

The Truth About Coal Seam Gas Greenhouse gas emissions.

- * Coal seam gas (CSG) is a fossil fuel and a significant source of greenhouse gas pollution. On a life-cycle basis it generates more than 40 times the amount of greenhouse gas per unit of energy generated than solar or wind. i
- * Liquefying natural gas consumes at least 20% of its energy value. When compared to coal it negates more than 30% of its "clean" character.
- * To export CSG, liquefaction is required. Full life cycle analyses show that the ultimate benefit is far less and in some cases results in higher CO₂ emissions than coal fired power generation
- * Queensland is the largest producer of greenhouse gases in the country and by far the highest per capita emitter. vi
- * The total domestic emissions per year from the three LNG projects approved so far in Queensland amount to 24.14 million tonnes of CO₂ equivalent (Mtpa CO₂-e)
- * Over the next three years, the CSG industry alone will increase Queensland's emissions by 16%.
- * Burning the LNG from just these three projects will emit 136 Mtpa CO₂-e. This represents a 2-3% increase in TOTAL global emissions of fossil fuel based greenhouse gas.

The production, export and burning of CSG for energy may be little or no better for our climate future than coal.

As a gas, CSG burns cleaner than coal, yielding only 56% of the CO₂ for the same heat output of coal.ii It also tends to produce fewer emissions of sulfur oxides (SO_x) and nitrogen oxides (NO_x). iii

The gas industry claims "gas-fired power stations emit up to 70 per cent less greenhouse gases than existing coal-burning plants" iv

The '70 percent less' figure may be accurate if only combustion is considered. It does not include the emissions associated with producing the gas - the drilling of almost 20,000 planned wells vii viii ix, the fracking process, the compression, dehydration, scrubbing and liquefying of the gas; nor those involved in exporting it - purging, boil-back from cryogenic transfers, leakage during LNG transfers, boil-back in transit, powering of LNG ships; and finally, re-gasification before use. It also ignores the impact of deforestation of woodland for the production well sites, pipelines, service facilities, roads and power easements.

The global warming potential (GWP) of Methane is 72-times more potent than CO₂, making any fugitive emissions (leakage) of CSG that much worse. Methane

emissions from the natural gas industry are equivalent to 1.4% of gross natural gas production. xi

Fracking is a technique used to speed up the flow of methane gas from underground rock formations. It makes the rock that has contained the gas for tens of millions of years permeable. This increases the risk of fugitive emissions. This is also being ignored by the CSG industry.

A 3% methane leakage rate cancels any greenhouse gas emissions advantage claimed for CSG over coal. xii

CSG may be cleaner than coal, but it is not clean, nor green.

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