Get the facts: what is unconventional gas?

As the world has started running out of large and easily extracted reservoirs of gas, the industry has developed various methods to release gas trapped within layers of rock. This is called 'unconventional' gas. It includes coal seam gas, shale gas and tight gas. These types of unconventional gas are generally extracted via a highly invasive process known as fracking.

Unlike conventional gas, fracking requires hundreds or thousands of wells across what becomes an industrial gasfield.
Wells are drilled horizontally into layers of rock. Millions of litres of water containing sand and toxic chemicals are then forced down the wells at high pressure. This fractures the rock, releasing the trapped gas.

Should I be concerned about unconventional gasfields?

The invasive practices needed for unconventional gas have multiple environmental and health impacts. For example, with fracking:

- The water forced into rock layers is toxic when it goes down, and even more toxic when it comes back up, as it absorbs heavy metals that normally live underground.
- This toxic waste water is left in uncovered pools lined with plastic where it is at risk of leaking into the landscape and our scarce water supplies, leaving a dangerous legacy for humans and other animals.
- Fracking so many wells unavoidably releases methane gas into the atmosphere.
- Methane drives climate change far more rapidly than the carbon dioxide that is produced when the gas is burnt at power stations.
- Any technology releasing methane is completely at odds with our goals to

- tackle climate change.
- In Queensland, where the fracking industry expanded very rapidly with minimal regulation, very high levels of methane have been measured around gasfields and a range of health problems have been reported in those communities.
- This is consistent with hundreds of peer reviewed articles documenting serious health impacts linked to fracking. Babies and children are particularly at risk.
- Health impacts may be caused by high methane levels and/or exposure to fracking chemicals, which include carcinogens, reproductive toxins and endocrine disruptors. Many of these chemicals have not been tested for their longterm impact on health.
- Expert organisations such as the <u>National Toxics Network</u> and <u>Doctors</u> <u>for the Environment</u> are strongly opposed to fracking in SA due to its health and environmental impacts.

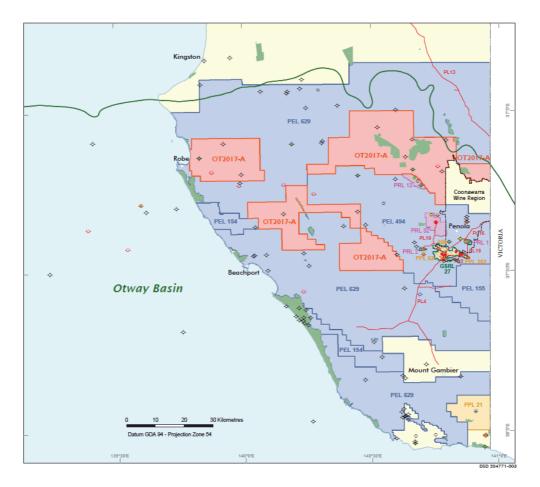
What's happening in South Australia?

Although the state government has been active on climate change and renewable energy, this is greatly undermined by its push for new unconventional gas exploration and developments across our state.

The South East is now almost completely covered in exploration licences.

On the map overleaf, the blue areas are already under licence while the red areas are currently being offered for exploration by the SA Government.

The government document calling for licence applications is talking up the unconventional gas potential of the South East.



Why would we go down this path?

Climate change demands that we move to renewable energy as fast as possible.

In SA this transition is already well underway, with 50% of our electricity now coming from renewables and a range of big new projects in the pipeline.

There are particular concerns about gasfields in the South East of our state, as this region produces much of our food supply.

We don't need gasfields for jobs or the economy: the gas industry is not a big employer and most of its profits head offshore. We need to look after the sectors that our economy does rely on, which include agriculture.

Should we be risking our state's foodbowl, our water supplies, our pristine landscapes and even our own health for the sake of an industry that needs to be phased out as soon as possible?

Can it be stopped?

The state government has said that the industry needs 'social licence' to operate.

If the community demonstrates strong and consistent opposition to these gasfield developments, they won't be able to take over our landscapes.

If you don't support this industry, you need to make your voice heard loudly and clearly, and encourage others to do the same.

To learn more or get involved visit: www.conservationsa.org.au/gas_and_fracking