Submission on draft terms of reference for the proposed China Stone Coal Project environmental impact statement

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Introduction

Economists at Large are a network of associate economists with a broad range of experience across economics, finance and sustainability. We specialise in environmental economics, the economics of animal welfare, tourism economics, natural resource economics and public policy analysis.

Economists at Large have assisted several Queensland community groups with submissions to environmental impact statements of major coal projects. See for example (Campbell & McKeon, 2011; Campbell, 2011). We believe there are changes that should be made to the draft terms of reference to ensure project outcomes maximise benefits to the Queensland community. Changes recommended below are:

- Requirement for cost benefit analysis
- Guidelines on treatment of greenhouse gas impacts
- Advice against use of input output modelling

Cost benefit analysis

Although the draft terms of reference (ToR) refer to "a comprehensive assessment of the direct, indirect, cumulative, costs and impacts of the project" and "estimated costs, if material, on industry and the community" (p51), the ToR do not require cost benefit analysis. The DSDIP Project Assurance Framework is explicit in its requirement of cost benefit analysis:

> *The primary method of economic evaluation of public sector policies and projects is cost-benefit analysis... Cost-benefit analysis generally assesses the impact of a project on the economic welfare of the community, and is therefore a key element in any public sector [economic] analysis* (Qld DIP 2011*,* p18).

The economics profession shows rare unanimity on this point – that project assessment should rely firmly on cost benefit analysis. Commonwealth and other state treasuries make similar statements (Commonwealth of Australia, 2006), as do academic economists (Dobes & Bennett, 2009), private consultants (Ergas, 2009)the Business Council of Australia:

> *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* (BCA, 2012, p1)

Despite the entire economics profession and the DSDIP calling for cost benefit analysis to be the centre of project assessment, consultants assessing projects in Queensland routinely ignore these calls if not specified in ToR. Examples include (AEC group, 2010; Economic Associates, 2010a, 2010b, 2011). It is worth noting that coal projects in other states are required to perform cost benefit analysis, see for example (Gillespie Economics, 2012).

Greenhouse Gas emissions

Cost benefit analysis is based on comparison of project scenarios with a baseline "no-project" scenario. The China Stone project will cause a small increase on the amount of coal used in the world. The greenhouse gasses associated with this marginal increase in consumption of coal should be considered in cost benefit analysis and the wider EIS.

Note that this is different to the calls by many environment groups for coal projects to be held responsible for *all* downstream emissions. This may be a worthwhile consideration for environmental purposes, but economic assessment should consider the marginal changes that the project brings.

Counter to environmentalists claims, coal industry proponents often claim that if *we* did not sell the coal to the users, someone else would, and our actions therefore make no difference. This is true to a large extent - most coal that would be consumed in the world would be substituted from other mines, but not all of it. The expansion of the coal supply that the project represents will exert some downward pressure on prices which will result in an increase in the amount demanded.

In the absence of the project, not all of the coal exported would be offset by production in other mines. To argue otherwise is to suggest that coal supply is perfectly elastic and therefore that coal price should not vary. This is clearly not the case. Some estimate of this effect can be made from published sources and consideration of the price elasticities of supply and demand for coal. This analysis need not increase resources required for EIS, while it would provide decision makers with important information about the impacts of the project. The ToR should require estimation of these impacts.

Input-output modelling of economic impacts

The ToR should discourage consultants from using input-output models (IO) which overstate the positive impacts of their clients projects. While cheap and easy to perform IO invariably overstates the impacts of a project on output and employment. Many IO analyses are further hampered by being based on older multipliers, as the ABS now does not publish them regularly and few consultants calculate their own. The ABS took these steps as:

> *Production of multipliers was discontinued with the 2001–02 issue for several reasons. There was considerable debate in the user community as to their suitability for the purposes to which they were most commonly applied, that is, to produce measures of the size and impact of a particular project to support bids for industry assistance of various forms.* (ABS, 2011)

The ABS goes on to discuss some of the reasons why I-O analysis is inappropriate for such assessment:

> ***Lack of supply–side constraints:*** *The most significant limitation of economic impact analysis using multipliers is the implicit assumption that the economy has no supply–side constraints. That is, it is assumed that extra output can be produced in one area without taking resources*

away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.

***Fixed prices**: Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.*

Instead, economic assessment should be based on cost benefit analysis. If impact assessment is requested by clients, it should be done through computable general equilibrium models (CGE).

Conclusion

To provide Queensland decision makers with useful information about the economic consequences of the China Stone Project, the terms of reference for the EIS economic section must include

- **Cost benefit analysis**
- **Consideration of marginal greenhouse gas emissions**
- **Impact assessment not based on input output models using inappropriate multipliers.**

References

ABS. (2011). Australian National Accounts: Input-Output Tables - Electronic Publication, Final release 2006-07 tables. Australian Bureau of Statistics. Retrieved from http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/5209.0.55.001Main Features4Final release 2006-07 tables?opendocument&tabname=Summary&prodno=5209.0.55.001&issue=Final release 2006-07 tables&num=&view=

AEC group. (2010). Economic Impact Assessment for the China First Project EIS. *Assessment*. Retrieved from http://www.deedi.qld.gov.au/cg/galilee-coal-project-northern-export-facility.html

BCA. (2012). *Cost – Benefit Analysis*. Policy Essentials report for the Business Council of Australia prepared by Deloitte Access Economics.

Campbell, R. (2011). *Review of Economic Impact Assessment for the China First Project EIS*. a report for the Bimblebox Nature Refuge Landholders, prepared by Economists at Large, Melbourne, Australia. Retrieved from http://www.ecolarge.com/news/china-coal-project-economic-assessment-reviewed/

Campbell, R., & McKeon, R. (2011). *Review of Kevin's Corner Coal Project Economics*. A report for the Capricorn Conservation Council, prepared by Economists at Large, Melbourne, Australia. Retrieved from http://www.ecolarge.com/news/kevins-corner-coal-project-review/

Commonwealth of Australia. (2006). Handbook of Cost-Benefit Analysis. *Financial Management*. Department of Finance and Administration, Commonwealth of Australia.

Dobes, L., & Bennett, J. (2009). Multi-Criteria Analysis: "Good Enough" for Government Work? *Agenda*, *16*(3).

Economic Associates. (2010a). *Alpha Coal Project (Coal Mine) Economic Impact Study*. Prepared for URS Australia by Economic Associates for the Alpha Coal Environmental Impact Statement.

Economic Associates. (2010b). *Alpha Coal Project (Coal Railway) Economic Impact Study*. Prepared for Hancock Prospecting Pty Ltd.

Economic Associates. (2011). *Kevin's Corner Project Environmental Impact Statement*. Prepared for URS Australia by Economic Associates for the Kevin's Corner Coal Environmental Impact Statement.

Ergas, H. (2009). In Defence of Cost-Benefit Analysis. *Agenda*, *16*(3), 31–40.

Gillespie Economics. (2012). *Cobbora Coal Project Economic Assessment*. Prepared for Cobbora Holdings by Gillespie Economics.

Qld DIP. (2011). Project Assurance Framework: Cost Benefit Analysis. *Analysis*. Queensland Department of Infrastructure and Planning. Retrieved from http://www.treasury.qld.gov.au/office/knowledge/docs/project-assurance-framework-guidelines/paf-cost-benefit-analysis.pdf