Cleaner ozone:
the benefits of increased natural gas use

As a cleaner burning source of fuel, natural gas is increasingly being relied upon around the world to meet energy needs. Countries like the United States and China for example, are replacing older electricity generation facilities with natural gas generation and seeing significant improvements in regional emission levels. In the United States alone, shifting to natural gas prevented over two billion metric tons of carbon dioxide from being emitted between 2005 and 2016 (Figure 9).

In addition to these emissions benefits, switching to natural gas for energy generation has other benefits such as increased reliability, as well as competitive pricing, if natural gas development is encouraged to expand. But don't just take our word for it, let's see what the experts have to say:

Reducing greenhouse gas emissions

"Increased use of shale gas (and other gas) for electricity generation could ***significantly decrease Australia's greenhouse gas emissions*** *based on gas replacing coal."* – Australian Council of Learned Academies

"Despite these issues, taking into account our estimates of methane emissions from both gas and coal, on average, gas generates ***far fewer greenhouse-gas emissions*** *than coal when generating heat or electricity, regardless of the timeframe considered."* – International Energy Agency

"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 Academies

More natural gas generation equals greater reliability

"In the short to medium term, the Australian National Electricity Market is likely to require higher levels of flexible, gas fired generation, which can provide ***a reliable low-emissions substitute*** *for ageing coal fired generation and can provide essential security services to rapidly respond and complement variable renewable electricity generation."* – Scientific Inquiry into Hydraulic Fracturing in the Northern Territory

Increased gas is needed to meet climate goals

"Based on gas supplying either 30% or 50% of electricity generation in 2030, analysis indicates that this could ***lead to reductions of either 27% or 52% respectively*** *in terms of the current GHG emissions for electricity production– based on gas replacing coal-fired generation."* – Australian Council of Learned Academies

"As coal power capacity is being retired over the coming decades, it is expected that natural gas can play a role in the energy transition. However, for this to occur, gas supplies need to be abundant and gas prices more competitive." – International Energy Agency

"Given that Australia has obligations under the second commitment period of the Kyoto Protocol...the Expert Working Group believes that deployment of higher efficiency gas turbines (and in the case of shale gas the use of green completion technologies) have the potential to ***make a substantial contribution to the achievement of Australia's GHG obligations*** *over this timeframe."* – Australian Council of Learned Academies

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