

The **Australia** Institute

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Select Committee into Certain Aspects of Queensland Government Administration related to Commonwealth Government Affairs

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As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

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Introduction

The Australia Institute has been involved with the planning process around major projects in Queensland for several years. As such, our work relates to the Committee's terms of reference point 1.c:

Approval process for the development of projects for the export of resources or services insofar as they are administered by the Commonwealth or under a bilateral agreement with the Commonwealth.

Approval processes for major projects in Queensland have seen the misuse of various tools of economic assessment. In particular cost benefit analysis has not been used in assessments, with government agencies and proponents instead relying on 'input-output' multiplier models. This is contrary to the Queensland Government's own guidelines, which state:

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.¹

Input-output models are not appropriate for project evaluation because they are mathematically certain to overstate the positive impacts of projects due to some key assumptions:

- They assume there are no resource constraints – in other words they assume there is a limitless amount of labour, capital, water, arable land, etc, available in to the economy.
- They assume fixed prices – regardless of how much of an input a project requires, the price of it never changes in the model. For example, under an input-output model, mining wages would not have changed through the mining boom.

Queensland's guidelines are supported by the Productivity Commission, which considers input-output modelling to be "abused"² and the Australian Bureau of Statistics, which says:

While their ease of use makes I-O multipliers a popular tool for economic impact analysis, they are based on limiting assumptions that results in multipliers being a biased estimator of the benefits or costs of a project.³

In fact, the economics profession shows rare unanimity on this point – project assessment should rely firmly on cost benefit analysis. Commonwealth and other state treasuries make similar statements, as do academic economists, private consultants and the Business Council of Australia⁴:

Over many years, the Business Council of Australia has promoted the importance of using cost-benefit analysis (CBA) to evaluate major public expenditure and regulatory decisions.⁵

¹ Qld DIP (2011) *Project Assurance Framework: Cost Benefit Analysis*, p18.

² Gretton (2013) *On input-output tables: Uses and abuses*.

³ ABS (2011) *Australian National Accounts: Input-Output Tables*.

⁴ See for example (Dobes & Bennett 2009; Ergas 2009; Department of Finance and Administration 2006).

⁵ BCA (2012) *Cost-benefit analysis*, p1.

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Unfortunately, cost benefit analysis has been absent from Queensland major project proposals in recent years, while input-output modelling and other non-preferred assessment techniques have been common. We have had involvement with the assessment processes of the following projects, none of which have been subject to cost benefit analysis, most based on either no economic assessment at all, input output models or other inadequate forms of economic assessment:

- Carmichael Coal Project
- Alpha Coal Project
- Kevin's Corner Coal Project
- China First Coal Project
- China Stone Coal Project
- New Acland Coal Project
- Arrow LNG project
- Great Keppel Island Redevelopment Project
- North Stradbroke Island sand mining projects

The Queensland Government has accepted the claims of all these project proponents based on inadequate or flawed economic analysis. Below we expand on the example of the Carmichael Coal Project - we are happy to discuss other examples with the Committee.

Carmichael Coal and Rail Project

The Carmichael Coal Mine and Rail Project is a proposal to mine up to 60 million tonnes per year of thermal coal from Queensland's Galilee Basin for export via associated rail and port infrastructure. As the project will have a major impact on the local and potentially global environment, an environmental impact statement (EIS) was prepared which included an economic assessment.

The economic assessment⁶ was based on an input-output model which claimed the project would result in increased employment of 6,789 jobs, even though the project itself would only employ around 2,500 people, almost all on a fly-in-fly-out basis. It also estimated an increase in Queensland's economic output of over \$4 billion per year.

These results are misleading as the model used assumes that there is a limitless amount of labour, water and other inputs available to the state economy. This suggests that the project can operate without taking resources away from any other project. In reality, workers and other inputs to the project do come from other mining projects and other sectors, which experience a contraction of employment very similar to the expansion claimed by the project. Because other sectors would contract if the project went ahead, the actual impact on employment is likely to be very small.

This effect and the inaccuracy of input-output models was shown in a recent court case in New South Wales. The Ashton South East Open Cut mine was originally assessed with an input-output model, which estimated it would create 522 jobs in addition to the 160 jobs in the mine.⁷ When the mine's approval was appealed in the NSW Land and Environment Court this modelling was dismissed by the proponents, as an earlier court case had dismissed such modelling as "deficient".⁸ Ashton's new economist declared that the project was "not about

⁶ GHD (2012) *Report for Carmichael Coal Mine and Rail Project Economic Assessment*.

⁷ HVRF (2009) *Ashton coal EIS Appendix 17: Social and Economic Environment*.

⁸ Preston (2013) *Judgement on Bulga Milbrodale Progress Association vs Minister for Planning and Rio Tinto*.

jobs”, estimating the project would result in only 2 additional jobs being created in the state economy beyond direct employment.⁹

While the input-output model of the Carmichael EIS exaggerates economic impacts of the project, it also obscures a more fundamental point – the financial viability of the project itself. Whether the project is profitable or not makes no difference to the input-output model results, unlike cost benefit analysis which is concerned about viability. In fact, the more expensive it is to construct, the greater the positive impacts under an input-output model. Input-output models are not concerned with whether a project’s revenue is able to cover its costs.

If the project’s revenues do not cover its costs, it will provide none of the benefits that the input-output model predicts. Most market analysts say that the Carmichael project is not viable.¹⁰ Investment houses such as Macquarie Bank have said that such developments would require investors to “ignore conventional economics”.¹¹

So far, however, it is only the Queensland Government which ignores conventional economics. In submissions on the Carmichael EIS, the unreliable nature of the assessment was pointed out. In response, the proponents agreed that:

[Cost benefit analysis produces] decision making indicators to determine whether a project should go ahead or not go ahead (e.g. if NPV is greater than zero, then it is prudent to invest) and to prioritise investment options. The cost-benefit analysis method essentially measures the net worth of a project, not its economic impacts.

While we think that the Queensland Government should be interested in whether the project should go ahead or not, the proponents said:

The objective of the economic assessment required by the Project [Terms of Reference] is to identify the potential economic impacts of the project, including the direct and indirect impacts. The input-output methodology is one method of estimating such impacts ...[and] therefore, is consistent with the outputs sought from the [Terms of Reference].

In other words, the Queensland Government had set the Terms of Reference in such a way that analysis that would ask if the project makes Queensland better off would be excluded, while analysis that exaggerates the project’s benefits would be included.

Impacts on policy and media

The effect of the Queensland Government’s acceptance of flawed economic assessment can be seen in the media today. At time of writing this submission, the Courier Mail ran a story that claimed the Carmichael mine would create 10,000 jobs.¹² This claim appears to be based on the input-output modelling in the later “supplementary” economic assessment which claimed even higher job numbers.¹³ The same article suggests the project could be worth \$22 billion in tax and royalty payments to Queensland. No analysis is presented to

⁹ Fahrer (2013) *South East Open Cut Project: Economic Assessment*.

¹⁰ Buckley & Sanzillo (2013) *Remote Prospects: A financial analysis of Adani’s coal gamble in Australia’s Galilee Basin*.

¹¹ Scharples (2013) *Australia Lures \$21 Billion Bet on Coal Rebound: Energy Markets*.

¹² McCarthy & Vogler (2014) *Indian mining giant Adani signs \$1bn deal to develop Carmichael mine*.

¹³ GHD (2013) *Carmichael Coal Mine and Rail Project SEIS Report for Economic Assessment*.

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support this claim, which seems wildly out of proportion with our own estimate of \$2.3 billion in present terms.¹⁴

Similar claims are made about most projects, often in local media and in relation to local political campaigns. For example, the New Acland Coal mine regularly advertises its economic assessment results in the Darling Downs media.

Based on these exaggerated claims and “abused” analysis, the Queensland Government has announced two policies that subsidise coal companies at the expense of the Queensland public. In particular, royalties will be waived for the Carmichael Project. Under the official *Galilee Basin Development Strategy*,¹⁵ royalties for the first project will be discounted and “ramped up” over time. There are no details on how big the discount is, or how long and how steep the “ramp” is. Regardless, a substantial amount of Queensland’s coal will be given away for free.

Furthermore, the Queensland Government has undertaken to subsidise infrastructure for the Carmichael project and others in the Galilee Basin.¹⁶ Over the past six years, Queensland Governments have spent over \$8 billion dollars on subsidies and assistance for coal mining through such policies.¹⁷ This expenditure comes at a serious cost to the Queensland community, as the Queensland Treasury itself makes clear:

There is a real opportunity cost for governments in undertaking the initial capital expenditure. Governments face budget constraints and spending on mining related infrastructure means less infrastructure spending in other areas, including social infrastructure such as hospitals and schools. For many projects directly related to assisting mining industry development, such as land acquisitions for state development areas, the expected timeframes for cost recovery are extremely long (sometimes decades). The opportunity cost of this use of limited funds is a real cost to government and the community.¹⁸

The Queensland Government, under both ALP and LNP leadership has made, and continue to make, policy decisions that have a real cost for the community, but benefits for coal mining companies, based on flawed economic analysis.

Conclusion

Serious reform is required within the Queensland Government and the Queensland planning system relating to the use and misuse of economic assessment. Public funds are being wasted and community welfare affected by projects and policies which favour major project proponents interests. The Queensland Government justifies these projects and policies using economic assessment methodologies which contravene their own guidelines.

In particular, cost benefit analysis is absent from the major project assessment process in our experience. Ironically, Queensland Treasurer Tim Nichols opened his budget speech promising cost benefit analysis would be applied to all major projects.¹⁹ Instead, flawed

¹⁴ This calculation is based on the latest production estimates of 40 million tonnes per year, over 60 years, at a long-term benchmark price of US\$75 per tonne, a 0.7 discount to benchmark based on energy content, a discount rate of 7% and an exchange rate of 0.80. Details available on request.

¹⁵ Queensland Government (2013) *Galilee Basin Development Strategy*.

¹⁶ Seeney (2014) *Media Release: Historic agreements bring jobs to Queensland*.

¹⁷ Peel et al. (2014) *Mining the Age of Entitlement: State government assistance to the minerals and fossil fuel sector*.

¹⁸ Queensland Treasury (2013) *Queensland Treasury Response to Commonwealth Grants Commission*.

¹⁹ Nicholls (2014) *State Budget 2014-15, budget paper number 1, Budget Speech*.

methodologies are used which enable proponents and the government to claim inflated benefits for their projects, at the expense of the public.

In particular, input output modelling is commonly used for project assessment in the state. This methodology has been described as “biased” by the Australian Bureau of Statistics and “abused” by the Productivity Commission.

Until projects and policies are assessed with standard economic techniques, such as those endorsed by government guidelines and bodies such as the Australian Bureau of Statistics and the Productivity Commission, the Queensland public cannot have confidence in the decisions of its government.

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