

Australian LNG floats to the top

By Peter Coleman

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It is an exciting time to be a part of the Australian Liquefied Natural Gas industry, which is on track to become the world's biggest supplier of LNG in the next decade.

We did not get to this position by chance. Crucial to our success has been hard work, innovation, strong partnerships with Asian joint venturers and customers, and support from community and governments.

As the CEO of Australia's largest independent oil and gas operator, Woodside, which celebrates its 60th anniversary in 2014, I am proud to share some insights on the rise of Australian LNG.

In the early 1970s, vast quantities of natural gas and condensate were discovered beneath the seabed on Australia's remote north-west continental shelf. It was a discovery that marked the birth of Australia's largest oil and gas resource development – the Woodside-operated North West Shelf (NWS) Project.

In 1984, the NWS Project began producing domestic gas and in 1989, the first cargo of Australian LNG arrived in Tokyo Bay, Japan. Since then, the NWS Project has invested more than A\$27 billion in its facilities, which include offshore production platforms and subsea infrastructure, onshore processing and storage facilities at the Karratha Gas Plant, loading facilities, jetties, associated infrastructure and LNG ships.

Today, the NWS Project is one of Australia's three operating LNG projects and includes five production units (or trains) and produces up to 16.3 million tonnes per annum (mtpa) of LNG. Woodside also operates Pluto LNG, which has one 4.3mtpa production train, and achieved the milestone shipment of its 100th cargo in early 2014. In Australia, another seven LNG projects – representing a total investment of more than A\$200 billion – are under development. Still more are on the drawing board.

Today, we have the fastest growing LNG sector in the world, with the seven projects currently under construction representing two-thirds of new global investment in LNG production and equal to around 20 per cent of global LNG supplies.

LNG expansion in Australia continues to be underwritten by a robust demand profile within our region, both from legacy North Asian importers and Asia's major emerging economies.

Early investment by Asian foundation customers and joint venturers has been crucial in the development of

Woodside's premium Australian projects, allowing us to reliably deliver more than 3,800 cargoes to Asian customers. We are fortunate that there is a robust growth outlook for LNG – based on a combination of global demand for natural gas and the increasing role of LNG in the global gas supply mix.

It is expected that by 2030 global demand for LNG will be more than double the current 2013 level of approximately 240mtpa, corresponding to an average annual growth rate of 4-5 per cent.

The Asia-Pacific remains the core market for global LNG demand (about 70 per cent of global demand). Demand from traditional buyers (Japan, Republic of Korea) is complemented by significant growth across India, China and South East Asia.

In addition to LNG demand growth in power generation, commercial and residential gas use, LNG demand for transport use is also growing rapidly. There is increasing investment in infrastructure for LNG as a fuel for ships and heavy-duty trucks, particularly in China, Europe and North America.

A changing dynamic

No other country appears better placed to meet Asia's long-term LNG demand than Australia. However, Australian LNG is operating in an increasingly competitive environment. The list of potential LNG projects includes new developments in existing supply regions, such as Russia, as well as emerging supply regions, including North America and East Africa.

Alongside these new supply options, we are seeing a boom in re-gasification terminal construction throughout Asia; a growing number of short-term and spot market sales; and the likely advent of regional gas trading hubs.

These factors are driving a regional market in which LNG will, over time, become an increasingly fungible commodity – buyers and sellers will both have greater flexibility to seek the best deal. We are already seeing this evolution taking place in the Asian market and the Australian LNG industry needs to be prepared.

Woodside is doing just that by bolstering its marketing, trading and shipping capabilities. In 2013, Woodside established a trading office in Singapore and we commenced trading with the Woodside Goode – our first LNG ship not dedicated to a specific project.

Our company is also focused on technology and



innovation in order to maintain our competitive edge in this new operating environment. We have established a technology division which is developing new in-house capabilities and ensuring we are leveraging off the very best service and technology providers. We are doing work on initiatives like construction-led design, subsea compression, deepwater production systems and 'float-in' facilities.

For us, floating LNG is an economic game-changer and an attractive model because it takes care of a big chunk of costs associated with logistics, movement of workforces and civil works programmes. A key milestone for 2013 was the agreement by the participants in the Browse Joint Venture to adopt FLNG technology as the basis of design in order to go ahead with early commercialisation of the world-class resources of Western Australia's Browse gas fields.

Without this technology, the Browse resources could not be commercialised. FLNG ensures that we can be competitive and remain a partner of choice for our Asian customers. Australian LNG companies like Woodside will need to remain very focused in the years to come – on remaining competitive, productive and a partner of choice – in this new era of global gas.

Proximity to premium markets

As the major Australian supplier, Woodside's key marketing strengths are its reputation for reliability, long-term relationships with key buyers, proximity to premium Asian markets and the stable political and fiscal regime in which it operates.

In the future, even as new supply sources enter the Asia-Pacific region, Woodside believes that buyers will continue to maintain diversified supply portfolios, and have Australian LNG as a key component.

For some Asian buyers, the higher calorific value of LNG from Australia's conventional offshore projects is attractive. Woodside's growth projects will be able to meet our customers' requirements for high heating quality gas at a time when most emerging supply areas

will be offering lower calorific supplies.

For all of our Asian customers, the proximity of Australia's gas resources is a big plus. The longer the supply lines, the higher the cost and the greater the exposure to risk. This proximity remains an enduring advantage.

The increased distance from market is a key reason why we believe that US LNG exports delivered to Asia will be competitive, but not low-cost. Buyers who take on Henry Hub-linked LNG will also take on US market risks, where pricing has been both volatile and seasonal.

The rise of Australian LNG would not have been possible without the support of state and federal governments, which have provided a strong, stable regulatory environment for our projects to go ahead.

For the Australian LNG industry, becoming a global leader will not just be about getting projects across the line and becoming the biggest exporter. Our industry has a world-class safety and environmental record and a commitment to the communities in which we operate. Woodside is particularly focussed on the qualities we commonly associate with leadership: reliability; vision and long-term planning; values and integrity; and commitment to excellence in everything we do. We are active in promoting these qualities across the industry, ensuring that Australia can truly call itself a global leader in LNG in the years to come. ■

Woodside marks its 60th anniversary in 2014, including 25 years of LNG exports to the Asia Pacific region



Photo courtesy of Woodside