26th World Gas Conference

1 – 5 June 2015, Paris, France

AUSTRALIAN GAS – SUSTAINING ASIA'S GROWTH AND SECURING A WORLD LEADING POSITION IN LNG

GRANT KING
Origin Energy

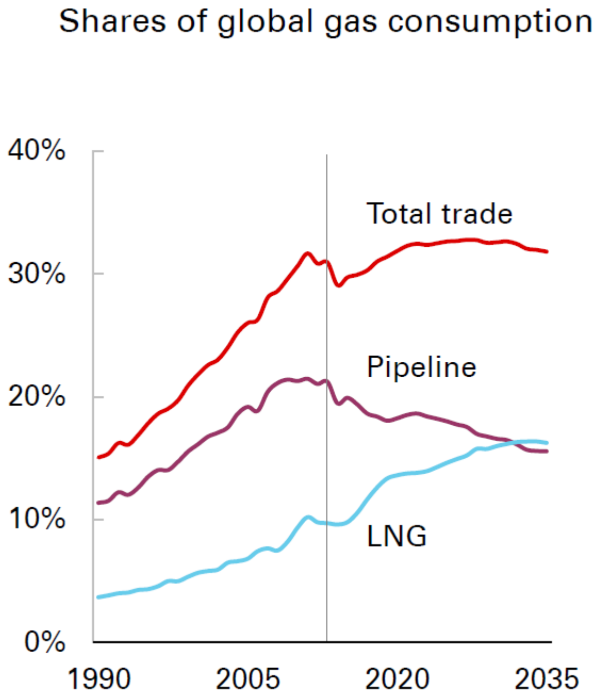
WGCPARIS2015
WORLD GAS CONFERENCE
IGU

Overview

- Australia on verge of an unprecedented transition to be world's leading LNG producer
- Growth enabled by resources, innovation, policy settings and proximity to Asia
- A focus on sustaining competitive advantages and securing next wave of investment

Karratha Gas Plant ©Woodside

Growing demand for LNG

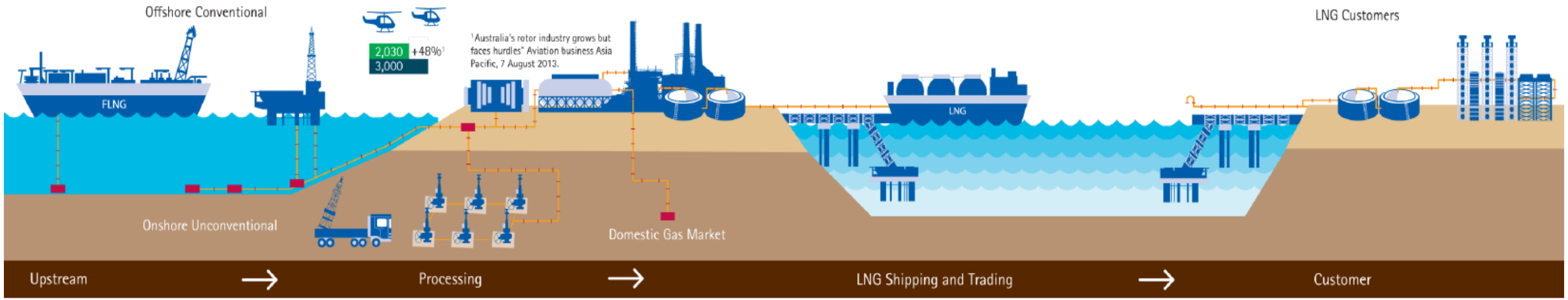


Source: BP, 2015

- LNG supply grows by 48 Bcf/d by 2035
- Australia (16 Bcf/d) will contribute around a third of that increase

LNG Tanker ©Shell

Australia on the verge of an unprecedented transition



	2014	2020	Change
Wells[2]	5,789	30,000	+418%
Pipeline (km)[3]	33,000	48,000	+45%
Natural Gas Production (bcm)[4]	66	128	+94%
Liquefaction Plants	4	10	+150%
LNG Trains	8	21	+163%
LNG Production (mtpa)[5]	24	86	+258%
LNG Cargoes (Shipments Per Annum)	275	980	+256%
LNG Sales ($US billion)	11.18565	40.0794	+258%

[2] Accenture research and operating company reports

[3] IBISWorld Industry Report I5021: Pipeline Transport in Australia, October 2014

[4] :IEA World Energy Outlook 2014

Number of trains measured from 2015 onwards

[5] World LNG Report, 2014, International Gas Union (IGU)

Based on assumption average vessel size = 200000m^3

Based on sales price of $US10/MMBTU

1st World 1st: Coal Seam Gas (CSG) to LNG

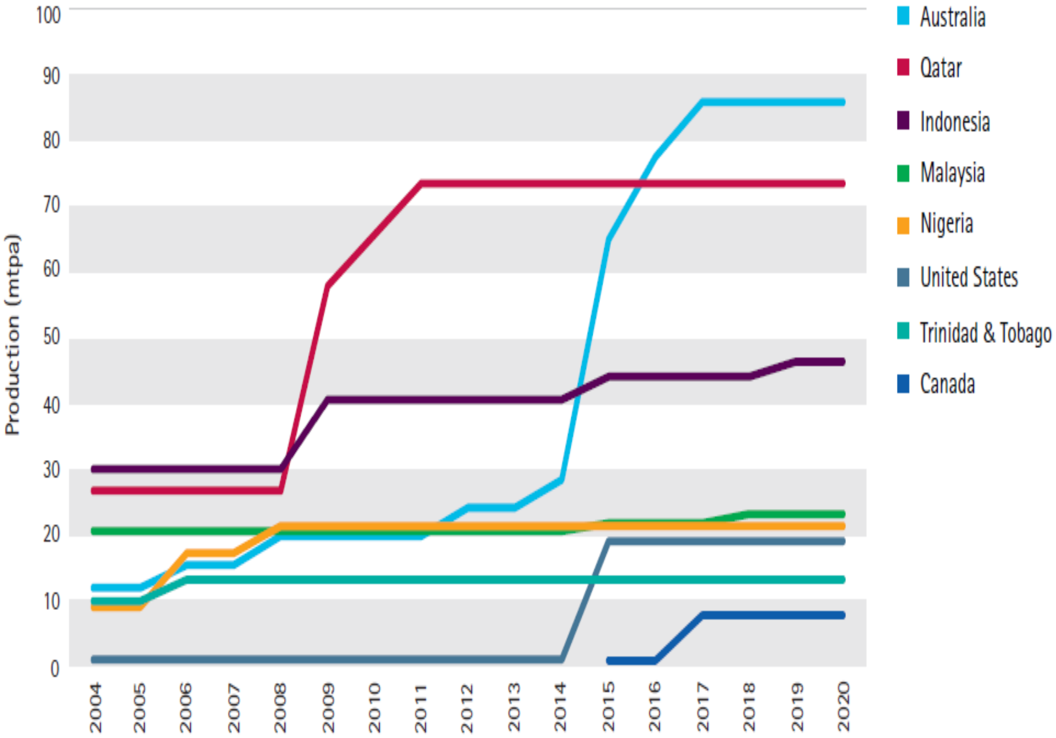
1st World 1st: Floating LNG

World Largest: CO2 Geo-sequestration

Legend:
- 2014
- 2020

Source: Accenture, 2015

Australian LNG nameplate capacity



Source: Accenture, 2015

Gorgon LNG Project ©Chevron

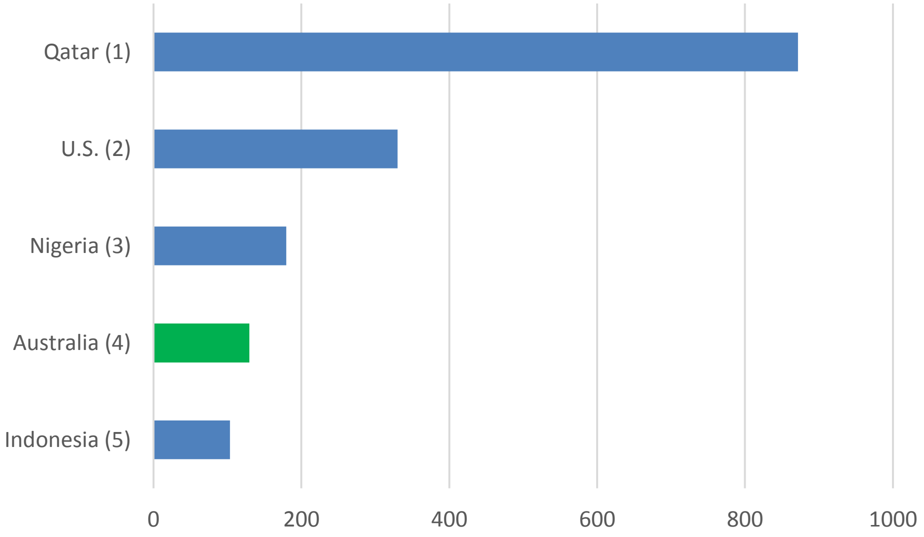
Australia's competitive advantage

- Resource abundance
- Strong government support
- Proximity to Asia
- History of innovation

Darwin LNG ©ConocoPhillips

Australia's gas resources rank on a global scale

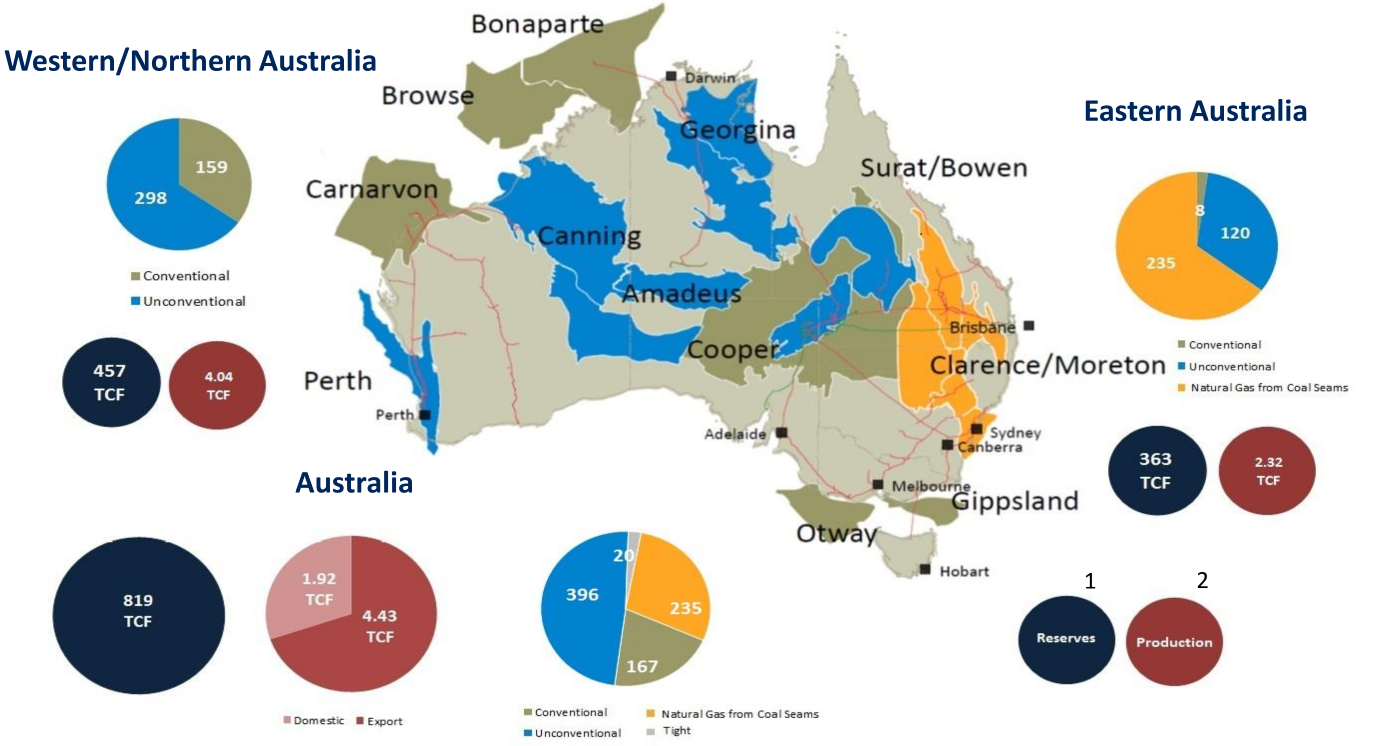
Selected international 2P gas reserves of major LNG exporters



Curtis Island Projects ©Bechtel

Source: BP Statistical Review 2014

Australia’s gas resources by major basins

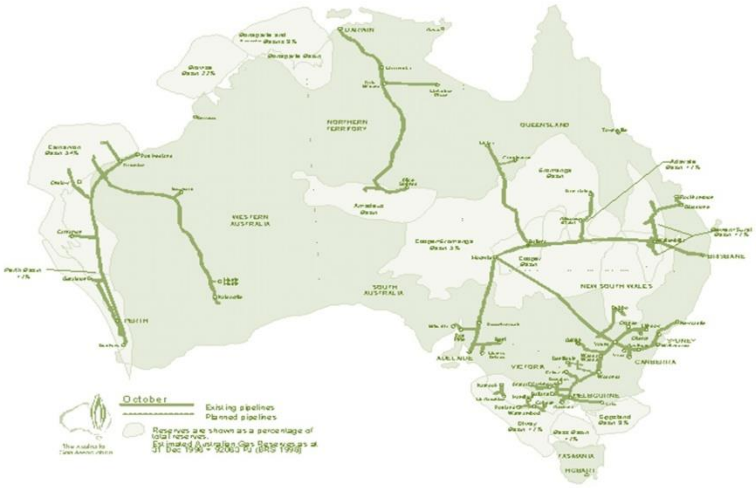


Source: BREE, GA (2014); EIA World Shale Gas Resources (2013)

[1] 3P Resources, [2] 2034-35 annual forecasts

Australia is an open, export-oriented and resource-based economy

Gas Producers in Australia

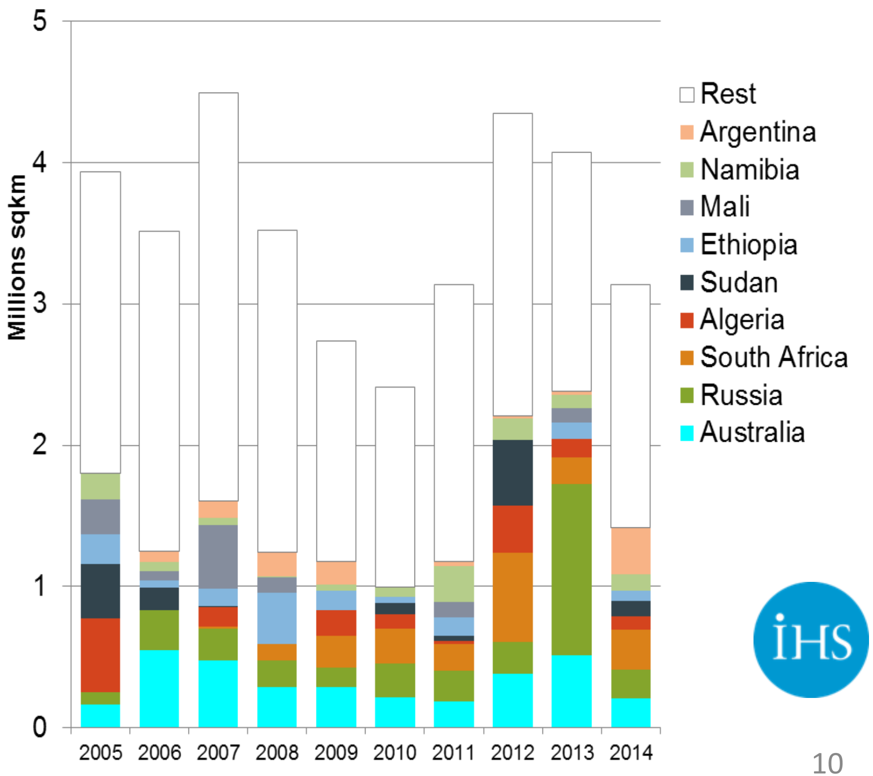


- Largest exporter of Iron Ore in the world in 2012/13 (47% share of the world market)
- Largest exporter of coking coal in the world in 2012/13 (54% share)
- Second largest exporter of thermal coal in 2012/13 (23% share)
- Third largest producer of uranium in 2012/13 (13% share)
- Second largest exporter of wheat in 2012/13 (16% share)
- **Moving from the third largest exporter of LNG today to the largest by 2018**

Strong government support

- Long standing investment in pre-competitive geoscience
- More acreage awarded in last decade than anywhere else
- A focus on streamlining of regulations
- No export controls
- The 4th most attractive petroleum jurisdiction for investment (IHS, 2015)

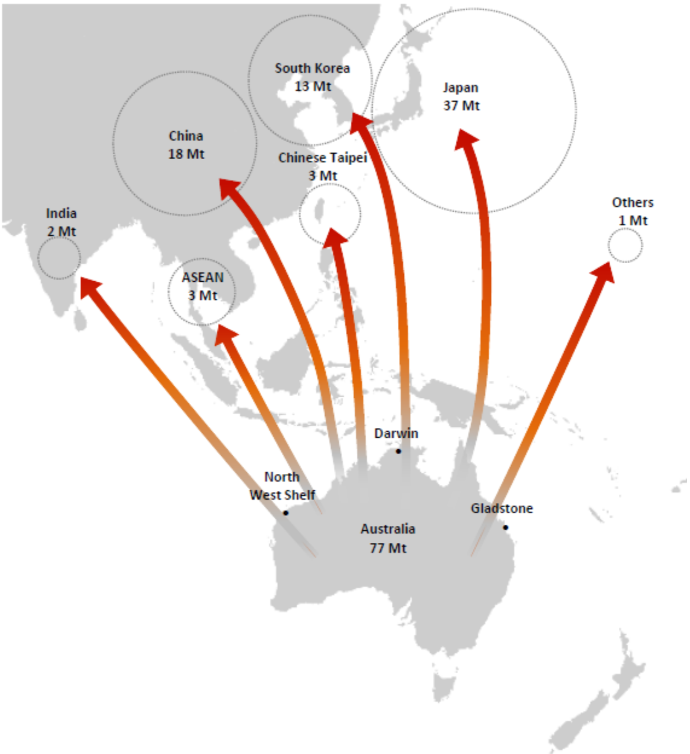
Top 9 countries awarding acreage in the last decade (by sqkm)



Australia’s LNG hubs are close to growing Asian markets

Source: WorleyParsons, 2015

Australian export outlook, by destination, 2020

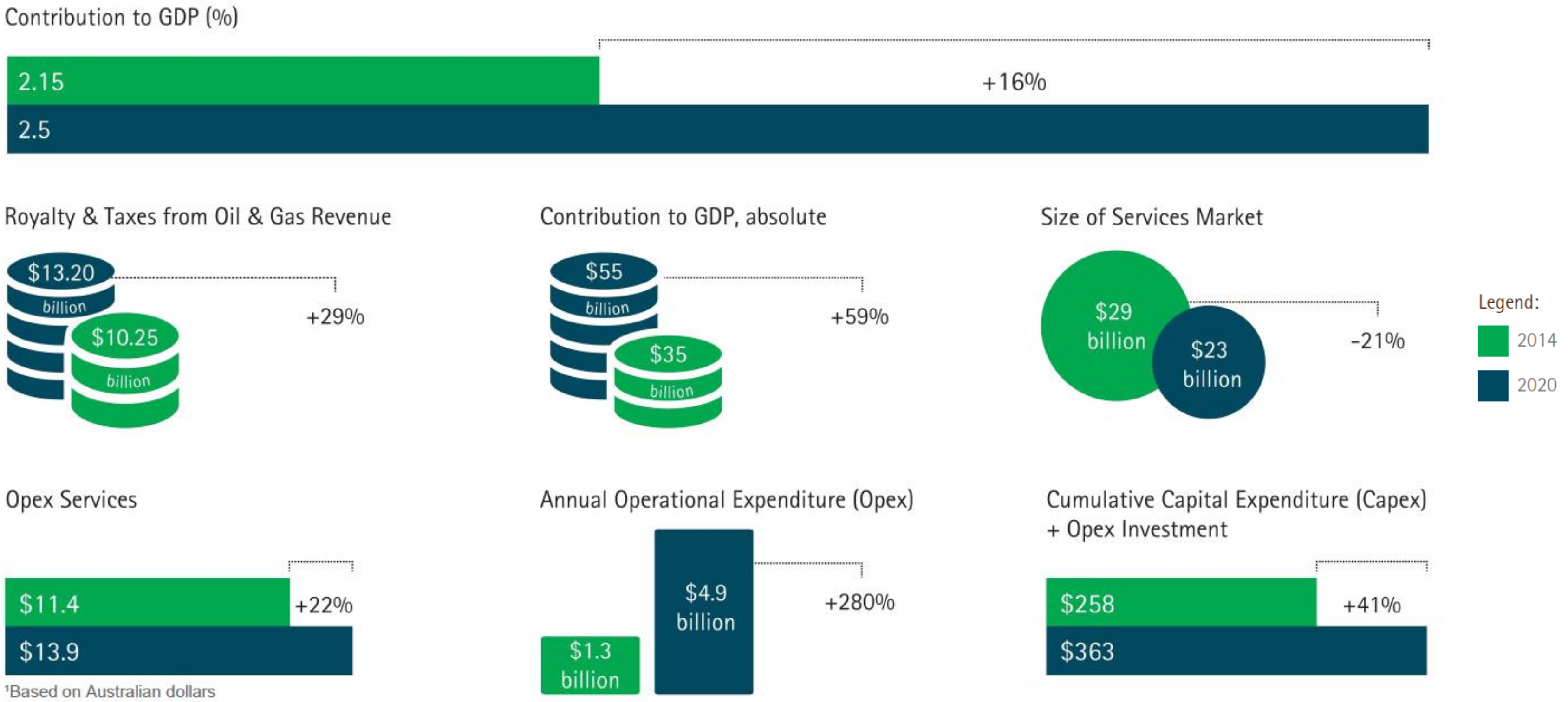


Source: Department of Industry and Science, Resources and Energy Quarterly, March 2015

A world-leading, innovative LNG sector

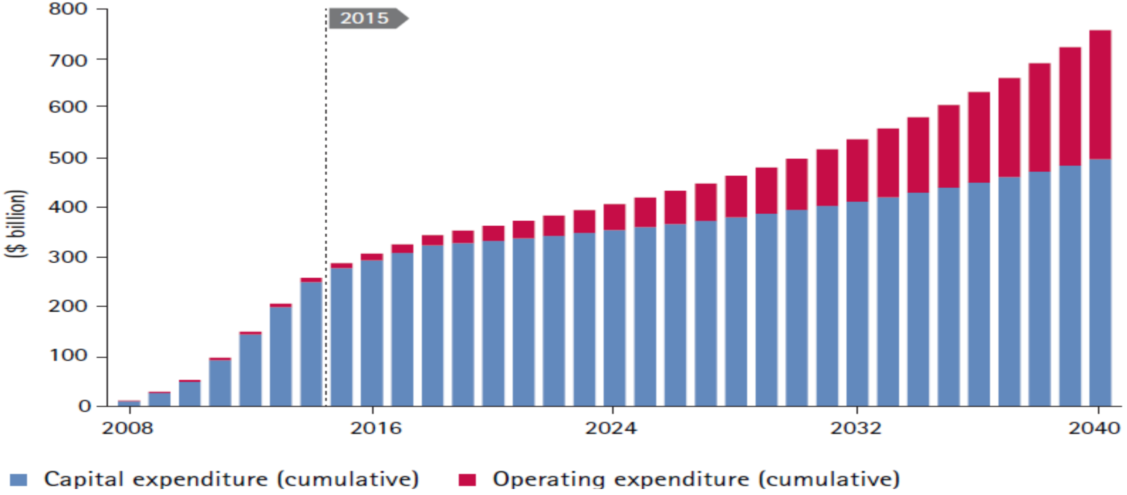
- First air cooled LNG plant (North West Shelf)
- First coal seam gas-based LNG production
- Largest floating LNG project (Prelude)
- Longest subsea pipeline (Ichthys Project)
- Largest CO^2 sequestration project (Gorgon Project)

The economic impact is material



Source: Accenture, 2015

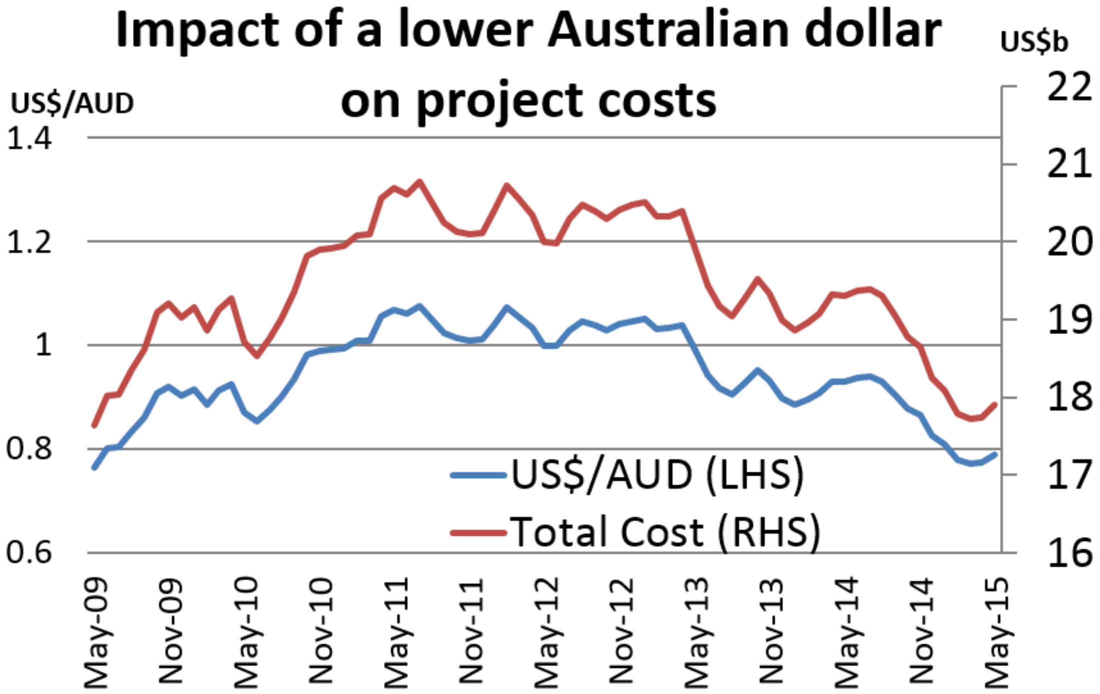
Projected LNG capital and operating expenditure



Investment in increased LNG capacity in Australia has created substantial and sustainable opportunities for domestic and international businesses to supply goods and services to the LNG industry.

Source: Accenture, 2015

Easing Pressure on LNG Project Costs



- Reducing regulatory burden a priority
- Streamlined approval processes offshore
- Integrated energy policy framework

Source: RBA, Songhurst (2014)

What is the future?

- Large undeveloped resources
- A track record of applying technology and innovation
- Infrastructure, skills and services in place
- Backfill and brownfields continue to represent attractive opportunities for ongoing growth
- Encouraging signs of improving cost competitiveness necessary for new greenfields developments

LNG 18 – Perth, Australia 11-15 April 2016

Owned and presented by

IGU INTERNATIONAL GAS UNION UNION INTERNATIONALE DU GAZ

gti GAS TECHNOLOGY INSTITUTE

iif iir

Host IGU Member

Australian Gas Industry Trust

Supporting Association

appea

Principal Sponsors

woodside Chevron

Thank you