

Regnan's engagement on Unconventional Oil and Gas (UOG) development in Australia including Coal Seam Gas (CSG)

Introduction

On behalf of institutional investors, Regnan – Governance Research & Engagement engages directly with leading ASX companies on the basis of its in-depth risk research and contributes to regulatory and policy processes and the public debate to support environmental, social and governance (ESG) objectives. Regnan's mission is to help future-proof portfolios by addressing long-term and systemic risks that markets tend to misprice.

The unconventional oil and gas (UOG) industry, which has grown rapidly in recent years, has elevated ESG risks for investors due to unresolved technical, regulatory and stakeholder issues alongside its significant investment potential.

With long-term shareholder interests in mind, Regnan commenced engagement with companies on UOG in 2010/11 with an initial focus on coal seam gas (CSG) development in Australia, and expanded to shale gas and tight oil in 2013 (collectively 'unconventional oil and gas') in parallel with changes in the industry.

This case study discusses the rationale, approach and impact of these efforts.

Collaborating, promoting actionable expectations and sharing best practice has resulted in positive change among a majority of the stocks engaged.

Background

What is unconventional oil and gas (UOG)?

UOG refers to oil and gas resources that have traditionally been considered too difficult or costly to produce; evolution in extraction technology and costs, combined with increases in oil and gas prices (driven by increasing demand and declining access to traditional oil and gas reserves), have enabled investment in UOG extraction.

Each type of UOG (CSG, shale, tight etc.) is named after its formation source and has a different extraction process – and consequently similar but distinct potential environmental and social impacts. For example CSG requires dewatering¹ whereas shale and tight require hydraulic fracture stimulation (fraccing) which uses large volumes of water.²

Why is there cause for concern?

While processes to extract UOG such as fraccing are well established, they are being used in new hydro/geological conditions, which increase the technical risk. Further, these processes have not

¹ Dewatering – the process of removing water from coal formations which reduces the pressure within the coal seam and releases (desorbs) the gas trapped inside the seams.

² Hydraulic fracturing (fraccing) - is the stimulation of fractures (tiny cracks) in a rock layer by pumping water and fraccing fluid down a well at high pressure in order to increase the flow of gas from a reservoir/formation.





previously been deployed at the scale projected for UOG. Consequently, it is difficult to predict the cumulative and long-term environmental effects.

Global UOG extraction experience to date indicates that there are many potential environmental impacts. The most significant include:

- · Aquifer connectivity and drawdown (dewatering);
- Water contamination from well leaks, frac fluid and produced water spills;
- High water use and waste water treatment requirements;
- Greenhouse gas (GHG) emissions including methane seeps; and
- Extensive operational footprint.

Given the potential environmental impacts, some landowners and communities are worried about the ability of UOG exploration and production to co-exist with communities and agricultural production. These concerns are exacerbated by the lack of landowners' legal rights to consent to UOG activities on their land and the level of financial reimbursement received.

Widespread protests over the environmental, health and safety (EHS) and land access issues globally have resulted in industry-wide reputational damage, with consequent threats to the retail brands of vertically integrated energy companies.³

Why has Regnan engaged companies on this issue?

Australia is understood to have one of the larger recoverable regions of unconventional gas resources. The development of UOG is emerging as a major source of Australian economic development and is considered a significant growth opportunity for oil and gas companies.

Increasing focus on carbon budgets and decarbonisation policies, however, is challenging the long-term role of UOG along with other fossil fuels. Regnan is attentive to these risks in our engagement with fossil fuel stocks and those that finance them.

Regnan recognised that, due to the relative infancy of UOG development, 'business as usual' no longer applied; investors couldn't rely on existing EHS and social management policies and regulations for downside ESG risk protection. Unresolved ESG risks threaten shareholder value through government bans/moratoria; increased regulatory time and costs; increased stakeholder engagement time and costs; long-tail exposures such as fines and remediation expenses; litigation; and reputation risks.

Engaging with UOG companies and government seeking a precautionary approach and continuous adherence of operators and contractors to best practice ESG risk management aims to address these risks. We also aim to ensure that disclosures from companies provide investors with sufficient information to inform risk assessments. Enhanced understanding of ESG risks should assist with effective capital allocation, risk-return expectations and offer some protection against downside price volatility.

³ Where the same company is involved in multiple parts of the energy supply chain. In Australia, it is common for energy retailers to also have energy production (electricity generation and gas extraction).



Engagement approach

Key aspects of Regnan's engagement with UOG companies have been:

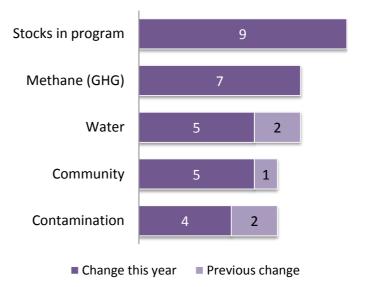
- Research led The complexity of UOG issues has been a barrier to effective dialogue between investors and the industry. Regnan drew on in-house research conducted by our team of experienced analysts to address this barrier. Building on prior CSG research and engagement, Regnan invested in the development of a position paper, Unconventional gas best practice ESG principles and recommendations and explanatory document (PP), with the intention of framing a more constructive discussion with companies and to outline changes sought. The PP was released in draft for consultation in June 2013 to ten S&P/ASX200 UOG companies and Principles for Responsible Investment (PRI) members.
- In depth company engagement Regnan consistently and repeatedly met with S&P/ASX200 stocks on ESG risks to UOG for nearly five years. Since 2010, Regnan has met with eight stocks on 25 separate occasions, an average of more than three meetings per stock, with engagement reaching every UOG stock on the index. This includes, to date, thirteen discussions about our PP with seven companies.
- Collaboration Regnan leveraged its existing relationships with investor networks
 (Australian Council of Superannuation Investors, Investor Group on Climate Change,
 Principles for Responsible Investment, and Responsible Investment Association of
 Australasia) to improve our collective impact by sharing knowledge, assisting with
 continuity of message and increasing scope and weight of activities.
- Public policy advocacy Regnan sought public policy consultation opportunities in line with our PP to bring a moderating perspective to the increasingly oppositional UOG debate, and to further catalyse change.

Impact and achievements

Since initiation of this engagement, seven of the nine UOG companies remaining in the S&P/ASX200 index made improvements to their UOG ESG risk management. For the remaining two we note that improvements may have been made but not reported publicly.

Methane emissions was the top issue addressed by stocks, perhaps reflecting the strong focus on this topic in public policy debate, to which we have contributed.

Unconventional Oil and Gas Stocks Evidencing Change - by Topic





Impact details

Methane emissions

Greenhouse gas (GHG) emissions from CSG venting and leakage in Australia are now being measured for the first time due to National Greenhouse and Energy Reporting Scheme (NGERS) proposals supported by a Regnan-initiated joint submission with IGCC (also supported by ACSI). The regulator is also considering extending such measurements to all UOG following our submission, something not previously under consideration. Our submission was also a catalyst for company-driven engagement; consequent company response, over and above the NGERS proposal, includes:

- Two stocks:
 - o Improved public disclosure on methane emissions estimation and seeps concerns;
 - Established research partnerships to develop methodology in measuring baseline GHG emissions for its UOG developments;
- Another stock committed to atmospheric monitoring of wells during fraccing and green completions;
- A further stock conducted baseline methane emissions monitoring following early Regnan engagement.

Water

Substantial improvements have been made to comply with regulatory changes to date. Additional water management improvements beyond regulatory requirements include a commitment to make good impacts to water resources and baseline water monitoring within 5kms.

Landowners and community

Regnan now sees elements of Free Prior and Informed Consent (FPIC⁴) within company initiatives, something for which we advocated in our PP and company discussions. Changes include: landowner consent for all areas in NSW (two stocks); consent within particular community/agricultural areas (one stock); compensation (four stocks); and the provision of funding for specialist reviews to aid indigenous decision making. Performance disclosure has also improved: reporting of landowner agreements status (%) has become industry standard, and one company now reports landowner complaints data.

Environmental contamination

Environmental contamination prevention, in particular third party contractor management thereof, is the least evolved area. It also continues to adversely affect industry reputation. There have been some improvements, such as the development of the Australian Petroleum Production & Exploration Association (APPEA) fraccing code, but these do not appear sufficient to overcome community distrust.

 $^{^4}$ FPIC is a principle to empower local communities to contribute to decision making on issues that may impact them.



Activity 2010-2015

Stocks engaged	Engagement meetings	Investor collaborative initiatives	Investor presentations	Stock site tours	Policy Submissions
10	25	2	2	1	4

Investor collaborative initiatives

Via the Principles for Responsible Investment clearinghouse:

- Regnan supported the IEHN/ICCR fraccing guide; and
- Our PP was supported by four investors, and an influential US investor reported using our PP in engagement.

Policy submissions

- Victorian Government inquiry into unconventional gas (July 2015)
- Western Australian Government inquiry into hydraulic fracturing (September 2013)
- Standing Council on Energy Resources: Draft National Harmonised Regulatory Framework (February 2013)
- Federal Government on proposals to amend the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (May 2013)

Full submissions online at: http://regnan.com/public-submissions

Other activity – Principles for Responsible Investment UOG working group

Regnan is a foundation member of the PRI Australia Network UOG Working Group (PRI WG). The working group was established in 2013 and is comprised of members of the Principles for Responsible Investment (PRI) Australian Network, an UN-supported initiative. Regnan participation included:

- Providing our PP for use in developing the PRI WG's engagement strategy;
- Presenting at PRI member UOG events; and
- Interviewing specialists in key areas such as hydrology and methane emissions.

The PRI WG have met with six of twelve targeted stocks over nine meetings to date, the majority utilising pre-arranged WG member meetings with the stock to discuss the PRI WG gap analysis.

Next steps

Regnan is finalising its UOG principles and recommendations to reflect our in-depth company discussions, the evolution of UOG best practice, and new developments in scientific understanding of UOG risks. The final guidelines will be circulated to targeted companies.

The sharp drop in oil prices from market oversupply has led to cuts in UOG exploration capital expenditure, however, some exploration continues and, while progress is evident, community distrust continues to be exacerbated by environmental contamination incidents. Regnan continues its active monitoring and targeted engagement on these issues.