

INQUIRY INTO COAL SEAM GAS

Name: Mr Roderick Campbell
Organisation: Economists at Large
Date received: 07/09/2011

The Director
General Purpose Standing Committee No. 5
Parliament House
Macquarie St
Sydney NSW 2000

**Submission to Coal Seam Gas Inquiry of General Purpose Standing Committee No. 5 of the
Parliament of New South Wales**

Economists at Large welcome the opportunity to make a submission to this enquiry, in relation to point two of the inquiry's terms of reference, the economic and social implications of Coal Seam Gas (CSG) activities. We are a group of economists with expertise in environmental and resource economics. We have considerable experience working with community groups on the economic impacts of major projects and in recent years our work has focused on mining and mineral projects, including CSG.

It may seem surprising that there is little economic analysis of CSG projects carried out either at the local level or at a larger scale. We believe that this lack of analysis is due to a widespread perception that any large project must be "good" for the economy, even if it might be "bad" for the environment. This perception is held by the general public, perpetuated in the media and reinforced by the planning approvals process. Most importantly, this perception is wrong from an economic perspective.

Cost Benefit Analysis and NSW Guidelines

Economists prefer to assess projects using Cost Benefit Analysis (CBA). This is made clear in the *NSW Government Guidelines for Economic Appraisal* and also in the *NSW Guidelines for economic effects and evaluation in Environmental Impact Assessment*:

Cost Benefit Analysis (CBA) is the most comprehensive of the economic appraisal techniques. It quantifies in money terms all the major costs and benefits.... The key strength of CBA is that it considers on a consistent basis the benefits and costs of alternatives. Thus the outcomes for a range of options are translated into comparable terms which facilitate evaluation and decision making.
(NSW Treasury, 2007, p9)

To conduct a proper economic evaluation of the options associated with a proposed development that is likely to have significant environmental impacts it is essential to undertake a benefit-cost analysis. (Gillespie & James, 2002, section 1.4)

Unfortunately, these requirements are rarely carried out for CSG projects. We were disappointed that the recent Commonwealth Tailored Guidelines for Draft EIS¹ of the Narrabri CSG project failed to require CBA. Instead it only required information on "projected economic value of the proposed action." This failure to require thorough cost-benefit analysis leads to projects using economic impact assessment to justify their project on economic grounds. This is inappropriate, as the NSW Treasury has made clear:

Economic Impact Assessments - Economic impacts of particular development proposals on their own, ... are of limited use in assisting Government to make funding [or planning] decisions Such analysis attempts to estimate changes to economic activity associated with a development.

We agree entirely with the Treasury and EIS guidelines that cost-benefit analysis is essential for economic decision making, while economic impact assessment is of limited use. CBA incorporates all costs of a project, including capital and operating costs as well as environmental and other external costs. Valuation of the environment and damages to it is required as part of CBA under these guidelines. Environmental economics is a well-established field and most of its main valuation techniques are described in the NSW guidelines for economic assessment in EIA (Gillespie & James 2002).

Lack of Cost-benefit analysis of CSG projects

Despite unanimity from economists and regulators about the importance of cost-benefit analysis, we know of no CSG project which has prepared a rigorous CBA. See for example:

- Camden Gas Project Environmental Assessment² Volume 1. This document has an "Economic Impact" section (8.7, p8-52), which presents an overall economic summary of the project area and some of the positive aspects of the project (such as employment), but has no mention of costs and could in no way be considered cost-benefit analysis. After cursory economic analysis the section concludes happily *"Given that the overall economic impacts of the proposal are considered to be positive, no specific environmental safeguards are considered necessary."* (p8-58)
- The Bohena Coal Seam Gas Project³ includes still less economic assessment, incredibly stating *"No detrimental socio-economic impacts associated with the proposed activity can be identified."* (p55)
- Queensland's Australia Pacific LNG⁴ (APLNG) project included economic impact assessment through a computable-general equilibrium model. The modelling brought about the unsurprising result that "construction of the Australia Pacific LNG project would contribute (directly and indirectly) to the economy" (see executive summary of KPMG assessment section). No CBA was performed.

¹ <http://www.environment.gov.au/epbc/notices/assessments/2011/5914/draft-eis.pdf>

² <http://www.agl.com.au/about/EnergySources/indevelopment/Pages/Camden-Gas-Project.aspx>

³ <http://www.dpi.nsw.gov.au/minerals/environment/nod/exploration-2006/20061201-PEL238.pdf>

⁴ <http://www.aplng.com.au/government-approvals>

Any large investment contributes to an economy. What is not made clear by such economic impact assessments such as the APLNG project and the Camden Gas Project, is whether the overall impact of the project is positive or negative and therefore whether a project should proceed. Only cost-benefit analysis can provide this guidance. Cost benefit analysis can also reveal how sensitive the results are to assumptions, and contribute to identification of “winners and losers” from a project, which can help in mitigating impacts and potentially compensating those adversely affected.

Recommendations

We urge the standing committee to recommend that thorough cost-benefit analysis be carried out on all CSG projects, ensuring this analysis includes social and environmental factors. We also suggest the committee commission economic assessment of the costs and benefits of CSG development at a state-wide scale. This analysis should be within existing government guidelines and in line with projects in other industries.

Furthermore, we urge CBA of CSG projects to include analysis of costs and benefits of projects that accrue at the local, state and national levels. We believe it is a lack of analysis of local costs and benefits that has led to the current controversy about CSG projects and extractive industries generally. Local communities rightly do not accept that the increases in employment and general economic activity as described in economic impact assessments lead to an increase in their welfare. From an economic perspective, they are correct in considering the environmental and social costs that they will bear and in giving less weight to benefits that accrue to external shareholders or the macro-economy.

This point is made clear by Eggert (2001) in his influential report on mining and economic sustainability for the UK-based Mining, Minerals and Sustainable Development project of the Institute for Environment and Development:

Let us now turn to two issues that challenge and bedevil practitioners of social benefit-cost analysis. The first challenge is deciding “whose benefits and costs count”. It sometimes is called the issue of standing—that is, who has standing in the analysis of benefits and costs? This is an issue of scope. Should the analysis include only those costs and benefits affecting residents of the local community? The state or province? The nation? The world? Whether the net benefits of a project are positive or negative often depends on how narrow or broad the scope of the study is. A local community, if concerned only about benefits and costs in the community itself, would consider tax payments to a national government as costs, even though from the perspective of the project as a whole they are benefits. Similarly, a national government would consider profits sent abroad as a cost. Whose perspective is correct? It depends. (p27)

CSG and other mineral companies would also benefit from such analysis. A better understanding of the distribution of their project’s costs and benefits would help them understand communities’ and government’s needs and help them develop more acceptable projects, plan projects in more appropriate areas and form compensation packages that would equitably spread the benefits of their projects.

Conclusion

We recommend that the committee require coal-seam gas projects to submit comprehensive cost-benefit analysis, including analysis of costs and benefits accruing at local, state and national levels, in order to gain project approval. This would be in line with Treasury and other government guidelines, which require cost-benefit analysis and not merely economic impact assessment. Even though all financial and environmental costs can be incorporated into cost-benefit analysis, we know of no CSG project in Australia to have carried out such analysis. Carrying out thorough, transparent CBA would assist communities, governments and CSG companies to understand each other's costs and benefits and in doing so, facilitate better social and environmental outcomes and the development of the CSG industry.

We would welcome the opportunity to expand on this submission either in person or in writing.

Rod Campbell, Tristan Knowles, Simon O'Connor

Directors

Economists at Large

References

- Eggert, R. G. (2001). *Mining and Economic Sustainability: National Economies and Local Communities. Sustainable Development*. Report commissioned by the Mining, Minerals and Sustainable Development project of the Institute for Environment and Development, England.
- Gillespie, R., & James, D. (2002). *Guideline for economic effects and evaluation in EIA*. Prepared on behalf of Planning NSW. Retrieved from http://cmsdata.iucn.org/downloads/11_guideline_for_economic_effects.pdf
- NSW Treasury. (2007). *NSW Government Guidelines for Economic Appraisal*. Office of Financial Management: Policy & Guidelines Paper.