

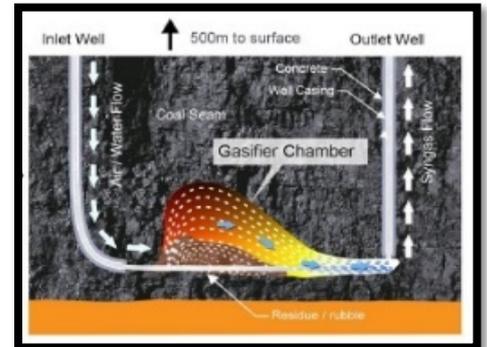
Oppose Underground Coal Gasification in South Australia

What is Underground Coal Gasification?

Underground Coal Gasification (UCG) is an unconventional coal extraction technology that converts solid coal into syngas in coal seams underground.

The conversion is started by injecting an ignition catalyst, oxygen and sometimes water into the coal seam, which drives several chemical reactions, including drying, pyrolysis, combustion and gasification.

As the process goes on, a gasifier chamber grows within the coal seam and syngas, which mainly consists of hydrogen, carbon monoxide, carbon dioxide and methane, is brought to the surface, where it is treated, cleaned and used to produce electricity, synthetic fuels or chemicals.



UCG plans for South Australia

In South Australia (SA), Leigh Creek Energy (LCK) plans to construct and operate a UCG demonstration plant on the Leigh Creek Coalfield, near the towns of Leigh Creek and Copley. On 3 September 2018, SA's Energy and Mining Minister gave the project its final approval. LCK has commenced its trial.

Main reasons to oppose UCG in South Australia

1. UCG poses serious environmental risks

Past UCG operations have had such devastating impacts on groundwater and soil that the practice has been banned in Queensland and moratoriums were put in place in Scotland and Wales.

During the UCG process, organic and inorganic contaminants are formed, and fractures develop in the surrounding strata, through which the contaminants can penetrate the surrounding rocks and groundwater. LCK argues that appropriate site selection and pressure management can contain the contaminants within the gasifier chamber.

However, independent hydrologists have stated that further, independent research into the geology and hydrogeology of LCK's site is required before it can be deemed safe. The recent pollution event caused by UCG trials in Queensland demonstrates that UCG companies still do not have the knowledge, skills and technologies necessary to avoid environmental harm.

2. UCG is unsustainable

While UCG power plants have lower life cycle greenhouse gas emissions than traditional coal fired power plants, UCG emissions are still higher than those of natural gas and significantly higher than those of renewable energy technologies.

Considering that UCG could potentially quadruple the world's recoverable coal resources and that most of these resources need to remain in the ground to limit global warming to two degrees, the commercialisation of UCG will harm global climate change mitigation efforts.

For South Australia, the introduction of UCG is an unnecessary step backwards, as the state has successfully phased out coal in 2016 and half of the state's electricity already comes from renewable sources.

3. UCG has no social licence

LCK's proposed UCG project is facing strong opposition from the Adnyamathanha Traditional Landowners, environmental groups and the wider local community. This is due to concerns regarding environmental and human health and safety as well as cultural heritage, which has been expressed by the Adnyamathanha Traditional Lands Association (ATLA) and other important heritage groups.

LCK has consciously excluded these groups from their stakeholder consultations and justifies disregarding ATLA's opposition by claiming that past mining activities have rendered the area culturally insignificant.

This is essentially saying that because the will of the Traditional Owners of the Land was not respected in the past, it does not need to be respected now.

Take action

Call SA Mining Minister Dan Van Holst Pellekaan to ban UCG at Leigh Creek

08 8642 3633