Find out more about...
Liquefied natural gas (LNG)

Did you know?

- LNG is natural gas chilled to -161 degrees Celsius.
- LNG shrinks to 1/600th the volume of natural gas.
- LNG is non-explosive and simply evaporates if released.
- LNG is responsible for 100,000 jobs and $200 billion worth of investment in Australia.
- Natural Gas produces up to half the greenhouse emissions of brown coal for electricity.
- Santos GLNG is on track for its first LNG cargo in the second half of 2015, and when fully operational will have the capacity to produce 7.8 million tonnes of LNG each year.

+ LNG technology enables the safe transportation of large quantities of Natural Gas.
What is liquefied natural gas?

Liquefied natural gas (LNG) is natural gas chilled to -161 degrees Celsius so that it becomes a liquid. Once it has been liquefied, it shrinks to 1/600 the space of natural gas, allowing it to be transported in purpose-built ships. Australia has four operating LNG projects. Another six LNG projects – representing a total investment of more than $200 billion – are now under development. Still more are on the drawing board.

This is already creating thousands of jobs and will deliver major export income and tax revenue for Australia, as well as cleaner energy for the world.

Is LNG safe?

LNG has been safely transported around the world for decades, giving millions of people access to a cleaner energy source.

LNG does not contain any oxygen, which is needed for combustion, so it won’t burn. It’s not stored or transported under pressure and is not explosive. Evaporated LNG does not pollute the air and leaves no residue on land or in water. Because LNG weighs less than water, it will float if spilled and then evaporate quickly.

LNG is transported by large double-hulled ships. The modern LNG shipping industry has had more than 40,000 safe voyages over the last four decades.

Benefits of LNG

LNG projects are driving an unprecedented level of investment in Australia, while also delivering reliable and cleaner energy to Asia.

Australia has several LNG projects under development that will cost industry about $200 billion to build – an investment of more than $1,200 per second over the next five years.

Once these LNG projects are operating, exports are likely to increase from 24 million tonnes per annum to 85 million tonnes per annum – making Australia the number one LNG exporter in the world.

This will also significantly increase the LNG export revenue flowing to Australia, which stood at $11.1 billion in 2011.

More LNG projects also mean more income tax, company tax and resource royalties. In 2011-12, the gas industry paid $8.8 billion in taxes and royalties, which is expected to reach $12.8 billion by 2020, enough to build six new major state-of-the-art hospitals.

During this investment phase, it is estimated that the industry will create about 100,000 jobs across the Australian economy.

All while producing an energy source that delivers half of the emissions of black coal and 70 per cent fewer emissions than brown coal when used to generate electricity.

PNG LNG Plant, Papua New Guinea
Santos GLNG project

Santos GLNG is a pioneering venture that will produce natural gas from Queensland’s coal seams and convert it into LNG for sale to world markets. It involves ongoing gas field development in the Surat and Bowen Basins, a 420-kilometre gas transmission pipeline, and the construction of an LNG plant on Curtis Island, near Gladstone.

Santos GLNG is led by Australian company Santos, in partnership with three of the world’s leading energy companies – PETRONAS from Malaysia, Total from France, and KOGAS from South Korea.

Santos GLNG is on track to deliver its first LNG cargo in the second half of 2015 and, when fully operational, will have the capacity to produce 7.8 million tonnes of LNG each year. Santos GLNG is leading the way in making Australia a world-leading gas producer, and will contribute billions of dollars to the Australian economy over many decades.

Energy security

Australia has more than enough gas for both domestic and export markets. Australia has an estimated 819 trillion cubic feet (TCF) of gas reserves (enough to power a city of 1 million people for 16,000 years). More discoveries are considered likely.

In 2012, the entire Australian economy consumed only 1.1 TCF, with a further 1 TCF exported.

The country’s supply is growing as new technology and access to export markets allows us to produce from large reserves that were too difficult and costly to access until recently.

Without access to export markets, which can pay higher prices to cover higher development costs, much of this gas may have stayed in the ground.

In this way, exporting LNG brings more supply online, ensuring Australia’s energy security.
Interested in learning more about natural gas?
Visit santos.com for more fact sheets on a wide range of gas-related topics.

Santos – an Australian Pioneer
An Australian energy pioneer since 1954, Santos is a leading oil and gas producer, supplying Australian and Asian customers. With over 3,000 employees across Australia and Asia, Santos’ foundations are based on safe, sustainable operations and working in partnership with host communities, governments, business partners and shareholders.