

**Submission
To
Carmichael Coal Mine
and
Rail Project
Environmental Impact Statement**

Submission from
Doctors for the Environment Australia Inc.
David Shearman, Hon Secretary
College Park House, 67 Payneham Road
COLLEGE PARK SA 5069
Phone: 0422 974 857
Email: admin@dea.org.au
<http://www.dea.org.au>



The following are members of our Scientific Committee and support the work of
Doctors for the Environment Australia

Prof. Stephen Boyden AM; Prof. Peter Doherty AC; Prof. Bob Douglas AO; Prof. Michael Kidd AM;
Prof. David de Kretser AC; Prof. Stephen Leeder AO; Prof. Ian Lowe AO; Prof. Robyn McDermott;
Prof. Tony McMichael AO; Prof. Peter Newman; Prof. Emeritus Sir Gustav Nossal AC; Prof. Hugh Possingham;
Prof. Lawrie Powell AC; Prof. Fiona Stanley AC; Dr Rosemary Stanton OAM; Dr Norman Swan;
Professor David Yencken AO

Doctors for the Environment Australia (DEA) is an independent, self-funded, non-government organisation of medical doctors in all Australian States and Territories. Our members work across all specialties in community, hospital and private practices. We work to minimise public health impacts and address the diseases – local, national and global – caused by damage to our natural environment.

Recommendations

1. The EIS should not be accepted without further studies, particularly health and economic assessments; evidence is not presented that the project has net benefit to the Australian community
2. The greenhouse emissions from the proposed project will be causative factor in future extreme weather events in Queensland and Australia. The resulting health and economic impacts of climate change must be included in the EIS.
3. Within the context of the proposed development of several major mines in the Galilee Basin there must be a basin-wide study of cumulative impacts before any further mines proceed
4. The Carmichael project should be assessed independently of proponent and state government.

Introductory comment

This project is one of the largest proposed coal mines in Queensland, producing 60 million tonnes per annum from a mine site 160km north-west of Clermont. The coal will be exported through either Abbot Point or Hay Point.

There is a sense of unreality with this proposal; the Executive Summary of which makes statements such as

Page E-xv "The management and mitigation measures employed through the construction, operational and decommissioning of the Project (Mine) adequately safeguard against risks associated with natural hazards and climate change"

How can this be, when the mine will cause a measureable impact in world emissions?

E-ix "The distribution of the impacts on the local and State economies are mostly positive, with further positive impacts felt nationally and internationally".

How can this be when externalities are not costed and indeed there is no overall economic assessment of true value to the community?

E-iii "Adani has sought to deliver community benefit from its business involvement and is committed to environmental protection and sustainable management of its operations and activities".

If Adani is committed to sustainability then this project cannot proceed. Carbon budgets suggest that we need to leave most of the remaining fossil fuels in the ground, so the predicted mine outputs over 90 years is not environmentally or economically sustainable in a national or international perspective.

Doctors for the Environment Australia made a submission on the draft TOR; many the recommendations made have not been incorporated.

Health Impacts

Here we detail the health impacts of the project which we recommend should be readdressed and their economic costs considered in an overall value of the project.

Health Impact Guidelines as detailed in 2001 are part of the EIS process [http://www.health.gov.au/internet/main/publishing.nsf/content/35F0DC2C1791C3A2CA256F1900042D1F/\\$File/env_impact.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/35F0DC2C1791C3A2CA256F1900042D1F/$File/env_impact.pdf).

Health Impact Assessment (HIA) should be included in this EIS. The evidence for inclusion of health impacts is decided by means of a screening and scoping processes by the state government and it would be important to detail the criteria by which some health impacts were excluded. This decision should be given at the commencement of the EIS, otherwise health experts are condemned to search the document for potential impacts—and indeed there are many- but they are not identified as such. There is a strong case for the potential health impacts to be brought together in one section.

This point can be illustrated by an analysis of Chapter 8 the most important health impact of the project, yet it is not considered as a health issue.

8. Greenhouse Gas Emissions

The exclusion of Scope 3 emissions by government regulation conveniently allows both proponents and Australian governments to avoid responsibility for global harms caused by a project; the pollution is not caused in Australia so it is someone else's problem. However this convenient regulation does not allow proponents to avoid this assessment completely for it is evident that the harms caused by these emissions are now affecting Australia through accelerating climate change; they should be included in the HIA.

It is notable that the word "health" is not included in Chapter 8. The World Health Organization (WHO) views climate change as one of the biggest health threats of this century, not only can there be direct loss of life and injury from extreme weather events but the fundamental determinants of health, access to appropriate air, water, food, shelter and freedom from disease are also indirectly threatened by our surrounding climate and subsequent weather events. The United Nations has repeatedly emphasised that climate change threatens all our goals for development and social progress and is a true existential threat to the planet.

Surely in the light of compelling scientific data on the increasing frequency and intensity of extreme weather events it would be accepted by the Queensland government that there is a relationship to flooding events in recent years which are costing lives and billions of dollars? In which case this issue should be part of a comprehensive HIA process and these probabilities should be included in the economic assessment as to the overall value of the project to the Australian community.

In summary, in health terms these impacts are:

Deaths and injuries from climate change

The project emissions can be calculated from the combustion of the mined coal wherever this takes place.

The resulting rise in world temperature can be calculated as a proportion of global emissions.

Based on extrapolation WHO figures there are 300,000-400,000 deaths per annum from climate change

<http://www.ecologicalinternet.org/shared/reader/welcome.aspx?linkid=223935&keybold=climate%20AND%20%20solution%20AND%20%20intergenerational> and so the proportion of this figure due to the project each year and over the life of the mine can be calculated. Estimates of illness and injury can be made.

A proportion of this health impact now falls upon Queensland and all Australia; it should be calculated and included in the HIA.

Economic loss from climate change

These losses are relevant for they also have health impacts.

The IBIS World report on the economic impact of the 2011 Queensland floods provided an estimate of \$10b from impacts on construction, tourism, transport, mining and agriculture. The costs of health impacts including deaths were not mentioned and were presumably absorbed into existing health and social services. Budget deficits in Queensland have been compounded by these and other floods, and health services have been cut along with many other government commitments. Again this is a health impact.

In the overall economic assessment of this project, the positives and negatives that will allow the community to see the true value of the project must be detailed.

In this regard, the statement on page Page E-1 is questionable

"If the Project does not proceed it would likely lead to Adani's demand for coal being met outside of Australia and the benefits of significant economic investment would not be realised".

Firstly, the drug dealer's defence is inappropriate- If I don't supply them someone else will. The International Energy Agency has indicated that other supply chains to replace current coal supplies could not deliver within time lines and the demand for renewable energy would increase.

Secondly the EIS cannot make the claim of any overall benefit without full health and economic assessment. This should be considered in 6.

6. Economies

6.4 Summary

"The potential of the Project to produce significant positive impacts on the local and State economies is substantial."

This assertion has not been substantiated. The costs of short and long term health, adverse social and environmental impacts have not been calculated. Therefore the true value to the community cannot be assessed.

We recommend the EIS be resubmitted with this information.

There should be an independent economic assessment of the project based on cost benefit analysis, supported by economic impact assessment. Economic impact assessment is not a substitute for cost benefit analysis. 'Independent' because there is clearly a conflict of interest in that a state government heavily in debt will receive income soon and the debt from health, social and environment impacts will be delayed or passed to others. The community needs to know the complete balance sheet. The use of cost benefit analysis by independent consultants would follow the practice of the Commonwealth, the Department of State Development, Infrastructure and Planning and is recommended by the Business Council.

3. Social Impact Assessment

3.3.2 Project Workforce Profile

The Social Impact Assessment process is appropriate.

However we note;-

"The significance of potential impacts was determined based on the severity, likelihood, duration, spatial extent and importance of the impact. Information was sourced through SIA consultations, a desktop literature review, and information from discussions with landholders held by Adani."

It is important that the sources of information be referenced by source so they can be corroborated and any essential studies omitted can be identified. There are also important health implications in addition to those already identified, such as increases in the need for health services. In this regard we draw attention to the health, social and economic costs of Fly-in Fly-out workforce (FIFO).

"It is expected that the Project (Mine and Rail) will reach peak workforce in 2015 with approximately 3,700 workers"

"It is expected that almost all workers will be recruited on a FIFO basis, flying in and out of one or more nominated collection points in population centres on the east coast of Queensland. This does not mean that workers will have their permanent residence at these locations. Workers may reside elsewhere in Queensland or Australia and travel independently to the nominated collection point, from where transportation to the proposed mine will be undertaken by Adani. Workers and their families may choose to relocate to the collection points, but this would be at the worker's discretion and not directed by Adani"

This issue is addressed in 4;-

4. Social Impact Management Plan

This is comprehensive and has used lessons learned from earlier FIFO systems in Australia. This is an extremely complex topic and an assessment of the 234 submissions to the Senate Inquiry into the use of 'fly-in, fly-out' (FIFO) workforce practices in regional Australia provides some indication of the likely short and long term health impacts. These are well documented and include the precipitation of mental illness, suicide and family breakdown.

In relation to **6. Economies** the cost of FIFO must be calculated in the long and short term and the apportionment to state and national budgets. Only complete analysis can allow for judgement as to whether this project will have net profit to the community.

8. Cumulative Impacts

The section is introduced as follows

"Cumulative impacts can be defined as successive and combined impacts of one or more projects upon the society, economy and the environment (Franks, DM, Brereton, D, CJ, Sarker, T and T, Cohen, 2010)"

This report was funded by the Australian Coal Industry. The report avoids consideration of the most important cumulative consideration – green house emissions.

The credibility of the Carmichael EIS is severely tarnished by the summary which indicates that green house emission have low significance and lists the project as having an economically positive impact when there are no definitive studies on either.

As indicated by Minister Burke in some recent statements, cumulative impacts are important for Basin developments.

<http://www.environment.gov.au/minister/burke/2012/mr20121010.html>. We believe this should apply to cumulative emissions and to long term economic impact and value to the community.

The statement in the Executive Summary that

"The Great Barrier Reef is downstream of the Project via the Belyando River and will not be impacted by the Project."

has no validity.

Studies have not been done to assess the impact of the drainage of the entire catchment into coastal waters. A cumulative impact of Carmichael on the Reef is already identifiable; the proportion of port expansion, dredging and increased shipping to accommodate the export from Carmichael.