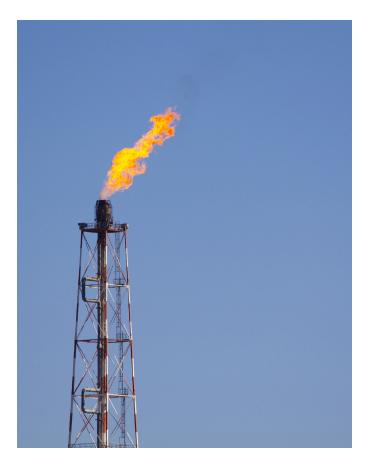


STOP FRACKING AND UNCONVENTIONAL GAS

Fracking and unconventional gas, including coal seam gas, pose a serious threat to our climate, groundwater, agricultural land and community.

Fracking and gas mining have expanded rapidly across Australia thanks to the industry's cosy relationship with governments, but they are destructive to land and communities.

Landholders and First Nations peoples don't even have the legal right to say no to gas mining on their land. The Greens support local communities and will fight to end this dangerous industry.



THE GREENS WILL:

- **Ban fracking** and all new or expanded unconventional gas mining and underground coal gasification across Australia
- Give landholders including First Nations peoples the right to say no to gas mining on their land
- **Protect water** by extending the 'water trigger' to all types of unconventional gas mining
- Commission an independent study of the real climate impacts of gas mining
- Make gas companies clean up their own mess



The rapid and destructive expansion of the unconventional gas (coal seam, shale and tight gas) industry across much of Australia demonstrates what happens when governments put big gas mining companies ahead of local communities, the environment and our long-term future.

The Greens have opposed the polluting unconventional gas industry since 2010. We will always act to protect our groundwater, climate, precious farmland and regional communities.

The Greens are fighting for a ban on all new unconventional gas approvals or expansions to existing projects, and for an end to underground coal gasification.

While we work towards that goal, we are pushing for:

- a ban on hydraulic fracturing (or "fracking")
- the right for landholders, including traditional owners, to say no to unconventional gas
- extending the 'water trigger' to all forms of unconventional gas, including shale and tight gas
- full investigation of the health impacts of unconventional gas
- independent measurement of the climate pollution from unconventional gas
- a just transition and new jobs for workers and communities
- no new gas infrastructure like pipelines (including the proposed gas pipeline from the NT to Queensland)
- no new gas ports along the Great Barrier Reef
- an end to fossil fuel subsidies
- a price on pollution to drive out coal and gas
- new, stronger national environment laws and a new national environment watchdog.

BAN FRACKING AND ANY NEW OR EXPANDED GAS MINING PROJECTS

Unconventional gas mining simply cannot co-exist with farming. It industrialises good farming land, and threatens groundwater. Drilling gas wells through aquifers to access underlying coal seams risks creating connections between the two, potentially lowering as well as contaminating the water table.

Extracting coal seam gas (CSG), shale and tight gas also regularly requires hydraulic fracturing or 'fracking'. Fracking is the high pressure injection of millions of litres of chemically treated water deep underground, to force the release of gas.

Fracking and unconventional extraction processes require huge amounts of water and chemicals. Fracking risks reducing the quality and quantity of our groundwater and causing earth tremors and surface subsidence.

Storage of the fracking wastewater is also problematic as it may contain heavy metals, salts, radioactive materials and volatile organic compounds which can be toxic to people, animals and plants. The massive volumes of wastewater produced is usually stored in uncovered ponds, or treated and released back into the water table or into streams and rivers.

There have been over 11,000 CSG wells sunk in Queensland¹, with approval granted for over 30,000 and climbing.² There is growing evidence of alarming health impacts on people living in close proximity to unconventional gas fields including nosebleeds and headaches in Queensland.³ The Greens are calling for a full investigation of these health impacts.

Meanwhile the fight continues against Leigh Creek Energy's underground coal gasification project in South Australia, with Traditional Owners calling for the project to be abandoned. Underground coal gasification is where coal is burnt in situ in coal seams, and carries similar risks of water contamination. This practice has been banned in Queensland, and should be banned nationally.

^{1 &}quot;Queensland's Petroleum & Gas Industry Snapshot - GasFields" http://www. gasfieldscommissionqld.org.au/resources/documents/Industry%20snapshot%20 FINAL_web%20version.pdf. Accessed 21 Mar. 2019.

^{2 &}quot;Queensland CSG to LNG Industry Workforce Plan - Energy Skills" http://www. energyskillsqld.com.au/wp-content/uploads/2016/09/Queensland-CSG-to-LNG-Industry-Workforce-Plan-Energy-Skills-Qld.pdf. Accessed 21 Mar. 2019. 3 OCSE (2014) Independent Review of Coal Seam Gas Activities in NSW Managing environmental and human health risks from CSG activities. Report from the NSW Government Office of the Chief Scientist and Engineer. http:// www.chiefscientist.nsw.gov.au/__data/assets/pdf_file/0006/56922/140930-FinalManaging-Environmental-and-Human-Health-Risks.pdf. Accessed 21 Mar. 2019.

LANDHOLDER'S RIGHT TO SAY NO

The Greens are firmly on the side of Australian farmers and landholders, including First Nations peoples. Currently, under state, territory and federal laws, most landholders have no legal right to refuse mining companies access to explore and, then later, mine their land.

Since 2011 the Greens have introduced three separate bills to give landholders, including traditional owners, the right to say no to coal and gas, and to ban fracking. Each time, Labor, Liberal and the National parties have voted against that legislation.

We will keep working to give landholders including First Nations peoples and local councils the right to refuse unconventional gas mining on their land, while we push for a complete end to this destructive industry.

The community is already winning in the fight against unconventional gas at Bentley and Gloucester in NSW and the industry is on the back foot in the Pilliga forest in NSW.

In the NT, sacred sites have been protected because of campaigning by Traditional Owners. On the Darling Downs in Queensland resistance to fracking continues to build after the tragic death of George Bender who took his own life after a protracted dispute with gas companies.

The community has forced some state governments to adopt moratoriums on fracking in Tasmania, Victoria, south-eastern South Australia and parts of NSW. Sadly, fracking is currently legal in Queensland, WA and the NT, despite strong community pressure.

The Greens have been a strong critical voice against the unconventional gas industries. We intend to continue our campaign alongside community campaigns like Lock the Gate so that we can bring a halt to the destruction across rural and regional Australia.



PROTECT AUSTRALIA'S WATER

As the driest inhabited continent on the planet, protection of our precious groundwater must come before the profits of gas companies.

In 2011 the Greens introduced a private members bill to create protection for water from coal and coal seam gas mining. Our plan was to make the national environment minister obliged to consider the impacts on water and groundwater when considering whether to approve any coal or coal seam gas mining projects.

It took two years to convince the government, but in 2013 we are proud to have supported a government bill which delivered such protection, the 'water trigger'. However, both Labor and the Liberals opposed our amendments to extend the water trigger to shale and tight gas mining. Shale and tight gas mining threaten groundwater supplies across almost half the country.

The Greens will extend the 'water trigger' in our national environmental protection laws to cover all forms of gas extraction to protect all water sources.

Under our plan, if an unconventional gas mining project will negatively impact water or groundwater, those water impacts must be fully considered by the Environment Minister in deciding whether to approve that project.

STUDY THE REAL CLIMATE IMPACTS OF GAS MINING

The gas industry claims that climate pollution from unconventional gas is around half that of coal. However, this does not count the "fugitive emissions" — methane that leaks into the atmosphere from wells and pipes. The Greens secured a CSIRO study of fugitive emissions from CSG, but those studies have not covered crucial stages of production.

The Greens would immediately commission a rigorous, well-funded independent study of fugitive emissions of unconventional gas, and the complete climate impacts of the mining, extraction, transport and liquification of unconventional gas.

Unconventional gas could in fact be just as bad for the climate as burning coal. The US EPA is now revising its earlier estimates for fugitive emissions upwards.

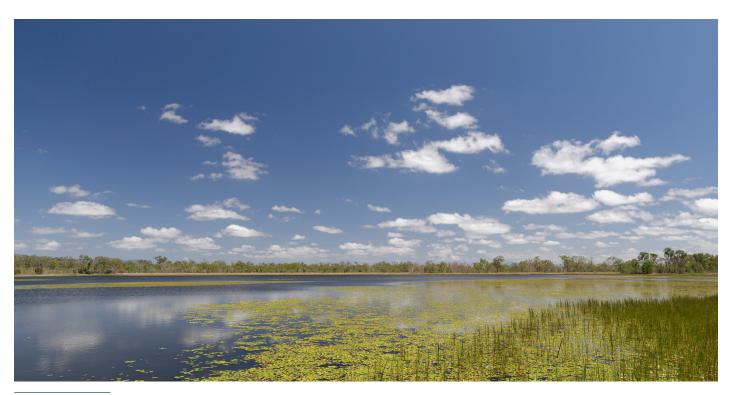
Evidence from the USA shows that emissions from unconventional gas and fracking are much worse than

previously reported.⁴ The Final Report of the inquiry into fracking in the Northern Territory reported that if the Territory is opened up for fracking, Australia's greenhouse gas emissions will rise by 5%.⁵ Analysis has shown that if all of the shale gas in the NT was extracted and used it would have the equivalent impact of 130 coal-fired power plants operating for 40 years, up to 60 times our current national emissions.⁶

Australia is already experiencing the impacts of climate change, including more severe weather events and heatwaves, and large tracts of our nation are in deep drought. We should not be opening new or expanding existing unconventional gas mines when we have abundant renewable energy that is reliable, jobs rich and genuinely clean. Fracking and unconventional gas extraction processes require huge amounts of water and chemicals, and the wastewater from the wells can be toxic to people, animals and plants. The massive volumes of wastewater produced is usually stored in uncovered ponds, or treated and released back into the water table or into streams and rivers.

Right now companies are required to pay a bond to state governments for the rehabilitation of their sites after they cease operation. However, the amount set aside is woefully below what the actual cost of rehabilitation is estimated to be.⁷ The cost of cleaning up the mess left behind by gas companies must never fall to the public.

The Greens will require gas companies to set aside sufficient funds for the rehabilitation of their project sites before the end of their license.



4 Melbourne Energy Institute, A review of current and future methane emissions from Australian unconventional oil and gas production,, 26/10/16

5 Final Report, The scientific inquiry into hydraulic fracturing in the Northern Territory, Final Report, 27/3/18 https://frackinginquiry.nt.gov. au/

6 The Australia Institute, Economies of shale, The Australia Institute, 19/1/18 http://www.tai.org.au/content/economies-shale

⁷ Collins, Ben. ABC. "Fracking exploration rehabilitation costs likely to be borne by taxpayers after company collapse." 30 Jan. 2019, https://www.abc.net.au/news/2019-01-31/fracking-company-unlikely-to-repair-environment/10743922. Accessed 21 Mar. 2019.