

Gas mining in the Clarence Valley

The Clarence Valley once had a natural gas industry but conventional reserves were depleted last century. Current interest is in 'unconventional' sources which are more difficult to extract and use more invasive techniques. Almost all of the Clarence Valley Local Government Area is covered by exploration licences held by Red Sky Energy or Metgasco, by applications for new exploration licences, or by an application for a special prospecting authority.

Council has no role in granting consents for exploration activities.

What is 'unconventional gas'?

Unconventional gas is methane extracted from coal seams, shale and sandstones. The controversial process of hydraulic fracturing is almost always involved in extracting gas from shale and sandstone. In this region most interest is in our coal seam gas and tight gas resources.

What is Coal Seam Gas (CSG)?

Coal seam gas comes from coal seams that are too deep to mine economically. The gas is held by water in the seam and large volumes of 'produced' water must be removed to allow the gas to flow. This produced water usually contains many toxins dissolved in it, along with vast quantities of salt.

What is shale gas?

Shale gas is extracted from deep shale rocks. Little water is produced but hydraulic fracturing is required.

What is tight gas?

Tight gas is methane trapped in sandstone formations. Releasing it generally requires hydraulic fracturing.

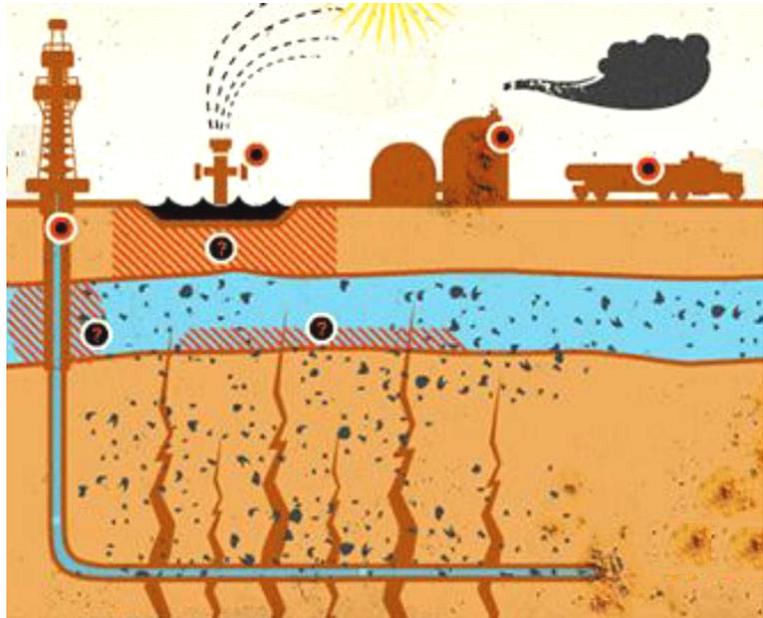
What is hydraulic fracturing?

Hydraulic fracturing ('fracking') involves blasting large amounts of water, sand and chemicals under pressure into gas-bearing rock to crack the rock and release the gas.

Between 20-80% of this mixture returns to the surface, along with a rush of methane which is rarely tapped.

Fracking has been linked to earthquakes in the UK and the US, and has been banned in several jurisdictions.

The compounds and chemicals involved in fracking are hazardous to human health. Of 23 commonly used fracking chemicals used in Australia, only two have been assessed for safety by the Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS).



What are some of the concerns?

Heavy vehicles damage roads and create traffic hazards The CSG industry is a 24/7 industry reliant on heavy machinery. Huge drilling rigs, scores of water tankers and other heavy vehicles are required for each well.

Falling property values Real estate agents near Queensland gas fields are reporting lower prices and reductions in property sales. In some areas owners cannot sell their land – they are at the mercy of gas companies. In the NSW Hunter valley, the value of drilled properties has decreased by at least 12%.

Contaminated water Produced water is generally salty and damages good quality soils. It can contain toxic chemicals, radioactive compounds, endocrine disruptors and heavy metals. Reverse osmosis removes the salts but not all the other contaminants. Disposal of water is problematic. If holding ponds breach, downstream areas would be put at risk.

Fragmentation Compared to conventional gas resources, unconventional gas requires a high density of well-heads, each with their own access road, compound and pipeline. This associated infrastructure fragments otherwise continuous expanses of productive agricultural land or bushland.

Fire hazard Methane is highly flammable. Gas vented from compressors or pipelines could be ignited by sparks or embers from bush fires and cause major damage to local areas.

Risks to groundwater Contamination and depletion of aquifers and other ground water reserves are real concerns. Faults and fractures within rock structures can become pathways for saline water, fracking chemicals or methane gas to enter freshwater aquifers. They can also drain aquifers, causing dramatic drops in local groundwater levels. Toxic chemicals have been found in bores near fracked wells in Queensland.

Unconventional gas is a fossil fuel On a whole of lifecycle analysis, unconventional gas may be no cleaner than coal – and it could be even worse. Methane is a potent greenhouse gas, and can leak from wells, processing plants and pipelines. Major unplanned leakages occur during fracking.

Royalties Despite all these potential impacts, the NSW Government does not charge any royalties for the first 5 years of each well's commercial production, and charges a discounted rate for the next 5. The NSW Government has announced its intention to stop this subsidy but new regulations are still to be drafted.

How am I protected?

Even though you own your land, you do **not** own the petroleum or gas under your land. The state government can issue exploration licences without your consent. Exploration activities, including seismic testing, core drilling and pilot wells, can occur with no notification to neighbours.

The only legislated protection you have is that mining or exploration activity cannot occur without your consent within 200 metres of your house, 50 metres of your orchard or garden, or on any other significant improvement (which existed before the exploration licence was issued).

In both Queensland and NSW, governments have paved the way for expanding the CSG industry. Most laws and regulations favour the industry over landholders, community interests or the environment. Is it any wonder the industry is operating without a social licence?

If the mining company wants to access your land, they need to negotiate an access agreement. If you refuse, the company can take you to arbitration and force agreement. However, in all probability to avoid the bad publicity, the mining company may decide not to pursue arbitration.

The first step in protecting your rights is to put up a 'no trespassing sign' aimed at gas companies.

Don't negotiate with CSG companies. Don't sign anything. Seek Legal Advice. Lock The Gate!

Sign the pledge at: www.csgfreenorthernrivers.org

The NSW Government has announced some changes to laws regulating mining and CSG activities, including the preparation of strategic regional land use plans. The Northern Rivers Region is not a priority for the preparation of a plan – but the industry is continuing to expand without restraint. It is operating without a social licence.

Concerned? Put up a lock the gate sign, ask your neighbours to do the same and become part of the growing 'Lock the Gate' movement!

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Useful websites: Minview www.minerals.nsw.gov.au/mv2web/mv2

Lock The Gate Alliance: <http://lockthegate.org.au/> Clarence Environment Centre <http://cec.org.au/>

CSG Free Northern Rivers: <http://www.csgfreenorthernrivers.org/>

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