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19th December 2011,

To whom it may concern:

Please find enclosed a submission on behalf of Greenpeace Australia Pacific in response to the Environmental Impacts Statement for the Galilee Coal (Northern Export Facility) Project (otherwise known as the China First Coal Project).

Our submission consists of two documents:

1. This submission;
2. The report titled "*Climate impact analysis of the China First Mine and the proposed development of the Galilee Basin*" which is referred to as Appendix 1 of this submission

Yours sincerely,



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Submission by Greenpeace Australia Pacific in response to the Environmental Impact Statement for the Galilee Coal (Northern Export Facility) Project (otherwise known as the China First Coal Project)

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1.0 Introduction

Greenpeace respectfully submit that the proposal for the Galilee Coal Project by Waratah Coal be rejected on the grounds of excessive and unjustifiable environmental and climate change impacts.

Our submission is brief. Community organisations such as Greenpeace simply do not have the resources required to conduct a comprehensive review of such a large Environmental Impact Statement (EIS) over such a short period of time, particularly when it is released at the same time as those for other large projects of a similar nature.

This reveals a serious flaw in the process of engaging stakeholders and the wider community in the environmental assessment process. We strongly recommend that the Queensland Government make serious financial resources available to community organisations in order to enable them to have the capacity to input constructively to the EIS process for future projects.

Our comments focus on several significant omissions from the EIS resulting from what we consider to be a flawed definition of the boundary of the project. These include:

1. Failure to consider the role of the project in enabling other Galilee Basin mines
2. Greenhouse gas emissions resulting from the burning of coal
3. Failure to consider climate change impacts of related infrastructure
4. Impacts on the Great Barrier Reef Marine Park as a result of increased shipping

In addition, we make comments about the unacceptable impacts of the project on the Bimblebox nature refuge. Finally, we refute the justification of the project, both in terms of the economic contribution it makes, as well as in terms of the alleged need to meet global coal demand.

2.0 The role of the Galilee Coal Project in enabling other mines

"The rail corridor will open a new multi-billion tonne coal province with opportunities for thermal coal export to world markets for both Waratah Coal, as well as other Galilee Basin proponents through welcomed third party access arrangements."

The above statement, made in section 1.4 (Project Rationale) of the EIS, is one of many by the proponent suggesting that railway infrastructure for China First be considered in the context of the Galilee Basin as a whole. It is clear that the Galilee Coal Project is only one part of a larger project (regardless of ownership) and that in assessing the rail line, assessment of the entire basin development (or at least those mines listed as likely users of the rail line) and its impacts, is necessary under the Environmental Protection and Biodiversity Conservation (EPBC) Act.

There are three questions to consider in relation to whether or not the China First Project can or should be considered in isolation from the wider Galilee Basin:

1. Does the output of the proposed China First mine alone justify the level of investment in the proposed railway infrastructure?
2. Do other projects proposed for the Galilee Basin rely on the provision of railway infrastructure proposed by China First?
3. Does the railway infrastructure proposed by China First represent 'enabling infrastructure' for additional coal mining projects?

These questions are explored in detail in section 3.2 of the report titled "*Climate impact analysis of the China First Mine and the proposed development of the Galilee Basin, QLD*" included as part of this submission in Appendix 1.

We conclude that the Galilee Coal Project mine and rail line cannot be seen in isolation from the wider Galilee Basin and that the cumulative emissions from the wider Basin development should be included in the consideration of the climate impacts from the project.

3.0 Greenhouse emissions resulting from the burning of coal

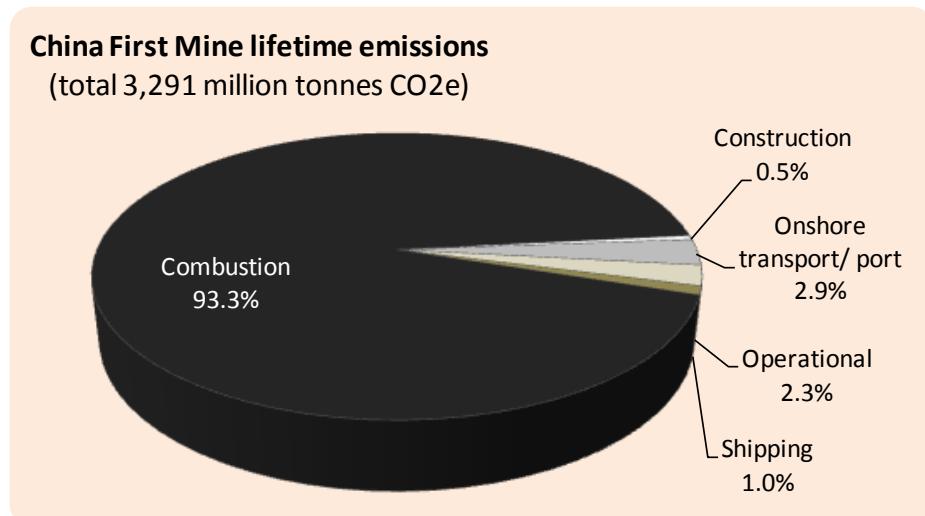
The greenhouse emissions resulting from the burning of coal from the Galilee Coal Project have not been considered in the EIS. This represents a flawed definition of the boundary of the project and results in major environmental impacts being omitted from scrutiny.

A full analysis of the total greenhouse impacts of the Galilee Coal Project is included in Appendix 1, including a justification for why combustion emissions should be included, as well as quantification of these emissions.

From a moral point of view, ignoring the negative impacts of the product being produced is akin to the morality of the ‘heroin dealer’ – with the only viable argument being that ‘if we don’t sell it somebody else will’. We do not believe this to be an acceptable moral position for the Co-ordinator General of the Queensland State Government to take.

Responsibility for greenhouse pollution is a crucial moral issue. The potential effects of climate change in the absence of emissions reductions sufficient to limit warming to under 2°C are potentially catastrophic. For example the World Health Organisation (WHO) estimates that already 150,000 deaths are occurring annually due to climate change.ⁱⁱ

In terms of overall greenhouse emissions attributable to the project, the following graph shows the significance of combustion related emissions.



Source: “Climate impact analysis of the China First Mine and the proposed development of the Galilee Basin, QLD”ⁱⁱⁱ

The EIS reveals that once full production is reached, annual Scope 1 and Scope 2 greenhouse emissions from the project (including the mine, rail and port operations) would be roughly 5.3 Million tonnes CO₂-e. To put this in context, this is equivalent to putting an extra 1.5 million cars on the road^{iv}, or the total emissions for an additional 425,500 Australian households (including household energy and private cars, 2009/10 data^v). These emissions alone are unacceptable given the urgent need to reduce emissions. However, they are dwarfed by the combustion emissions.

Offshore emissions (shipping and combustion) from the Galilee Coal Project mine would be 95 million tonnes per annum for most of the mines operational life – equivalent to roughly 16% of Australia’s total current domestic emissions^{vi}.

The majority of these emissions result from combustion of the coal (94 million tonnes CO₂-e per annum) while an additional 1 million tonnes per annum are estimated to result from shipping. Neither of these are included in the climate change analysis contained within the project EIS. This is a major omission.

However, due to the enabling nature of the Galilee Coal Project (as outlined in section 2.0 above) it is necessary for the proponent to consider the combined climate impacts of the projects that it would enable.

Table 1 below shows the total emissions (both onshore and offshore) from the Galilee Basin mines that would be enabled by the Galilee Coal Project 400Mtpa rail line.

Table 1 Emissions from the Galilee Basin

Million tonnes CO ₂ -e	2020	2030	2040	2050	CUMULATIVE 2013 - 2050
ON SHORE EMISSIONS - GALILEE BASIN					
Construction	5	-	-	-	145
Mine operations	15	22	22	19	666
Transport and port operations	20	28	28	25	853
Total onshore emissions	40	49	49	44	1,663
EMISSIONS FROM COAL – GALILEE BASIN					
Shipping	7	9	9	8	282
Combustion	625	882	882	788	27,163
Total offshore emissions	632	891	891	796	27,445
OVERALL TOTAL	672	940	940	840	29,108

Source: "Climate impact analysis of the China First Mine and the proposed development of the Galilee Basin, QLD"^{vii}

As can be seen from section 5.3 in Appendix 1, the combined emissions (including combustion) from the Galilee Basin mines enabled by the Galilee Coal Project are substantially larger than Australia's total greenhouse emissions.

The cumulative emissions enabled by this project are incompatible with a global target of limiting warming to 2 degrees and are incompatible with public interest. The project should therefore be rejected.

4.0 Omission of climate impacts of related infrastructure

There are a number of related infrastructure developments that are being proposed in order to provide necessary services to the Galilee Coal Project. However, it is not clear if or how these related projects have been included in the EIS for the project. In order to understand and evaluate the cumulative impacts, greenhouse gas emissions (and other environmental impacts) from these associated projects need to be apportioned to the Galilee Coal Project.

The auxiliary facilities for the project include the provision of new power supply infrastructure (including a new 275 kV transmission line from the Lilyvale substation to the mine - to be owned by Powerlink), water supply (including the Connors River Dam and Pipeline^{viii}) and wastewater treatment facilities, fibre optic telecommunications infrastructure, fire-fighting and first aid infrastructure, machinery maintenance centre, accommodation and an airport.

These other projects are being developed in order to service the Galilee Coal Project and would not proceed without this project also proceeding. Therefore, their impacts should be considered as part of the cumulative impacts of the Galilee Coal Project.

5.0 Impacts on the Great Barrier Reef Marine Park from increased shipping

The EIS does not consider the environmental impacts of increased shipping through of coal through the Great Barrier Reef Marine Park. This needs to be considered as there will be a significant increase in shipping as a direct result of this project.

The EIS does not discuss the size of vessels that will be used to transport the coal from Abbot Point to the various destination ports. The proposed Multi-Cargo Facility at Abbot Point is being designed to accept Capesize vessels. For illustrative purposes, if we assume that Capesize vessels of an average capacity of 100,000 tonnes are used, the Galilee Coal Project will result in an additional 400 coal ships passing through the Great Barrier Reef Marine Park each year.

If we consider the real scope of the project being considered in the EIS including the rail line and the intention for it to enable up to 375Mtpa of additional coal exports per year, this figure would increase to 3,750 additional coal ships passing through the Great Barrier Reef Marine Park each year as a result of the Galilee Coal Project.

Information regarding the anticipated size and number of ships, along with the shipping route should be sought from the proponent. A supplementary EIS is required to examine the environmental impact of increased ship movement on the Great Barrier Reef Marine Park. Mitigation, risk management and emergency response plans will be required to predict and to manage this impact.

6.0 Impacts on Bimblebox Nature Refuge

The proponent has failed to acknowledge the significant and largely irreplaceable values of Bimblebox Nature Refuge which would be substantially impacted by the proposed mine.

Conservation values of Bimblebox

Bimblebox Nature Refuge is home to a number of threatened and significant species and its role as a sanctuary for the rich diversity of flora and fauna species in the Desert Uplands bioregion will be even more crucial in the coming decades.

Bimblebox Nature Refuge is one of the largest tracts of intact remnant woodland in the area northwest of Alpha. It is situated in the Desert Uplands, considered a biodiversity hotspot,^{ix} but where less than 5% of the area is held in conservation reserves.^x While the dominant ecosystems on Bimblebox are not listed as ‘of concern’, they are barely represented in the regional National Parks.^{xi} Much of the surrounding land has been cleared and blade-ploughed for cattle grazing and is given over to tree-less pasture pastures, primarily consisting of the introduced species Buffel Grass (section 5.2.6, Appendix 10, p.42).

The proposed open-cut mine would involve the destruction of 52% of Bimblebox Nature Refuge, totalling some 3,926 hectares of remnant native vegetation (section 3.1.8.2, Executive Summary, p.35). The remaining 48% of the property would be subject to underground mining which is likely to cause substantial subsidence ‘expected to range between 1.3-1.6 m’ and interference with the natural hydrology that supports the overlying ecology (section 6.4.1.2, Vol. 2 Ch. 6, p.187).

Given the scale of proposed coal developments in the region is likely to result in many tens of thousands of hectares of remnant vegetation being cleared in the vicinity of Bimblebox, this increases the value of existing conservation areas and shows why Bimblebox Nature Refuge should remain protected in perpetuity.

Moreover, Bimblebox Nature Refuge and the precious few other conservation areas with recognised rich biodiversity in the bioregion will also be crucial in buffering the impacts from climate change in the region. An increase of 0.5°C in average annual temperatures has already been observed in central Queensland between 1998 and 2007, and it is projected that this may further increase by up to 4.5°C by 2070 (Queensland Government 2009, p.4)^{xii}.

Coal mining is incompatible with ‘in perpetuity’ protection of nature

In 2003 the Bimblebox Nature Refuge Agreement (IUCN category VI) was signed between the landholders and the Queensland Government. This agreement states that it ‘will ensure that management and use of the Land sustains [the] flora and fauna values in perpetuity’ (Bimblebox Nature Agreement, p.12). The clear intention of the Bimblebox Nature Refuge Agreement is represented in the following points listed in Item 5 (Clause 4.6):

'The Landholder shall not undertake, consent to or approve.... :

- a) the interference with, or destruction or removal of, any native plants including trees, shrubs and grasses;
- b) the planting of any trees, shrubs, grasses or any other plants other than local indigenous native flora preferably derived from local seed stock;
- c) any act or omission which may adversely affect any indigenous flora or fauna or their related habitats;
- d) any deterioration in the natural state or in the flow, supply, quantity or quality of any body of water;

Building an open cut coal mine that would completely destroy half of the nature refuge is not compatible with 'sustain[ing the] flora and fauna values in perpetuity' as stated in the Nature Refuge Agreement. Indeed, it is difficult to imagine a project that would have a more devastating impact on Bimblebox.

If the Galilee Coal Project proceeds as planned, it would undermine the very concept and legitimacy of Nature Refuges in Queensland. It would set an extremely dangerous precedent and would create a level of uncertainty over conservation agreements that would undermine community confidence in Government agreements for many years to come.

The proposal for this mine should not even be seriously considered due to the impacts on Bimblebox Nature Refuge alone.

7.0 No sound justification for the project

There is no sound justification for the project. The economic benefits are consistently overstated and little attention is given to the fact that the majority of economic benefits will accrue to a relatively small number of beneficiaries whereas the negative economic impacts of the project will be spread widely across the Australian community.

Economic benefits are overstated

The estimates of tax revenue included in the EIS are based on an AUD\$ exchange rate of US\$0.80 – substantially lower than the current actual exchange rate. This has the effect of over-stating the likely royalties that will be received by the State Government. This is a serious concern given that royalties form an important part of the justification for the project and given the upward pressure that this project, and the mining boom more broadly, will continue to exert on the value of the Australian dollar.

In relation to the question of job creation, page 57 of Appendix 24 of the EIS states that 'the China First Project will place additional pressure on the already tight labour market in an industry (and region) that in recent years has been exposed to significant skills shortages...'

It is not clear why it is beneficial to be creating new jobs in an industry and region that continues to experience sustained skills shortages, particularly given the wider negative impacts on employment, noted below, should the project proceed.

Economic costs are significant

The EIS clearly states that:

- Significant job losses will occur in other industries (notably manufacturing) and that manufacturing output will decline by \$1,249.9 million per year between 2013 and 2017 (p. XIII Appendix 24)
- Manufacturing jobs will decline by 2,215 in Queensland alone between 2013 and 2017 (p. XVI Appendix 24)
- 'The draw of labour to the mining and transport and storage sectors...is estimated to result in some other sectors recording a decline in employment compared to what would be achieved without the China First Project' (p.XVI Appendix 24)

The EIS does not adequately address the wider negative economic impacts resulting from upward pressure on exchange rate and interest rates from such a large project, particularly considering the enabling role of the rail line.

These negative impacts potentially (more than) negate the purported economic benefits of the project, regardless of the unacceptably high environmental impacts.

No need to increase coal exports

There is no need to increase coal production in Australia or anywhere else. In fact, if we are to avoid the worst impacts of climate change, we need to reduce coal production and consumption considerably and rapidly.

The project has been presented with reference to a business as usual scenario of global coal demand. However, as the Australian Government has committed to global action to keep temp below 2 degree threshold^{xiii}, the proponents should make reference to future coal scenarios consistent with this. The International Energy Agency (IEA) has developed such a scenario (IEA 450 scenario), which should be used as a reference to determine whether the project is required and the impacts justified.

The International Energy Agency 450 ppm scenario was developed in 2010 as a scenario in which:

“.. policies are assumed to be introduced to bring the world onto an energy trajectory that provides a reasonable chance of constraining the average global temperature increase to 2° Celsius.” IEA (2010)^{xiv}, p78

It should be noted that Greenpeace does not consider 450ppm or 2 degrees to be sufficient targets to avoid catastrophic climate change. Many researchers have concluded that a lower atmospheric target is needed, such as 350 ppm (for example, Anderson and Bows, 2011^{xv}; Hansen et al., 2008^{xvi}; Rockström et al., 2009^{xvii}; Smith et al., 2009^{xviii}). However, the 450 scenario is the lowest emission scenario put forward by the IEA.

It is clear from the analysis presented in Appendix 1 that the Galilee Coal Project is incompatible with the required future trajectory of the coal industry as described in the International Energy Agency (IEA) 450 ppm scenario from IEA^{xix}, and the Energy [R]evolution Scenario produced by Greenpeace International (GPI) and the European Renewable Energy Council (EREC)^{xx}.

The increased production, and therefore the increased emissions from the Galilee Coal Project and the wider Galilee Basin development are in stark contrast to the steeply declining emissions from coal in both the IEA and the Greenpeace/ EREC scenarios.

As concluded in the report in Appendix 1, the development of the Galilee Basin effectively doubles Australia’s coal production. This is in stark contrast to the International Energy Agency’s projection for world coal demand, which shows a **decrease** of 38% in coal demand in their IEA 450 scenario, the IEA scenario designed to keep global temperature rise below 2°C. Even the IEA New Policies scenario, based on stated policy intentions only shows a 9% increase in coal demand by 2035. If policies are put in place to keep temperature change within 2°C as advocated by the Australian Government, there is a very real possibility that development of the Galilee Basin could become a stranded asset, without a market for the coal.

Emissions from the Galilee Basin, including both the production and use of the coal, estimated in the report would account for 4% of the available global carbon budget for energy from now until 2049, if the world is to have a better than even chance of keeping temperature rise below 2°C. Added to current production and excluding other mine developments that are currently proposed in other areas, Australian coal could account for 9% of this budget.

It is impossible to reconcile the development of the Galilee Basin with Australia’s commitment to global action to keep temperature rise below 2°C.

8.0 Conclusion

The EIS fails to include many of the cumulative impacts of the proposal.

The proposal should be rejected outright on the grounds that:

1. There is no way to ‘manage’ the impacts of the project on the Bimblebox Nature Refuge and this nature refuge is far more valuable to humanity than this project;
2. The project will have widespread negative economic impacts on the Australian community while any economic benefits will be concentrated in the hands of a small number of direct beneficiaries;
3. The increase in greenhouse emissions that would result from this project are unacceptable and incompatible with Australia’s greenhouse reduction targets and with global attempts to limit global warming to 2 degrees or less.

9.0 Appendix 1 - Climate impact analysis

Please find attached the appendix titled “*Climate impact analysis of the China First Mine and the proposed development of the Galilee Basin, QLD.*”

This appendix should be considered to be an integral part of this submission. It has been included as an appendix rather than within this document simply for ease of communication and layout.

10.0 Acknowledgements:

Greenpeace would like to acknowledge the tireless work of Paola Cassoni, Sonya Duus and others in fighting to protect Bimblebox Nature Refuge for the benefit of future generations. This submission has drawn from their extensive local knowledge and from their own detailed submission to this EIS. We would also like to acknowledge the work of Jay Rutowitz, Leah Mason and Nicky Ison from the Institute of Sustainable Futures for assistance with analysis of the climate change impacts of the mine.

This submission was written by John Hepburn with input from Adam Walters and Belinda Fletcher.

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- ^{xiii} UNFCCC, 2010, Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010, paragraph 4 of decision 1/CP.16 "Further recognizes that deep cuts in global greenhouse gas emissions are required according to science, and as documented in the Fourth Assessment Report of the Inter-governmental Panel on Climate Change, with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2°C above pre-industrial levels, and that Parties should take urgent action to meet this long-term goal, consistent with science and on the basis of equity; Also recognizes the need to consider, in the context of the first review, as referred to in paragraph 138 below, strengthening the long-term global goal on the basis of the best available scientific knowledge, including in relation to a global average temperature rise of 1.5°C;"
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