Debunking Australasian Centre for Corporate Responsibility spin
Myths vs Facts

This Fact Sheet is a direct response to the Australasian Centre for Corporate Responsibility's (ACCR) report of February 2022 about the Australian natural gas industry.

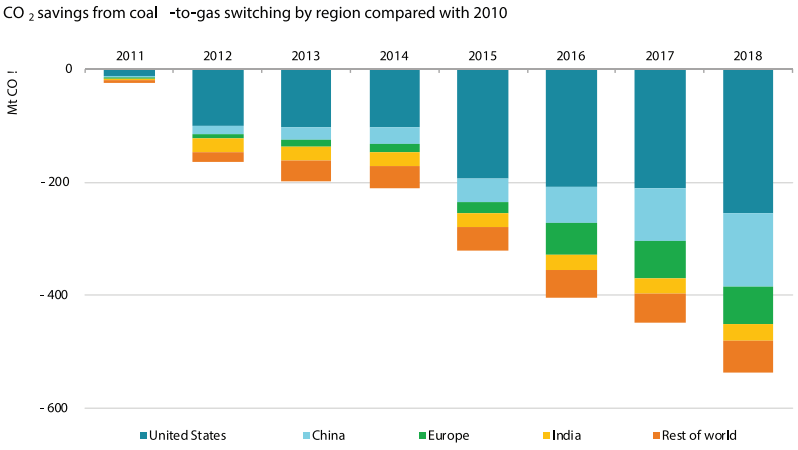
These responses are based on facts, scientific reports, and fully sourced information.

Myth: Gas has not materially displaced coal use in Australia's largest LNG markets to date.

Fact: Yes it has, and it will continue to do so.

From 2010-2019, coal to gas switching has saved around 500 million tonnes of CO2 – the equivalent of putting an extra 200 million electric vehicles on the road running on zero-carbon electricity over the same period *(International Energy Agency, 2019)*.

Coal -to-gas switching has helped prevent faster growth in emissions since 2010…



Note: Mt CO2 = million tonnes carbon dioxide. Coal-to-gas switching includes emissions reductions in sectors where the market share of coal decreased, and the market share of gas increased within each region. The baseline increase in emissions assumes no improvement in the carbon intensity of energy or the energy intensity of gross domestic product (GDP) since 2010. Savings are calculated as those which occur compared to 2010.

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(International Energy Agency, 2019).

Much of the push for coal-to-gas switching in China is occurring in areas to replace coalfired boilers in residential and industrial settings (which are a major contributor to poor air quality), rather than power plants *(International Energy Agency, 2019)*.

Natural gas demand growth will be largest in emerging market and developing economies from 2019-2030, led by China and India, with fuel switching from coal and oil to be responsible for nearly 30% of net growth *(International Energy Agency, 2020)*.

Since 2017, natural gas consumption in China has risen sharply due to strengthened action against air pollution and an array of coal-to-gas switching policies and projects *(The Oxford Institute for Energy Studies, 2018)*.

ENERGY INFORMATION AUSTRALIA

Energy Information Australia is an initiative funded by the Australian Petroleum Production & Exploration Association (APPEA). Authorised by S Browne, Melbourne.

Myth: Increased variable renewable energy in Asian countries reducing the importance of natural gas.

Fact: **Natural gas helps support increased renewables in electricity systems.**

"The flexibility that natural gas brings to an energy system can also make it a good fit for the rise of variable renewables such as wind and solar PV." *(International Energy Agency, 2017).*

"Substantial GHG emissions reductions would be possible if gas was used to provide baseload and peak electrical power generation in Australia under scenarios of higher intermittent renewables energy and gas use." *(Australian Council of Learned Academic, 2013).*

"Gas is an important part of Australia's energy mix, with the ability to respond more rapidly to variable grid demands, and with lower emissions than coal" *(Engineers Australia, 2017).*

"Gas generators, which are inherently flexible technologies that can be easily ramped up and down to meet demand, are natural counterparts for variable resources such as wind and solar." *(The Business Council for Sustainable Energy, 2013).*

Myth: Gas should no longer be classed as clean, as it emits more than half the emissions of coal when combusted.

Fact: **Gas is 50% cleaner than coal when combusted.**

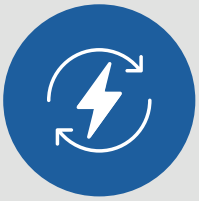
An independent review of the Australian national electricity market found that gas is more than 50 per cent cleaner than coal *(Commonwealth of Australia, 2017).*

The report states: "In the NEM, gas-fired generation can provide a reliable, low emissions substitute for ageing coal-fired generation" *(Commonwealth of Australia, 2017).*

The CSIRO found that gas fired electricity is significantly lower in greenhouse gas emissions than coal fired electricity.

"In Australia, if Surat Basin natural gas was used to displace domestic coal fired electricity generation, GHG emissions intensities would be 0.66 t CO2-e/MWh (open cycle gas turbine) or 0.48 t CO2-e/MWh (closed cycle gas turbine) representing a reduction in emission compared with coal of 31% and 50%, respectively" *(CSIRO, 2019).*

Myth: Battery storage is now affordable enough to replace gas peaking plants for firming renewable energy.



Fact: **All technologies are needed.**

As the IEA has made clear, it is not a case of one or the other: "Meeting rising flexibility needs while decarbonising electricity generation is a central challenge for the power sector, so all sources of flexibility, including power plants, grids, demand-side response and storage need to be tapped" *(International Energy Agency, 2021).*

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