists as the single greatest threat to biodiversity globally. It has been estimated that by the year 2050, approximately 35% of terrestrial species could be committed to extinction due to anthropogenic climate change, if greenhouse emissions are not dramatically reduced⁶.

- impacts on listed World Heritage Areas.

The World Heritage and biodiversity values of the Blue Mountains in NSW occur mainly due to the remarkable diversity of *Eucalyptus* species in the region. Australia's iconic genus *Eucalyptus* is extremely threatened by anthropogenic climate change⁷. Other World Heritage areas of Australia that face decimation from anthropogenic climate change include the Wet Tropics⁸, Kakadu Wetlands⁹, and the Great Barrier Reef¹⁰.

- impacts on agricultural production.

For all possible warming scenarios resulting from human greenhouse pollution, there are expected impacts on food production, particularly for poorer and more marginalised people in the world¹¹. With moderate warming in Australia, agricultural regions in the west and the south of the continent face marked declines in production. With high warming, entire agricultural regions would be put out of business¹².

6 Thomas *et al* (2004), Extinction risk from climate change, *Nature* **427**, 145 - 148

7 Hughes, L, Cawsey E. M. and Westoby, M. Climatic range sizes of *Eucalyptus* species in relation to future climate change. *Global Ecology and Biogeography Letters* 5:23-29

8 Krockenberger et al (January 2004); *Environmental Crisis: Climate Change and Terrestrial Biodiversity in Queensland*; Rainforest CRC

9 Gitay, H., Brown, S., Easterlin, W. and Jallow, B.: 2001, 'Chapter 5: Ecosystems and Their Goods and Services', *Climate Change 2001: Impacts, Adaptation and Vulnerability*, Cambridge University Press, Cambridge, UK, pp. 237-342.

10 Pittock and Wratt (2001), Chapter 12 of Third Assessment Report, Intergovernmental Panel on Climate Change Working Group 2

11 Hare, W.L.: 2003, 'Assessment of Knowledge on Impacts of Climate Change – Contribution to the Specification of Art. 2 of the UNFCCC'. Berlin.

12 Pittock, B., Wratt, D., Basher, R., Bates, B., Finalyson, M., Gitay, H., Woodward, A., Arthington, A., Beets, P. and Biggs, B.: 2001, 'Chapter 12: Australia and New Zealand', *Climate Change 2001: Impacts, adaptation and vulnerability*, Cambridge University Press, Cambridge, UK, pp. 591-639.

- impacts on water supply.

Climate change is expected to have major impacts on weather patterns around the world, resulting in a greater frequency and intensity of extreme weather events such as drought, floods, fires, and storms. The NSW Government commissioned a CSIRO report on the predicted impacts of climate change on rainfall and temperature in NSW. The report predicted a marked decline in NSW rainfall over the coming decades, due to climate change. This, combined with increasing temperature – by 2070, up to a 6.4 degree increase in average temperature in some parts of NSW – is likely to have major impacts on the availability of water to farmers, industries, and households in NSW. With NSW already experiencing major water shortages in most areas, it is imperative that action be taken to cut greenhouse pollution and limit future climate change.

- rising sea levels

In 2001, the Intergovernmental Panel on Climate Change forecast sea level increases of up to 88cm by the end of this century, due to global warming caused by anthropogenic greenhouse pollution¹³. The IPCC is expected to increase this estimate in its next report, due early next year. An increase of just 31 centimetres in average sea level would move typical beach shorelines inland by about 300 metres¹⁴. Last year saw the world's first official climate change refugees created. The 980 people living on the Cateret Atolls near Papua New Guinea are being forced to relocate to the larger PNG island of Bougainville.¹⁵ With most of the world's heavily populated areas occurring in low-lying coastal regions, any amount of sea level rise threatens to have profound impacts on human civilisation. A high degree of sea level rise could be devastating for our species.

In order for the worst extremes of possible impacts from climate change to be avoided, human greenhouse emissions need to be cut drastically and immediately. Scientists the world over are now calling for reductions in greenhouse pollution of the order of 90% within decades, starting now¹⁶. For

13 IPCC (2001), Third Assessment Report.

14 "Sea level rise is quickening pace", January 2006, Nature News
<http://www.nature.com/news/2006/060116/full/060116-11.html>

15 "Going, going... PNG atolls sinking fast", John Vidal, Sydney Morning Herald, November 26th 2005.

16 See for example: Bows *et al*, July 2006, Living within a carbon budget, Tyndall Centre for Climate Research commissioned by Friends of the Earth and the Cooperative Bank. See also: "Avoiding dangerous climate change", 2006, edited by Hans Joachim Schellnhuber, Cambridge University Press.

the NSW Government to even be considering new coal mine proposals in this situation is reprehensible. Clearly, the NSW Government has a responsibility to both its own constituents, and to the rest of the world, to begin the move away from coal. While it is possibly true that the NSW coal industry cannot be shut down overnight, it is certainly true that there is an urgent need for a swift and just transition away from coal for NSW, into clean and sustainable alternative industries.

The first step of such a transition is a ban on new coal infrastructure projects in NSW, including new coal export projects, including the proposal to increase the throughput capacity of the Kooragang Coal Terminal. This project must not be approved.