Overview

The Hon Bill Johnston MLA was invited to make the keynote speech at the Gas Asia Summit 2017 in Singapore as Minister for Mines and Petroleum. This was the Minister’s first official visit to Singapore representing the Western Australia Government at this prestigious resources conference.

During his visit the Minister met with various key executives from the resources sector and also took the opportunity to meet with the Singaporean Minister for Trade and Industry which was facilitated by the Australian High Commission.

The Minister was accompanied by;

- Mr John Caitlin, Commissioner, Government of Western Australia Office (GoWA), Singapore.
- Ms Penny Bond, Senior Policy Adviser to Minister Johnston
- Mr Melvin Sico, Business Development Manager, GoWA, Singapore

Wednesday 25 October 2017

Travel – Perth to Singapore
Thursday 26 October 2017

Keynote Address to the Gas Asia Summit

Minister Johnston was the keynote speaker on Day 2 of the Gas Asia Summit 2017 in the Commercial stream.

His speech emphasised that:

- WA is not linked to the Eastern Australian energy grid and not impacted by current upheavals there;

- WA has LNG reserves for domestic use and is open to foreign businesses seeking a sustainable energy supply and/or interested in investing in petroleum discovery and production;

- Western Australian and Australian LNG production is growing rapidly;

- WA is a centre for petroleum excellence, building on stable regulation, world class research and technological innovation.

WA is expanding its LNG industry research and technical capacity. Decommissioning expertise is just one example of emerging technical capacities.

Gas Asia Summit – Panel Presentation on the LNG Market

Panellists:

- **Mr Mangesh Patankar**, Head of Business Development (Asia Pacific), Galway Group
- **Mr Luca Tonello**, Joint General Manager, Head of Project and Export Finance, Sumitomo Mitsui Banking Corporation
- **Mr Sheharyar Chughtai**, Vice President (Project Finance), Korea Development Bank, Singapore branch
- **Mr Daniel Mallo**, Head of Natural Resources and Infrastructure, Societe Generale
Each speakers produced an individual analysis of the evolving LNG market, with particular emphasis on expanding the scope to service smaller and/or more isolated markets through “break bulking” strategies and infrastructure – storage, shipping, distribution – designed for smaller quantities of LNG. The common assumption was that demand for LNG across South East Asia will continue to rise.

Gas Asia Summit 2017 – tour of conference exhibits and introduction to Industry representatives;

- Two televised media events centring on the Minister’s presence at the Summit

Meeting with GLX Pte Ltd

GLX is a Western Australian company with offices in Perth and Singapore. The company is in the final stages of preparation to launch a global trading platform for LNG, a world first. The Minister was provided an overview on GLX’s objectives for the LNG trading platform and GLX’s insights on the LNG demand in South East Asia, India and Japan

Meeting with Shell Energy

Shell Energy provided the Minister with a presentation on their assessment of the international LNG market and the demand trends over the next five years. The Minister provided a background to the WA LNG environment and the WA Government’s key messages about energy market certainty in WA.

Meeting with Keppel Offshore & Marine

Keppel provided a comprehensive presentation on their marine enterprises – ship building, oil and gas rig design and construction, terminal expansion in Singapore, debunking facilities for LNG, overseas yards, research into Arctic and deep sea resource harvesting. Their long-term strategy mirrors the Singapore Government’s commitment to investing in infrastructure to complement Singapore as an LNG hub for the region.

The Minister shared a general background to LNG development in Western Australia.
Western Australian University Alumni Sundowner

Alumni from Murdoch University, Curtin University, and the University of Western Australia, led by Professor Robert Evans, Pro Vice Chancellor and President of Curtin Singapore; and Associate Professor Christopher Vas, Deputy Dean at Murdoch Singapore.

The Minister welcomed the alumni and spoke about the role WA universities play in Asia and the WA Government’s desire to increase its student intake from Asia. The Minister noted his respect for the original Colombo Plan as a means to build Australian-Asian relationships and his support for Colombo Plan 2 which has been implemented by the Commonwealth Government. The Minister also spoke about his role as Minister for Asian Engagement as a reflection of Government support for WA to have an enhanced role in Asia.

Official Reception celebrating the Queen’s Baton Relay for the 2018 Commonwealth Games

Reception to celebrate Australia hosting the 2018 Commonwealth Games.

Hosts:

- Mr Paul de Jersey, Governor of Queensland
- Mr Bruce Gosper, Australian High Commissioner to Singapore
- Councillor Tom Tate, Mayor, City of Gold Coast

Friday 27 October 2017

Business Breakfast hosted by the Minister

The business breakfast introduced the Minister to a cross-section of Singapore and Australian business people. The topics covered included energy, LNG production, foreign students attraction, offshore universities (Curtin and Murdoch), doing business in WA, the WA property market, minerals production, and the WA Government’s Asian engagement policy.

Meeting with Singapore Exchange (SGX)

Essentially an introductory meeting between the Minister and senior SGX officials who expressed interest in having WA companies list their shares in Singapore. It was noted that the SGX has regularly sent senior staff to Perth to address minerals industry events. Minister Johnston provided an overview on the WA minerals and petroleum industries in WA. The Minister then had a brief tour of SGX’s facilities, including their auditorium space which could be made available for WA Government presentations in future.
Luncheon with Pavilion Energy Pte Ltd

General exchange of views over lunch between Pavilion and the Minister about the LNG industry and Pavilion’s planning.

Meeting with National University of Singapore, Centre for Offshore Research and Engineering (CORE)

NUS CORE and TCOMS are keen to partner with WA universities for R&D projects (NUS has existing research links with UWA). NUS’s Marine Engineering faculty – which is sponsored by Keppel Corporation’s marine sector - provided an extensive presentation on their suite of undergraduate and postgraduate marine engineering courses. They outlined an ambitious plan to service the oil and gas industry ecosystem end-to-end, from seabed and wave movement research to ship, barge and rig design and construction, research and design into floating storage and gas processing facilities. The Minister invited NUS CORE to write to him with any request for assistance in developing partnerships on offshore research with academic institutions in WA.

Meeting with Mr LIM Hng Kiang, Minister for Trade and Industry (Trade)

- **Ms Kate Duff**, Deputy High Commissioner, Australian High Commission, Singapore
- **Ms Carolyn Atkinson**, First Secretary, Australian High Commission, Singapore
- **Ms Penny Bond**, Senior Policy Adviser, Office of the Hon Bill Johnston MLA
- **Mr John Catlin**, Commissioner, Government of Western Australia Office, Singapore

The meeting was essentially a courtesy meeting between a WA Government Minister and a senior Singapore Government Minister, arranged with the assistance of the Australian High Commission in Singapore. Minister Johnson provided a brief background on the WA trade sector and Minister Lim made a number of enquiries about WA industry development and possible areas of interaction.

Depart Singapore to Perth

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*Attached:*

*Minister Johnston’s speech and slide presentation*
Gas Asia Summit 2017
Western Australia’s LNG Expertise: a Centre for Petroleum Excellence
History of LNG in Western Australia

From one project, one train in 1989 to four projects, 10 trains in 2017
Australia’s LNG story

At the end of 2016, Australia’s LNG capacity was 66.3 million tonnes per annum. Western Australia was responsible for 32 Mt/a.

By 2018, Australia’s LNG production is expected to reach 88 Mt/a. This will be the largest production capacity in the world.
Japan, China and South Korea accounted for **92%** of Western Australia’s LNG exports in the 12 months to May 2017.
Stable Regulation

Western Australian gas production is expected to increase to **80.1 billion** cubic metres by 2018-19.

Over the next five years, export volumes are expected to more than triple.
Perth: a global centre for excellence

Western Australia is a hub for innovation, research and development in the mining and resources sector

- World-class researchers
- CSIRO Australian Resources Research Centre
- Woodside Energy’s Innovation and Technology Hub
- Chevron’s Global Technology Centre
Decommissioning expertise

Building on our world-class expertise by supporting a joint research and development study.

Delivering innovative and transformative solutions.

Providing technical solutions to your complex problems.

Photo: Woodside
Western Australia...

... a global gas leader and an ideal place to do business

See you in Perth!

Karratha Gas Plant. Photo: Woodside
HON BILL JOHNSTON MLA
Minister for Mines and Petroleum; Commerce and Industrial Relations; Electoral Affairs; Asian Engagement

EVENT:
GAS ASIA SUMMIT 2017

VENUE:
MARINA BAY SANDS, SINGAPORE

DATE:
26 October 2017
Introduction

I am pleased to be here today at the fifth Gas Asia Summit and Exhibition on behalf of the Government of Western Australia, in my capacities as Minister for Mines & Petroleum and Minister for Asian Engagement.

Speaking today is an important opportunity for the Government of Western Australia to outline our State’s capacities and expertise in relation to the exploration for, and production of, liquefied natural gas (LNG), including the maintenance of LNG plants and the eventual decommissioning of associated infrastructure.

While Western Australia is ideally placed to partner with all Asian countries in the supply of LNG, the State also has capacities in a range of technical areas to partner with you in all aspects of the LNG value chain, and that is what I will be particularly highlighting today.

I often like to say that I have the best job in the world: who wouldn’t want to be the Minister for Mines and Petroleum in the world’s number one resources province?

However, in addition to that role, I am also Western Australia’s first Minister for Asian Engagement. The Government of Western Australia, under the leadership of Premier Mark McGowan, recognises that Asia is the region of the world that will provide the opportunities to support the next phase of global economic development.

As an open trading economy, with many links to the region, Australia is well placed to partner for that development, and Western Australia is the closest and most well connected State in Australia to Asia.

History of LNG in WA

Before I move on to outline some of the opportunities we have for cooperation in Western Australia, I want to remind you of Western Australia’s long history in the LNG sector.

LNG exports started from the North West Shelf in 1989 and there has been continuous supply since.

As foundation investment partners and customers, Japanese utilities helped to establish Western Australia’s LNG industry.

These initial customers have been joined by other partners in Korea, Taiwan and elsewhere. Next year, Western Australian LNG will be exported to Indonesia.

In 2006, Western Australia became the first jurisdiction in the world to export LNG to China.

While the State has a long history engaging Asian LNG customers, we also welcome Asian investors both as equity participants in the industry and as operators.

Earlier this year I was pleased to participate in the inaugural Western Australia-Chinese Petroleum Association’s LNG forum, which demonstrated the deep connection we have been able to create.
From one project with just one LNG train in 1989, we now have four operating projects with a total of 10 LNG trains. When Wheatstone’s second train comes online, the total will jump to 11.

The most recent project to ramp up, Wheatstone, this month achieved first LNG production. This project is positioned to become Australia’s first LNG production hub, with the operator inviting third parties to bring their gas through shared facilities.

In addition, the Ichtys project is located off-shore Western Australia, with its giant floating production storage and offloading (FPSO) now on-site. Although its onshore LNG facility is located in Darwin, in our neighbouring province of the Northern Territory.

Further, Shell’s Prelude floating LNG project is currently on site offshore Western Australia in its connection phase.

Western Australia is undoubtedly a world-class LNG province and will continue to be an important source of energy to customers in the Asia-Pacific region for years to come.

**Australia’s LNG Story**

However, I have to acknowledge that Western Australia is not the whole of the LNG story in Australia.

As I mentioned earlier, the Ichtys on-shore LNG facility is in Darwin, in the Northern Territory, along with the ConocoPhilips operated LNG facility which processes gas from the Bayu-Undan field.

There are now also three LNG facilities in Queensland, with the Curtis, Gladstone and Australia-Pacific LNG projects now in operation.

With the start-up of the Ichtys, Prelude and Wheatstone projects, this will make Australia the world’s largest LNG producer with a combined 88-million-ton capacity, surpassing Qatar’s 77-million-ton capacity.

I would like to emphasise that Western Australia’s LNG and domestic gas industry has no physical connection to the Australian east coast LNG and domestic gas system.

Whatever controversies may attach to any particular aspect of Australia’s east coast gas system, it bears no connection to our completely independent system in Western Australia.

Further, regulatory activities for the Western Australian on-shore LNG facilities are my responsibility, and don’t relate to the Australian Commonwealth Government or other State Governments.

The Western Australian State Government is very proud of our long-term, stable regulatory framework that has supported our strong LNG industry.
WA: Asia’s Reliable LNG Partner

As indicated, with Wheatstone achieving first gas this month, Western Australia now has four operating LNG projects. Our local projects include:

1. **North West Shelf**
   - The Woodside Energy operated North West Shelf joint venture, which has a large number of project participants, has five trains and an annual LNG export capacity of 16.9 mtpa.
   - Over the past three decades, this project has been reliably supplying LNG customers in the Asia-Pacific region.
   - The project has a domestic gas plant, which supplies gas to local Western Australian customers. For over 30 years, the North West Shelf has been the largest producer of gas to the domestic market, as well as being a major LNG exporter.

2. **Pluto**
   - The 90% Woodside Energy owned and operated single train Pluto project has an annual production rate of 4.9 mtpa.
   - The Pluto project took just seven years from field discovery, through environmental and technical permitting, FID and into production, demonstrating how quickly we are able to react to the needs of industry.

3. **Gorgon**
   - The giant three-train Gorgon joint venture, operated by Chevron, with 15.6 mtpa LNG capacity, started operation in 2016 and is projected to reach name-plate capacity next year.
   - Gorgon also has its domestic gas plant in production, with capacity to supply 300 terajoules a day to Western Australian customers.

4. **Wheatstone**
   - Finally, as mentioned previously, this month the Chevron-operated Wheatstone joint venture started producing LNG.
   - The Project’s two LNG trains have a combined capacity of 8.9 mtpa and there is also a domestic gas plant.

With Wheatstone ramping up, plus the Shell Prelude floating LNG facility which will be in operation soon, Western Australia’s LNG exports are expected to grow rapidly over the next two to three years.

This is certainly good news for our Asian partners.
While I’ve focused on existing projects, Western Australia also has plenty of undeveloped gas fields and is well placed to continue to be a reliable export partner to meet Asia’s growing energy demands.

**Stable Regulation: Domestic Gas and LNG, too**

Western Australia prides itself on being a reliable partner for our Asian neighbours. Our regulatory environment is designed to provide stable, long-term arrangements to support investment and trade.

The Government of Western Australia understands the need for regulatory certainty when investing in LNG projects.

Our model of regulation includes a domestic gas component, which ensures that local, domestic energy needs do not interfere with the needs of our export customers.

The Western Australian LNG industry has a high level of local support due to the interdependence of the State’s domestic supply and these major LNG projects.

In addition to the domestic gas facilities provided by our LNG exporters at the North West Shelf, Gorgon and Wheatstone, we also have a number of other domestic gas producers, such as the BHP-joint venture Macedon facility, Quadrant Energy joint ventures at Devil’s Creek and Varanus Island, and other, smaller on-shore fields that supply the domestic market.

We have enough domestic supply to accommodate all expected domestic demand, and we still have the capacity to supply additional industrial demand if needed.

If you have a gas-intensive project, you should certainly consider Western Australia as your investment destination.

Capital costs have been significantly reduced over the last few years as the rapid expansion of our iron ore sector has concluded, so many of the stories that you may have been told about investment costs are now in our past.

Western Australia is not only your ideal LNG partner; we also have a strong inbound investment story to share as well.
Perth: a global centre for excellence

Western Australia’s resource base is a well-known strategic advantage. Perth, the State’s capital city, has been at the forefront of innovation and has the capacity to be your technology partner.

To those in the audience, it probably goes without saying that major resource projects – such as Western Australia’s LNG projects – drive innovation and expertise. These complex projects require careful planning, management and often collaboration between industry, Government and research institutions.

The Government of Western Australia’s vision is for the State to be the destination of choice for responsible exploration and development of our natural resources.

We support investment in mining and energy through the provision of a strong economy, a mature resources services sector, world-class research institutions and a skilled workforce.

We understand that innovation is the key to maintaining international competitiveness and ensuring the longevity of our resources sector.

Western Australia produces the majority of the world’s mining software and we host a research and development sector that rivals that of anywhere in the world.

The Australian and Western Australian Governments foster this research and development by collaborating with industry and our universities in the Western Australian Energy Research Alliance, which brings together our high-quality universities with our oil-and-gas industry leaders.

A notable result of this collaboration is The University of Western Australia’s partnership with Shell Australia, which helped to develop the floating Liquefied Natural Gas (FLNG) vessel technology being used on Prelude.

Additionally, Western Australia’s expertise has seen industry and the Australian Federal Government, headquarter significant research institutions here, for instance:

- The Commonwealth Scientific and Industrial Research Organisation’s (CSIRO) Australian Resources Research Centre is headquartered in Perth.
- Woodside Energy has its Woodside Innovation & Technology Hub (better known by its acronym, WITH) here.
- Similarly, one of Chevron’s two Global Technology Centres is headquartered in Perth (the other is located in Aberdeen, Scotland).

Perth is an internationally recognised centre for mining and resources equipment, technology and services, with more than 700 local and international companies operating in Perth.

Our city is also the leading resource jurisdiction for the development and implementation of industry step-change innovation through automation, robotics, remote systems and data analytics.
By way of example, Woodside is applying robotic technology to remote sensing and maintenance. In the mining sector, BHP, Rio and FMG are all applying driverless technology – not in the laboratory, but to everyday operations on-site.

I am sure you have heard about driverless cars being tested in California. In Western Australia we already have about 100 driverless trucks in operating mines, being controlled by remote sensing technology with their operators sitting in air-conditioned office buildings in Perth, thousands of kilometres away.

Similarly, Western Australia houses the LNG Marine Fuel Institute, which is leading the way in the use of LNG as a bunkering fuel. I am pleased to note that the Chief Executive Officer of the Institute, Captain Walter P. Purio, will be addressing you later today.

Perth has not explained our technology story properly. Of course Western Australia is an unrivalled source of raw materials and energy, but I firmly believe that our true success is in technology and innovation.

Perth is the place you should come to for the expertise and solutions to technical challenges at every stage of the LNG value chain.

**Decommissioning Expertise**

I would particularly like to highlight the challenge that is emerging globally in respect of decommissioning offshore oil and gas infrastructure.

The Western Australian Government has identified petroleum decommissioning as an essential component of a successful industry.

It’s estimated that 600 petroleum producing fields in the Asia Pacific region will cease production over the next ten years. This will create an expensive challenge for operators.

To be successful, decommissioning requires cooperation, scientific research, technical innovation and skilled workers.

These expertise and skills are already available in Perth. Our capacities can be applied across the Asia-Pacific to assist with decommissioning infrastructure when required.

The State Government is building on Western Australia’s world-class expertise by supporting a joint research and development study into decommissioning by industry participants.

The joint research aims to deliver innovative and transformative offshore decommissioning solutions, reinforcing the State’s position as a regional and global leader.
**Conclusion**

Western Australia’s proximity and strong links to the key markets in Asia, including sharing a time zone close to China, Japan, Korea, Singapore, Indonesia and Vietnam, makes us an attractive partner.

We also have a large Asian diaspora resident in Perth from almost every Asian country, which should not be forgotten in considering the ease of doing business.

Further, our universities have produced thousands of graduates who have successfully returned to senior roles in all the countries of this region, again providing a key link between many regional markets and Western Australia’s skills and capacities.

In my role as Minister for Asian Engagement, I am keen to highlight the opportunities for partnership between the State and countries in our region.

As Minister for Mines and Petroleum, I am tasked to ensure that Western Australia continues to be a reliable and effective energy partner in every aspect of the LNG value chain.

The State has been reliably exporting LNG for almost three decades, and at the same time, we have been able to manage our domestic energy demands as well.

The Government of Western Australia recognises that the Asian LNG market is changing and that local producers need to change and adapt along with these new market dynamics.

I think this adaptability was successfully demonstrated in the Woodside-Pertamina sales and supply agreement, which shows that Australian producers can accommodate emerging contract arrangements to suit changing markets.

Western Australia’s fast-growing LNG relationship with Asia links the theme of this event – “Connecting the gas and LNG value chain across Asia” – to ensure a bright future that will be mutually beneficial.

I look forward to seeing you in Perth!