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Research that matters.

Inquiry into Galilee Basin State Development Area:

State Development and Public Works Organisation (State Development Areas) Amendment Regulation (No.1) 2014

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Mark Ogge, Roderick Campbell

TAI

Submission

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Level 5, City Walk Centre
131 City Walk
Canberra City, ACT 2601
Tel +61 2 6130 0530
Email: mail@tai.org.au
Website: www.tai.org.au

Introduction

The Queensland Government is conducting an inquiry into a proposal to declare an official "State Development Area" over prospective coal projects in the Galilee Basin of Central Queensland and across the area between the Galilee Basin and proposed coal export terminals at the port of Abbot Point.

The effect of the Galilee Basin State Development Area (GBSDA) would be to prioritise coal mining, transport and port development over other land uses across a large area of Queensland. The projects enabled by this State Development Area are some of the largest and potentially most environmentally damaging projects ever proposed for Queensland, with significant social and economic impacts. Negative economic impacts will be felt by existing coal mining regions in Queensland, as well as other important industries, particularly agriculture and tourism.

Despite these negative impacts, the economic merits of the projects in the area have not been adequately assessed. Economic assessment to date has been based on input-output modelling techniques described as 'biased' and 'abused' by the Australian Bureau of Statistics and the Productivity Commission. No Cost Benefit Analysis has been conducted, in contrast to Queensland Government guidelines which require it.[1]

Impact on Queensland coal industry

The Queensland coal industry has been struggling for several years, with the industry's lobby group, the Queensland Resource Council, claiming that a quarter of the state's mines are operating at a loss, particularly thermal coal mines.[2]

The coal projects in the Galilee Basin would put large amounts of coal onto world markets and push down prices further, increasing pressure on existing operations. The Bureau of Resource and Energy Economics estimates the world seaborne thermal coal market at around 1,000 million tonnes per year.[3] Galilee Basin projects propose to put up to 300 million tonnes per year into this market. Market analysts suggest this could depress coal prices by 10 to 20 per cent.[4]

Given the long project life expected for the Galilee Basin projects (the Carmichael project plans for a sixty year life) this long-term hit to coal prices would almost certainly lead to mine closures and job losses. The environmental impact statement for the Carmichael mine even discusses low coal prices leading to other mine closures. [5]

These impacts will be felt hardest in existing mining areas in the Bowen Basin, and further south in areas closer to population centres than the Galilee Basin. Transferring coal mining from these areas to more remote areas will undermine efforts to bring development and increased activity to these regional areas, and entrench fly-in-fly-out working arrangements in the Galilee Basin, bringing minimal development to remote communities.

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[1] (ABS, 2011; Gretton, 2013; Qld DIP, 2011)
[2] http://www.smh.com.au/business/mining-and-resources/bhp-rio-warn-strong-australian-dollar-will-lead-to-more-job-losses-20140526-38xck.html
[3] (BREE, 2013)
[4] http://agmetalminer.com/2014/08/06/environmentalists-go-up-against-indias-well-connected-adani-group-over-queensland-coal/
[5] (GHD, 2013a)

Impact on other industries

Major developments in the Galilee Basin would not only draw resources away from Queensland's mining industry, but also from other industries. Manufacturing and agriculture will be particularly impacted, as manufacturing employs people with similar skills, and agriculture operates in nearby rural areas. The construction and operation of Galilee Basin projects would bid up the price of labour, services and other inputs for these industries, making it more difficult for them to compete.

The economic assessment for one of the Galilee Basin projects, Waratah Coal's China First project, included these impacts in their assessment. They estimated that their project alone would:

- Reduce employment in manufacturing by 2,215 jobs
- Reduce employment in agriculture by 192 jobs.[6]

The tourism industry would also be affected. Adding hundreds of millions of tonnes of coal to existing exports would have a material effect on the exchange rate, making Queensland a more expensive destination for international visitors and making overseas holidays more attractive for Australians.

Perhaps more importantly for the tourism industry, the Galilee Basin coal projects impact on how Queensland is perceived as a tourism destination. The proposals to dump dredge spoil and increase shipping in the Great Barrier Reef Marine Park have attracted international concern for the future of the reef, and the condemnation of World Heritage bodies.[7] The image of Queensland as a state increasing coal exports while climate change damages one of its most treasured natural assets cannot assist with marketing the state to the world.

These projects would also lead to the permanent destruction of significant amounts of agricultural land in the areas to be mined, disruption of farm businesses along the rail corridor, and diversion of huge quantities of scarce water-resources from agriculture to mining.[8]

Lack of Cost Benefit Analysis

Despite the serious economic costs that the Galilee Basin coal projects would impose on other areas, there has been no Cost Benefit Analysis (CBA) to show that the projects individually, or the proposal to establish the GBSDA, would provide an overall benefit to the Queensland community.

The explanatory notes for the proposed amendment have a section on the "Benefits and Costs of Implementation". It states:

> *The development of the Galilee Basin will be of overall economic benefit to Queensland, creating employment opportunities and providing coal royalties for the State.*[9]

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[6] (AEC group, 2010)

[7] http://www.abc.net.au/news/2014-05-01/unesco-decision-dredge-spoil-near-great-barrier-reef-condemned/5422802

[8] Crothers (2014). Draining the Lifeblood, Groundwater impacts of coal mining in the Galilee Basin and addendum. Hydrocology Environmental Consulting.

[9] Queensland Parliament (2014), Explanatory notes for the the State Development and Public works Organisation (State Development Areas) Amendment Regulation (NO.1) 2014.

This assertion is not based on any orthodox economic analysis. There has been no CBA of the GBSDA proposal and there has been no CBA released of any of the major proposals individually.

What economic assessment has been conducted of the Galilee Basin coal projects has largely been based on 'input-output' modelling, which is mathematically certain to overstate the positive impacts of the projects. Because of this, Queensland government guidelines explicitly recommend against this type of modelling which is certain to overstate the benefits of projects:

> *The primary method of economic evaluation of public sector policies and projects is Cost- Benefit Analysis. Input-output methodology (or the use of multipliers) is not a preferred methodology for economic evaluations.*[10]

By ignoring guidelines and Cost Benefit Analysis, and employing unreliable economic modelling, project proponents have concealed an important fact – all Galilee Basin and associated projects are known to be struggling for financial viability.

Galilee Basin projects not financially viable

Many financial analysts and economists are concerned about the viability of these projects:

> *Development of the Galilee Basin looks increasingly remote, Macquarie Group Ltd., Australia's biggest investment bank, said in a May 1 research note. Prospects for project paybacks look extremely poor, the bank said. Further delays are likely unless "deep pocket" backers are able to ignore conventional economics, Sydney-based Macquarie said.*[11]

The most advanced project, the Carmichael coal mine is considered:

> *Uncommercial for investors. The project's economics don't stack up. The short- and long-term price of coal globally, and within the principal outtake market of India, does not support the cost structure of this mining project. The Adani Group is also financially and operationally constrained and faces a series of logistical barriers in Australia.*[12]

Another of the more advanced projects, GVK's Alpha project also faces financial difficulties, as the company has net debt of around $2.8 billion and a market capitalisation of around only $240 million. The total capital cost of the Alpha project is around $10 billion. GVK have never operated any business outside of India, and have never operated a coal mine in India or elsewhere.[13]

The viability of all these projects is based on assumptions of increasing coal demand and prices. However global investment analysis from HSBC, Deutsche Bank, Citigroup, Standard & Poor's and Moody's have all confirmed that coal demand is slowing, and will continue to do so.[14]

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[10] (Qld DIP, 2011) p18

[11] Scharples, B. (2013).

[12] Buckley and Sanzillo (2014). Remote Prospects, A Financial analysis of Adani's coal gamble in Australia's Galilee Basin. Institute of Energy Economics and Financial Analysis.

[13] Buckley and Sanzillo (2014). Stranded; A Financial Analysis of GVK's proposed Alpha Coal Project in Australia's Galilee Basin. IEEFA

[14] These sources are summarised in Buckley and Sanzillo (2014), see also (Bernstein Research, 2013; MorningStar, 2014)

Consequences of unviable projects

Proceeding with the development of the Galilee Basin despite the financial unviability of doing so will have heavy costs for Queensland's taxpayers through reduced royalties and industry demands for assistance.

Royalties

Due to the lack of Cost Benefit Analysis of the Galilee Basin projects, there is no available estimate on how much they might pay in royalties.[15] This is an extraordinary omission, as royalties would be the main financial benefit Queensland would receive from these projects. As these projects are largely foreign-owned, other financial benefits, such as profits, accrue mainly to foreign interests.

Despite the importance of royalties as a benefit of these projects, it is Queensland Government policy to waive royalties to encourage the development of the Galilee Basin.[16] This is euphemistically described as a "ramp-up to full royalty" by the Government, but there are no details as to how low this "ramp" might be set and how steep its gradient might be. Every tonne of coal produced without full royalties paid represents a loss to Queensland taxpayers and a subsidy to the Galilee Basin coal industry.

While Queenslanders should be concerned about royalty waivers, the importance of royalties to the state budget is widely over-estimated. While Premier Newman thinks that the coal industry is vital if Queensland is to have "decent hospitals, schools and police on the beat",[17] in fact, coal royalties account for only four per cent of Queensland Government revenues - a similar amount to motor vehicle registration.[18] Royalties from the Galilee Basin – if any are ever paid – would have a minor impact on the state's finances.

Industry assistance

Research by The Australia Institute shows that, over the last six years, the Queensland Government has spent more than $8 billion dollars on infrastructure and other forms of assistance for the coal industry. Last year alone, the Queensland Government provided almost 1.5 billion dollars of support to the mining industry, equivalent to almost half the amount paid by the industry in royalties. [19] In addition to paying for railways and ports used by the industry, the government provides discounted access to this infrastructure worth over $500 million per year.

Most of this assistance has gone to parts of Queensland's coal industry that are financially viable and profitable. In order to develop the Galilee Basin it is likely that huge state government assistance would be required.

Every dollar spent on assistance to the Galilee Basin coal industry is a dollar that is not spent on health, education and law enforcement in the rest of Queensland. Health, education and law enforcement provide tangible benefits to Queenslanders, while Galilee Basin projects, as discussed above, are unlikely to provide reliable returns.

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[15] For example, see (GHD, 2013b), the economic assessment of the Carmichael Project and (Economic Associates, 2010) the assessment of the Alpha project.
[16] (Queensland Government, 2013)
[17] News.com.au (2012)
[18] Queensland Treasury (2014) *Queensland State Budget 2014-15 Budget Paper 2 - Budget Strategy and Outlook, Part 3 Revenue*
[19] (Peel, Campbell, & Denniss, 2014)

Conclusion

The proposals to develop coal resources in the Galilee Basin will have strong negative impacts on other parts of the Queensland coal industry and on other key industries like manufacturing, agriculture and tourism. These impacts should not be encouraged or hastened by the declaration of a State Development Area, or other policies which facilitate and subsidise the development of the area.

The lack of economic assessment for the State Development Area proposal, or for the Galilee Basin coal projects individually, is concerning. Rather than engaging in rigorous assessment, proponents have been using discredited modelling techniques which overstate the case for their projects.

By using discredited modelling and assessment, uncomfortable facts about the Galilee Basin projects have been concealed. Most importantly, they are financially unviable. This means benefits of royalties and employment will not eventuate as advocates are claiming. Even if they do, many will come at the expense of royalties and jobs elsewhere in the Queensland economy.

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