

Coming apart at the seams? Social impact assessment and the coal seam gas controversy in Queensland, Australia

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The prospects for the Darling Downs and Maranoa regions in the Australian state of Queensland are riding high. While this is one of the country's most productive farming areas, it is the reserves of coal seam gas (CSG) that represent the biggest source of both promise and conflict. With three newly-approved CSG 'mega-projects', another in development, mining exploration permits covering most of the region, and an export contract of unprecedented magnitude, this part of the Surat Basin is viewed as a critical contributor to future State employment and revenue, as well as the federal government's lower-carbon energy policy. Debates about whether the scale and pace of coal seam gas mining are booming ahead of scientific understanding and legislative protections and putting communities and environments irreversibly at risk have, however, become highly charged. Questions have been raised not only about the safety of cumulative and longer-term impacts on aquifers and agriculture, including on the nation's food security, but also about the very future of Australia's rural and regional communities, environment and economy. This paper examines these issues in relation to current and proposed provisions for social and environmental impact assessment. More broadly, it considers debates about the nature and role of social impact assessment in development decisions, and tensions over the legitimacy and science of assessment that may be fracturing, or becoming further buried, in the seams.

SIA requirements in Queensland

Social impact assessment (SIA) has formed part of Australia's legislative framework for over four decades, although with diverse triggers and mechanisms across state and federal jurisdictions (Cox et al., 2001, p. 74) and enduring tensions between technocratic and participatory approaches (Lane et al., 2003). Most jurisdictions now incorporate attention to social, economic and biophysical dimensions in legal definitions of 'the environment', with formal requirements for SIA generally triggered as part of an environmental impact statement (EIS) when public authorities are considering proposals for resource or other kinds of development. Further, SIA processes in Queensland have become increasingly institutionalised as a basis for planning, policy or program change. Even so, disciplinary critique of the goals, assumptions and processes of SIA highlight the need to consider legislative requirements in relation to the political contexts of decision making, and the distributional aspects and cumulative impacts of development (Howitt, 2001; O'Faircheallagh, 2009).

Within Queensland, three central pieces of legislation currently make formal provision for assessment of the social impacts of development, with one trigger for federal intervention. Factors such as the nature, scale, stage and significance of the project, and the characteristics of the proposed site/s for development determine the applicable laws, points of agency contact and advice, and decision-making authority. Mining proposals are

exempt from the first of these, the *Sustainable Planning Act 2009*, though may need additional approvals for any development beyond petroleum tenure areas. Secondly, development proposals may activate EIS requirements under the *Environmental Protection Act (EPA) 1994*. Any proposed exploration for coal seam gas, for example, requires an Authority to Prospect under the *Petroleum and Gas (Production and Safety) Act 2004*, allowing exploratory activities and providing a basis for negotiating access and compensation with landholders, but involving no consideration of environmental impacts. An EIS may be required prior to the production stage if, when proponents apply for a Petroleum Lease and an Environmental Authority (Mining Activity), projects are designated as holding high significance under the *EPA 1994*.

Thirdly, a development proposal may be declared a ‘significant project’ (with strategic significance and likely environmental impacts, for example) and subject to assessment and approval by the State’s Co-ordinator General. All such projects require an EIS, usually under the *State Development and Public Works Organisation Act 1971*. Finally, if proposals are identified by the federal Minister as being a ‘controlled action’, with implications for Matters of National Environmental Significance such as internationally important wetlands (DSEWPC, 2011), assessment and approval may be pursued under the *Environment Protection and Biodiversity Conservation Act 1999*. In these cases, the federal Minister may require an EIS. If proposals are identified as both ‘significant projects’ and ‘controlled actions’ (as with each of the four current CSG ‘mega-projects’), approval and conditions for operation are required to be issued by both Queensland’s Co-ordinator General and the federal Minister for the Environment. Under a bilateral agreement between these respective governments, federal accreditation of the State’s assessment processes allows proponents to satisfy all environmental and social assessment requirements with one (draft and final) submission.

At the approval stage, authorities are legally required to ‘consider’ the EIS and SIA (including public submissions and agency evaluations). While the federal Minister may take such things as economic and social costs and benefits, community views and cumulative impacts into account, decision making and regulation regarding ‘broader environmental protection’ and ‘social and economic matters’ is primarily the responsibility of states (DSEWPC, 2011). To this end, a Social Impact Assessment Unit (now in the Department of State Development, Infrastructure and Planning) must be involved in all SIA processes, and Social Impact Management Plans must be prepared in consultation with government and other ‘key stakeholders’. Depending on the legislation activated, the Terms of Reference (TOR) are drafted by the Co-ordinator General or proponents, with advice from relevant agencies, opportunity for public comment, and finalisation by the authority. Given that TORs set the scope for assessment, this phase powerfully influences the entire process, with submissions reflecting similar strengths, or shortcomings (Dale et al., 1997).

Recent policy reforms have significant bearing on both assessment triggers and decision contexts. Notably, an Independent Expert Scientific Committee has been established to drive ‘a new science-based framework to provide more certainty for regional communities’ by overseeing a \$150 billion research program investigating CSG and coal

mining impacts on water resources (Burke, 2012). Assuming statutory power in mid-2012, states will be required to ‘take into account’ their advice in any mining approvals process through a new partnership agreement, recently signed by Queensland. On another front, ‘strategic cropping’ legislation came into effect in January 2012 in Queensland to protect ‘prime agricultural land’ (according to specified biophysical criteria) from the adverse impacts of development. The law prohibits development that may permanently alienate this land from production, unless the resource is determined to be of overwhelming public benefit. It provides some passage for development in these areas if impacts are identified as temporary and holding relatively low risk, as CSG wells are in this context, though require an EIS prior to any exploration. The certainty about the nature and significance of CSG mining impacts, and the extent to which they can co-exist with agriculture, remains, however, a key source of conflict, as is the definition of ‘prime agricultural land’.

Challenging the science and legitimacy of assessment

While the impetus to proceed is great, conflicts locally and further afield are intensifying. Concerns with CSG mining centre on protecting underground and surface water and the rights of landholders, and addressing the cumulative and long-term impacts of intensive regional development. At issue is the need to improve the scientific basis for assessment and management, and address related shortcomings in state legislative frameworks and decision making that may have placed environments and communities at unacceptable risk. The legitimacy to evaluate and regulate the industry has been challenged, with State impartiality and capacity for adequate oversight coming under fire. There have been calls for the federal government to take regulatory control of all CSG projects, and for earlier triggers for EIA and public consultation (Parsons Brinkerhoff, 2011). Warnings were issued by a federal Senate Inquiry into CSG development in the Surat Basin of ill-founded project approvals, with calls for a halt to mining in the region until potential impacts and possibilities for remediation are determined through scientific study (AFP, 2011).

The types of science seen as legitimate arbiters also exposes (arguably deeply entrenched) seams. Strengthening the understanding of environmental impacts is viewed as remote from the ways which social science research may usefully contribute. Referring to a Commonwealth scientific institute briefing regarding potential agricultural uses for waste water, the Chair of the federal Senate committee investigating CSG mining noted an emphasis on “‘social science over earth science’”, on ‘addressing damage caused by the process, “not on avoiding damage in the first place”’ (Franklin, 2011, November 3). Mining companies, industry bodies and State government representatives have in turn argued that that the prosperity of Australia is in jeopardy precisely because of ill-advised advocacy for changes to the legislative framework, risking international competitiveness and industry viability, as well as the very science needed to ensure and demonstrate it. From this perspective, CSG mining is seen as the most heavily regulated industry in the country, operating successfully and responsibly for many years, with new legislation creating a heavy and unnecessary burden. Both State government and industry representatives have emphasised the existing scientific rigour and extensive public

consultation in assessment, with flexibility to incorporate advancements in knowledge into ongoing management and mitigation (Walker, 2011, December 2, p. 1).

Companies have also pointed to strong commitments to regional investment and engagement with communities throughout a project's life-cycle. Nevertheless, though much is made of regulatory burdens, it may be the case that 'gaining access to rural land' poses the larger challenge (Manning, 2012, March 17, p. 6), requiring property-by-property negotiation to avoid enforcing claims to mineral wealth in the state's Land Court. Even though companies have described a "very strong connection with the community", especially in the westernmost parts of the Surat Basin where there is relatively dispersed settlement and long history of oil and gas development (Manning, 2012, March 17, p. 7), the weight of evidence suggests that the social license to operate is on shaky ground. The leader of the 'Lock the Gate' Alliance, for example, claims all companies mining CSG are 'getting pinned down'; "[n]o-one is signing" (Manning, 2012, March 17, p. 7).

The legitimacy of concerns raised over CSG developments have also been challenged, however. The State government has, for example, sought to address popular 'myths' about CSG (DERM, 2012), and suggested that mining companies spend more time 'explaining the industry' (Bromby, 2011, August 15). Meanwhile, companies and industry bodies have attempted to better educate communities about the 'real risks' (Franklin, 2011, November 3). In the process, some have identified related conflicts as "overblown", having "little to do with science" and "Occupy Wall Street"-derived (Burrell, 2011, November 3, p. 8). Such characterisations are also evident within related SIAs; where community tensions are noted, they are generally framed as 'perceived' (versus 'real') impacts. Better communication, then, is often promoted as the key to addressing opposition, to redress a lack of understanding or appropriate knowledge—not an unproblematic response, given the disciplinary critique related technocratic assumptions have weathered. Indeed, such (differently privileged) perspectives, produced in particular political and cultural contexts, themselves warrant critical attention (Jasanoff, 1998; Davidson & Gismondi, 2011). Wider call for social science research to better address these conflicts within (and recognise them as partially a product of) approvals processes seems lacking. There is also still limited attention given to the often highly differentiated benefits and costs of development, and existing fragmentation in 'community', in SIAs overall (Freudenburg, 1986; Lockie et al., 2008). A related consideration is whether public participation is thought to strengthen decision making, with appropriate opportunity and power to negotiate outcomes, or be damaging or irrelevant to the rational weighing of evidence (Rickson et al., 2004).

Conflicts over CSG mining have emerged not just between companies seeking to secure a 'social license' with residents at the farm gate and in town halls, but involve a much broader constituency, beyond a 'politics of grievance' (Buttel, 2005). Wider debates over resource use have questioned both the acceptability of risks and the legitimacy invested in authorities to accept them. That there has been the level of conflict within and across regions, political party lines, sectors and communities powerfully suggests that developments are indeed proceeding ahead of adequate SIA requirements, but also that

these alone may provide insufficient basis to address such conflicts, the issues at debate, or the differently privileged interests that identify, negotiate or contest them.

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