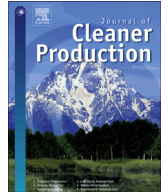




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Using social contract to inform social licence to operate: an application in the Australian coal seam gas industry

Justine Lacey^{a,*}, Julian Lamont^b

^a Commonwealth Scientific and Industrial Research Organisation (CSIRO), Division of Earth Science and Resource Engineering, 1 Technology Court, Pullenvale, QLD 4069, Australia

^b The University of Queensland, School of History, Philosophy, Religion and Classics, St. Lucia, QLD 4072, Australia

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ABSTRACT

The emerging coal seam gas (CSG) industry has been commercially active in Australia since the mid 1990s. More recently however, the development of the CSG industry has escalated rapidly with its trajectory predicted to grow into the future as gas supplies become a major and important fuel source in the transition to a lower carbon future. However, the industry has been the subject of significant social opposition. Coordinated citizen action groups taking direct action against CSG operations have delayed and even stopped CSG projects progressing. In response, the industry has recognised the importance of establishing its social licence to operate. While conflicts around CSG development tend to incorporate a combination of environmental, social, economic and technological concerns, the ethical aspects of these disagreements are rarely made explicit or explored in any depth. However, some of these more implicit ethical assumptions have begun to be formalised in the concept of social licence. The idea that a social licence represents a social contract between companies and communities is instructive. Because social contract theory describes the nature and purpose of agreement-making among members of an organised society, there are clear implications for understanding the social sustainability of those arrangements. This paper explores how consent-based and justice-based forms of social contract provide an ethical framework for the way CSG companies and communities interact.

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1. Introduction

Coal seam gas (CSG), also known as coal bed methane (CBM), is a naturally occurring methane gas found in most coal seams (Geoscience Australia, 2013). The extraction of CSG involves drilling wells into the coal seams and bringing water from the seams to the surface. This process reduces the pressure in the seams and allows the gas to be released from pores. The emerging coal seam gas industry has been commercially active in Australia since the mid 1990s (Geoscience Australia, 2013; Hamawand et al., 2013). Since that time, production of CSG has increased rapidly.

Australia has extensive gas resources. While most of the conventional gas resources are located off the north-west coast of Australia, there are significant CSG reserves located in the eastern states of Queensland and New South Wales (see Fig. 1). While approximately 90% of the current identified reserves are located in Queensland's Bowen and Surat Basins, reserves in New South Wales

have also been identified in the Sydney, Gunnedah, Clarence-Moreton and Gloucester Basins (Geoscience Australia, 2013). Many countries around the world are also actively developing and investing in the CSG industry including the United States, Canada, China and India (Hamawand et al., 2013).

Such global interest in the industry and increase in the demand for gas has been driven by a combination of factors including the impetus to develop alternatives to conventional energy sources, the rapid pace of economic development in China, India and the Middle East, several countries restricting the use of nuclear energy post the Fukushima disaster, and increasing concerns about climate change (Wood et al., 2013). Within this context of an increased demand for gas, the development of the CSG industry has escalated rapidly and this is predicted to continue as gas becomes a major and important fuel source in the transition to a lower carbon future (Nghiem et al., 2011; Bhutto et al., 2013).

This transition also takes place against the backdrop of global sustainability challenges such as climate change, energy and food security, and human health and well-being. It has been argued that achieving social sustainability in the face of such competing demands is a public goods problem where environmental and social

* Corresponding author. Tel.: +61 7 3327 4707.

E-mail address: justine.lacey@csiro.au (J. Lacey).

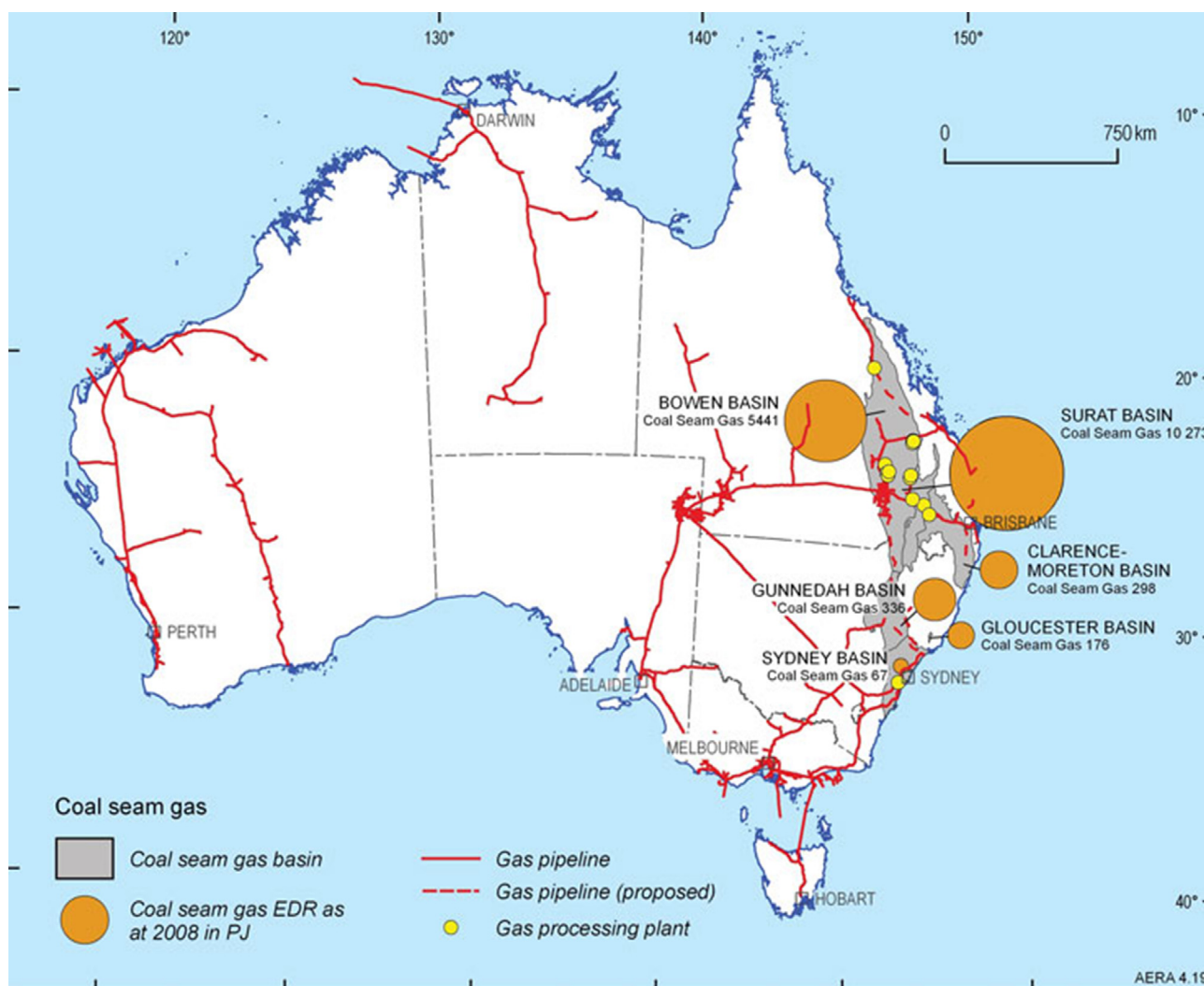


Fig. 1. Location and Economic Demonstrated Resources (EDR) of Australia's coal seam gas reserves. (Source: Geoscience Australia and ABARE, 2010: 98)

goods must be traded off in order to achieve optimal outcomes (Perc et al., 2013; Perc and Szolnoki, 2010). This involves balancing social goods such as energy security, economic growth, land uses and democratic values with environmental goods such as lowered emissions and water security. This can also reveal competing, and in some cases conflicting, agendas as stakeholders seek to respond to these pressures in the context of their own local environments and communities (Bardwell, 1991; Whitmore, 2006).

In this regard, the CSG industry in Australia has faced significant social opposition, documented in the popular media (Carney and Agius, 2013; Macdonald-Smith, 2013), and evident in the rise of citizen action groups (e.g. the national Lock the Gate Alliance and regionally based networks such as CSG Free Northern Rivers, Save Liverpool Plains and Stop CSG Illawarra among others) that have the potential to delay or stop CSG projects progressing. While the objections of communities to CSG development tend to incorporate a combination of environmental, social, economic, and technological concerns, the ethical aspects of these disagreements are rarely made explicit or explored in any depth. However, we believe that some of these more implicit ethical assumptions have begun to be formalised in the concept of a 'social licence to operate'.

Social licence has been described as an informal social contract existing between an industry and the community in which it operates (Lacey et al., 2012; Nelsen, 2006; Thomson and Boutillier, 2011). The social licence underpins the level of acceptance or approval a community provides to an operation, and earning a social licence has been identified as a priority for the CSG industry in Australia (APPEA, 2012). While the term itself has been used for almost 20 years in the mining and minerals industry, in more recent times, social licence has attracted increasing attention in research and consulting circles. However, in spite of this recent research interest, there has been no ethical and conceptual analysis of how a social licence might function as a form of social contract. For these reasons the analysis we are undertaking here is both timely and instructive as Australia navigates social arrangements around this emerging industry and, as a society, tries to meet the challenges of understanding and negotiating the inevitable compromises and tradeoffs.

Our aim is to undertake an ethical and conceptual analysis of social agreement-making in the extractives sector, using the CSG industry in Australia as a case study. We do this in order to make systematic some of those more intuitive or implicit assumptions

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