### What's at risk?

More than half of Australia is covered in coal and gas leases & applications and families and communities are suffering as a result. Rural residents are being forced to leave their family farms forever.

Others are left stranded, living close to mines and gasfields and experiencing serious health impacts associated with air pollution.

Many of our most valuable landscapes are under serious threat, including:

- Our iconic food-bowls: such as the Darling Downs, Gippsland, the Liverpool Plains, the Gunnedah Basin, and the rich farmlands of South Australia.
- Our precious water resources- like the Great Artesian Basin and the drinking water catchments for the Sydney region.
- Our closely settled green hinterlands: including the Northern Rivers of NSW, the Gloucester Valley, the Otway Coast, South Australia's Limestone Coast and Queensland's Scenic Rim.
- Our Indigenous Cultural Heritage- cultural sites and traditional lands and waters of Indigenous peoples across Australia.
- Our international tourism icons: like the Kimberley, the Ningaloo coast, Australia's Red Centre, and Arnhem Land.
- Our coastlines- such as the Great Barrier Reef which is threatened with plans for up to 17 coal and gas port developments.



Warning: Trespass is an Offence
Admittance to the properties only by whitation or price appointment
Authority-High court of Australia PLANTY SOLD (1999) 171CLR555 FC 91/904
Www.fockthogate.crg.au

### Lock the Gate Movement

The Lock the Gate Alliance is a grass roots organisation made up of thousands of individuals and many community groups across Australia.

Our mission is to protect Australia's agricultural, environmental and cultural resources from inappropriate mining and to educate and empower all Australians to demand sustainable solutions to food and energy production.

## How you can get involved

- Install a yellow triangle on your property -Lock the Gate!
- Join the Lock the Gate Alliance.
- Donate to help our movement grow.
- Form or join a local action group. Tell your neighbours/friends/family and colleagues.
- Become more informed!

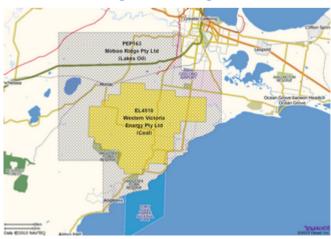
You can find out how to do all this and more by visiting www.lockthegate.org.au

# Your contact at Frack Free Grovedale is:

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# Save your future, your children's future and our planet NOW!



Australians uniting to protect our land, our water our air and our right to exist



### **Invasive Coal Mining**

Australia is planning a massive expansion in coal mining over the next 10 years which may see our coal production double in size.

There will be new mega-mines that are three times larger than the biggest coal mine we have in the country now.

There are plans for 51 new or expanded coal mines in Qld and 44 in NSW, plus a new 13 billion tonne coal allocation in Victoria and a doubling of exports from south-west WA.

Underground Coal Gasification (UGC) and coal to liquids projects are also proposed around the country.

Both of these technologies are energy intensive and polluting and likely to pose significant risks.

The impacts of coal mining expansion include:

- Increased incidences of heart, lung and kidney diseases from coal dust and other pollutants.
- Reduced quality of life for neighbouring landholders from constant noise and light.
- Loss of agricultural land with the accompanying depopulation and destruction of rural communities.
- Creek diversions, aquifer depressurization, and pollution of surface waterways.
- More railway lines, ports and coal ships, with associated impacts on coastal areas.
- Pressure on limited water resources from the vast quantities of water used in coal processing.

**Example**: Google - bacchus marsh coal mine protest



### **Unconventional Gas**

Unconventional gas exploration and/or production is now taking place in all Australian states.

Coal seam gas, shale gas and tight gas differ from natural gas because they are more difficult to extract and cannot be developed with conventional processes.

Unconventional gas production is highly invasive above and below ground, requiring massive numbers of wells and intrusive extraction methods such as horizontal drilling and hydraulic fracturing (fracking).

Fracking involves high pressure injection of large volumes of water, proppants (e.g. sand), radioactive tracers and chemical additives into the ground to fracture the source rock and stimulate gas flow. Many chemicals used in fracking are toxic and have not been assessed for environmental and health impacts.

In coal seam gas extraction large volumes of ground water must also be extracted to facilitate gas flow. This wastewater is generally salty and may contain toxic chemicals, radioactive compounds, and heavy metals.

There is no proven safe method to properly dispose of this waste.

Invasive gas mining impacts include:

- Industrialization of whole regions with wells, roads, pipelines, and infrastructure.
- Contamination of ground and surface waters with toxic chemicals and methane.
- Loss of agricultural land and reductions in property values.
- Release of hazardous air pollutants from venting, flaring and wastewater evaporation.
- Depletion of water resources from well dewatering and use in fracking.
- Substantial greenhouse emissions from methane leakage.
- Massive scars on the landscape from mine voids which are rarely rehabilitated.
- Few people employed compared to other industries like farming and manufacturing.

- Serious health effects experienced in communities living near gasfields in the US & Queensland.
- Fragmentation and destruction of native forests and critical wildlife habitat.
- Reduced quality of life for rural residents from industrialization of rural areas.
- Increased earthquake activity from fracking and wastewater re-injection.

# **Quick Facts on coal and gas**

Australia gets little benefit from coal and gas production because 83% of the mining industry is foreign-owned.

Mining is one of the smallest employers in Australia, employing only 2% of the population which is less than the arts and recreation services industry.

Australia has plentiful supplies of 'conventional' or 'natural' gas and some of the best solar and wind resources in the world.

Most coal and gas is shipped overseas – Australia is the biggest exporter of coal in the world and plans to become the biggest exporter of gas by 2020.

Exports of coal seam gas are driving up the cost of gas for consumers in Australia, because companies are increasing domestic prices to match overseas prices.



This is Tara in 'rural' Queensland STOP CSG MINING NOW!