
Santos operated Moomba 191 in Cooper Basin, Central Australia

Catching Australia's Unconventional Gas Wave

James Baulderstone – VP Eastern Australia

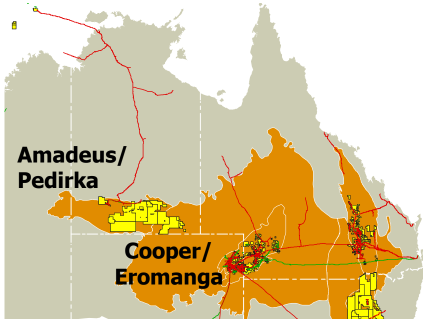
CERAWeek March 2013

Santos
We have the energy.

Key Messages

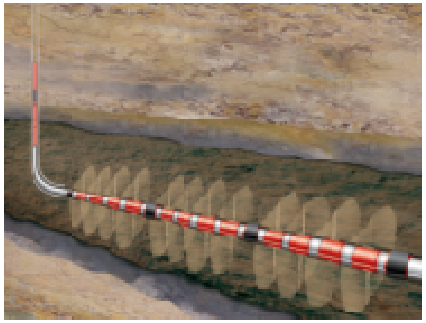
Australia is well positioned to convert unconventional gas potential

- Large unconventional resource base
- Growing domestic and proximity to Asian LNG demand
- Politically stable development opportunity



Majors are early movers in the development life cycle

- Australia is well placed to adapt U.S. shale commercialisation lessons
- Major international E&P companies are taking large acreage positions

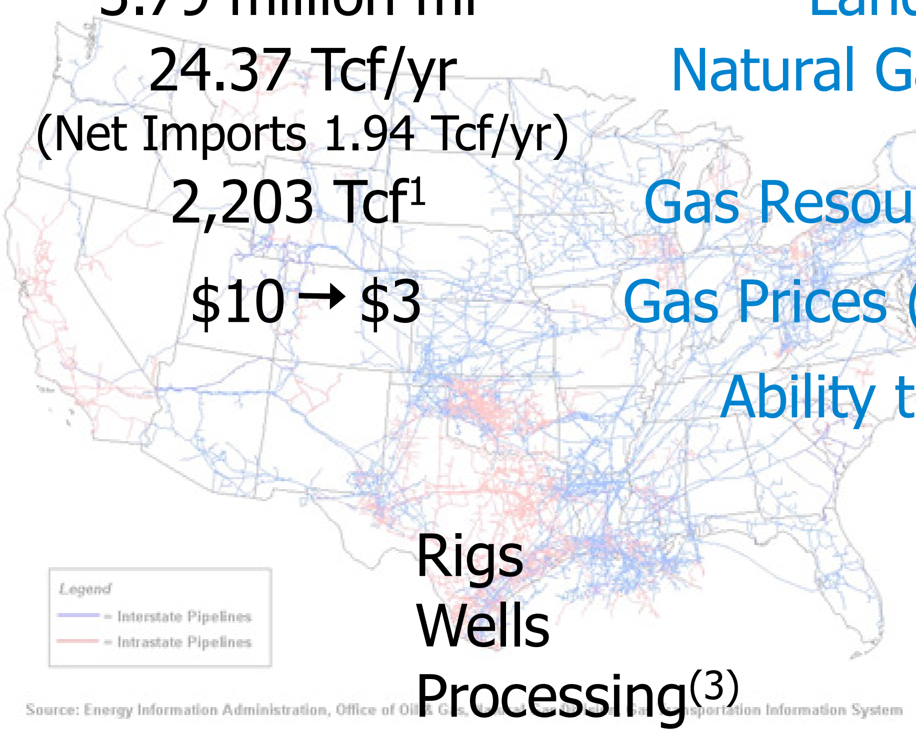


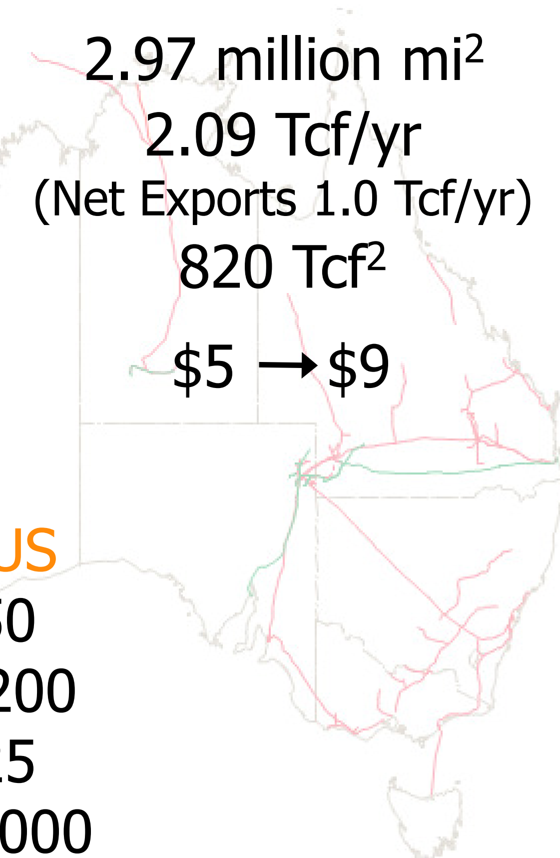
Early commercialisation will depend upon access to infrastructure and market

- Infrastructure limited to existing developed basins
- Processing and marketing capacity important

Santos
We have the energy.

Putting the Australian opportunity in context





United States of America		Australia
3.79 million mi^2	Land Area	2.97 million mi^2
24.37 Tcf/yr (Net Imports 1.94 Tcf/yr)	Natural Gas Demand	2.09 Tcf/yr (Net Exports 1.0 Tcf/yr)
2,203 Tcf[1]	Gas Resource Potential	820 Tcf[2]
\$10 → \$3	Gas Prices (US\$/MMBtu)	\$5 → \$9

Ability to Deliver

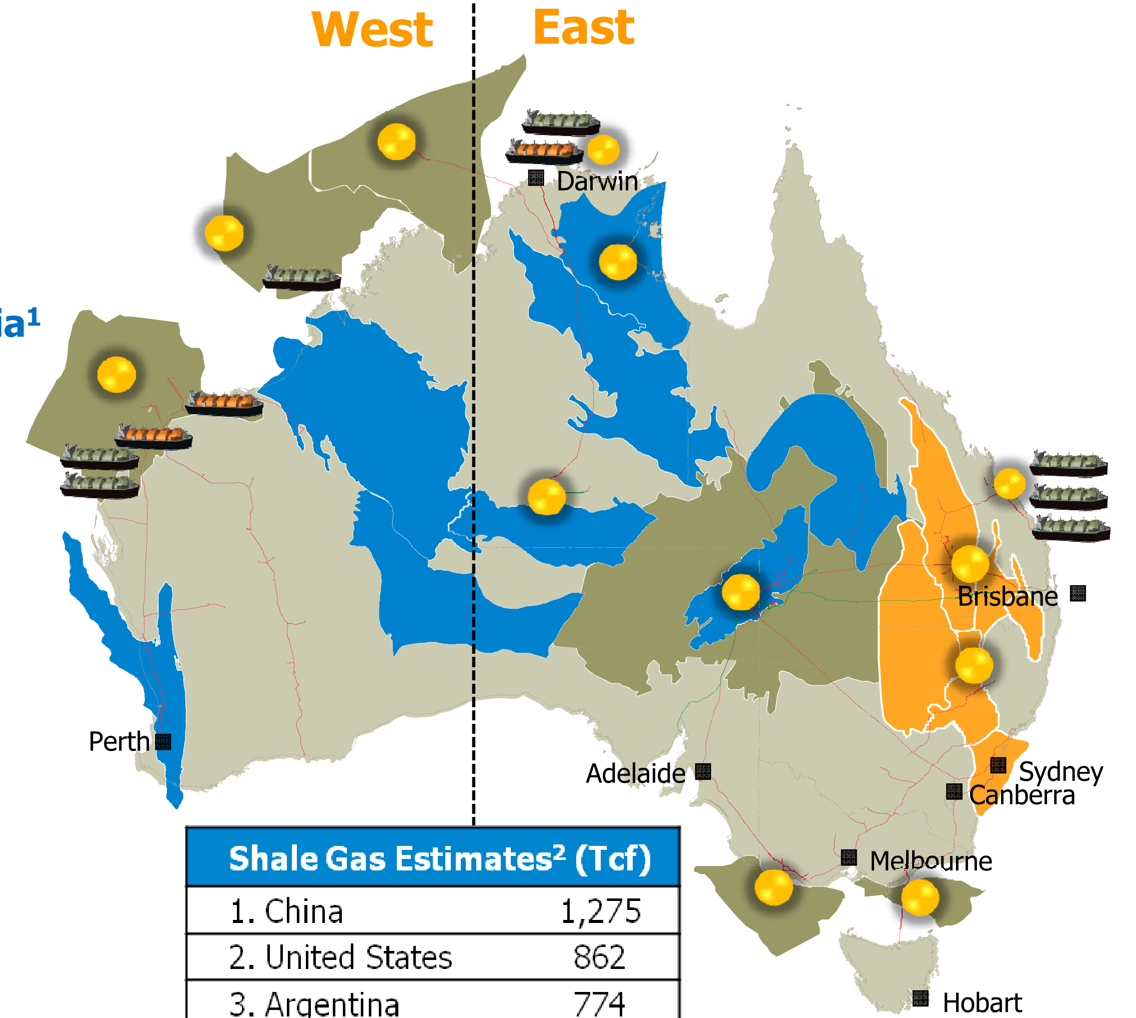
	US	AUS
Rigs	1,800	50
Wells	37,000	1,200
Processing(3)	600	25
Pipelines (mi)	350,000	20,000

1. Technically recoverable resources
2. Total demonstrated gas resources
3. Number of plants

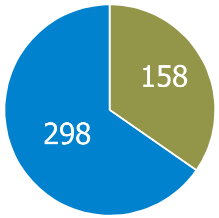
Source : EIA Independent Statistics & Analysis, EIA Annual Energy Review 2011 , BREE 2012 Gas Resource Assessment, Energy Quest and Santos analysis

Santos
We have the energy.

Australia's enormous unconventional gas potential

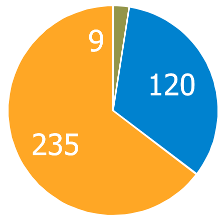


Western Australia[1]



456 tcf

Eastern Australia[1]



364 tcf

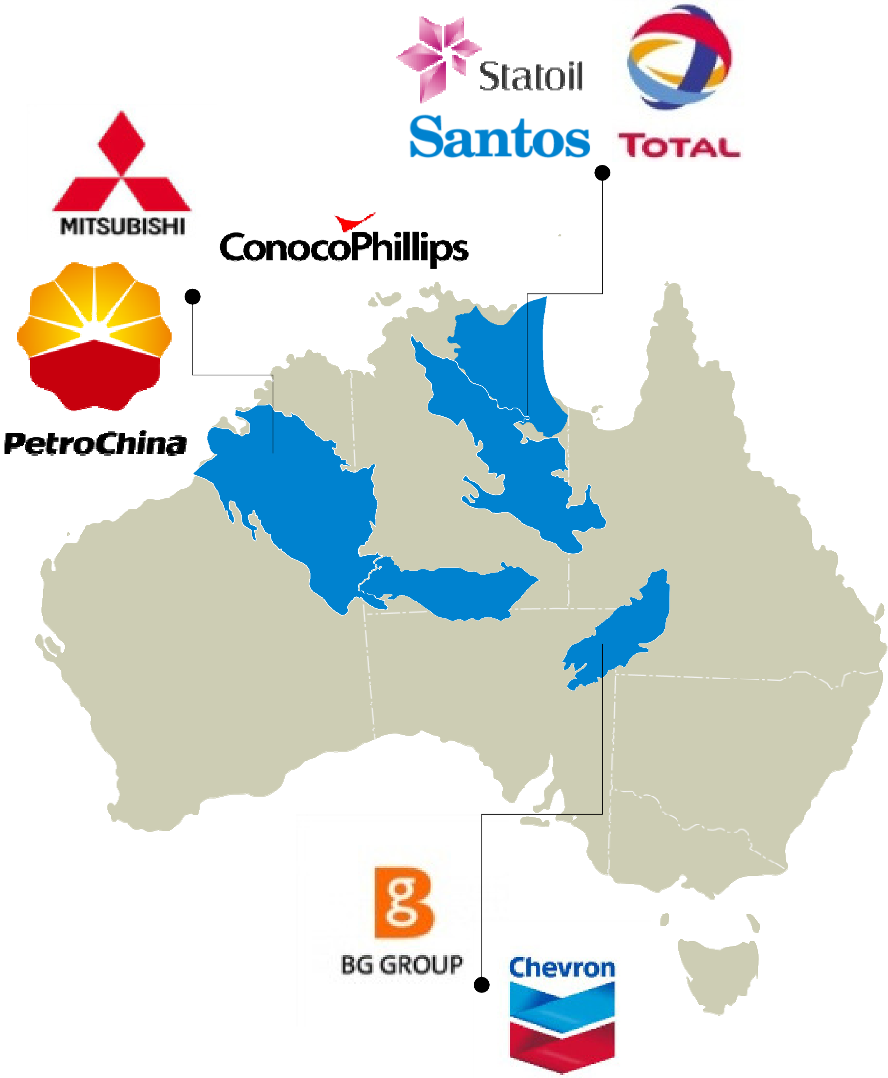
Shale Gas Estimates[2] (Tcf)	
1. China	1,275
2. United States	862
3. Argentina	774
4. Mexico	681
5. South Africa	485
6. Australia	**396**

1. Total demonstrated resources
2. Technically recoverable resources

Source: BREE 2012 Gas Resource Assessment & EIA World Shale Gas Resources 2011

Santos
We have the energy.

Early moving majors are taking material positions



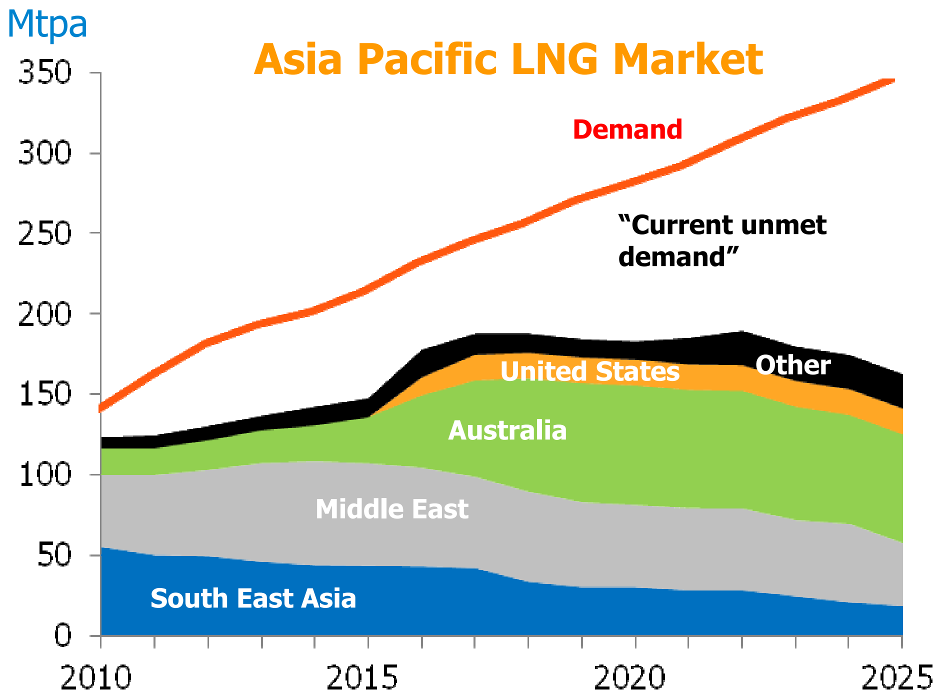
Australia				
Date	**Basin**	**Buyer**	**Deal Value ($MM)**	**$ / acre**
Feb 2013	Cooper	Chevron	349	900
Dec 2012	McArthur	Santos	71	15
Sep 2011	Canning	ConocoPhillips	110	13
Jul 2011	Cooper	BG Group	125	324
Jul 2011	Georgina	Statoil	210	26
Jun 2010	Canning	Mitsubishi	150	18

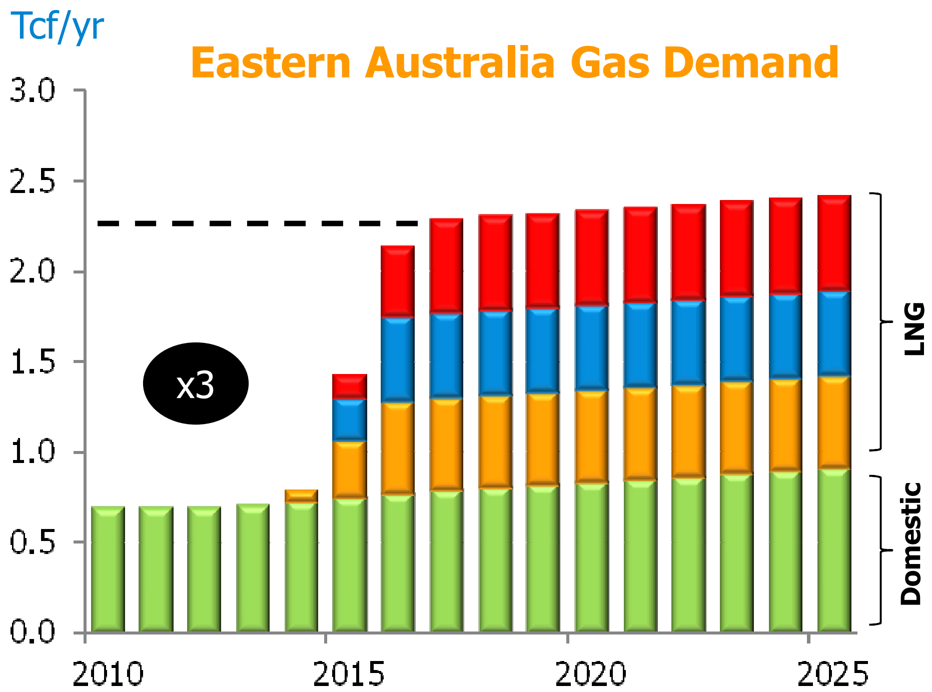
United States				
Date	**Play**	**Buyer**	**Deal Value ($MM)**	**$ / acre**
Feb 2011	Fayetteville	BHP/Chesapeake	4,750	9,754
Nov 2010	Marcellus	Chevron	4,315	-
Oct 2010	Eagle Ford	Statoil/Tailsman	1,325	13,660
Aug 2010	Cordova Embayment	Mitsubishi	428	6,336
May 2010	Marcellus	Shell	4,700	6,631
Jun 2009	Haynesville	BG Group	1,055	17,583

Source: Barclays "Global Natural Resources" 13 December 2012, IHS Herolds database, Santos analysis

Note: All figures presented are in US dollars

Australia's opportunity underpinned by Asian LNG demand





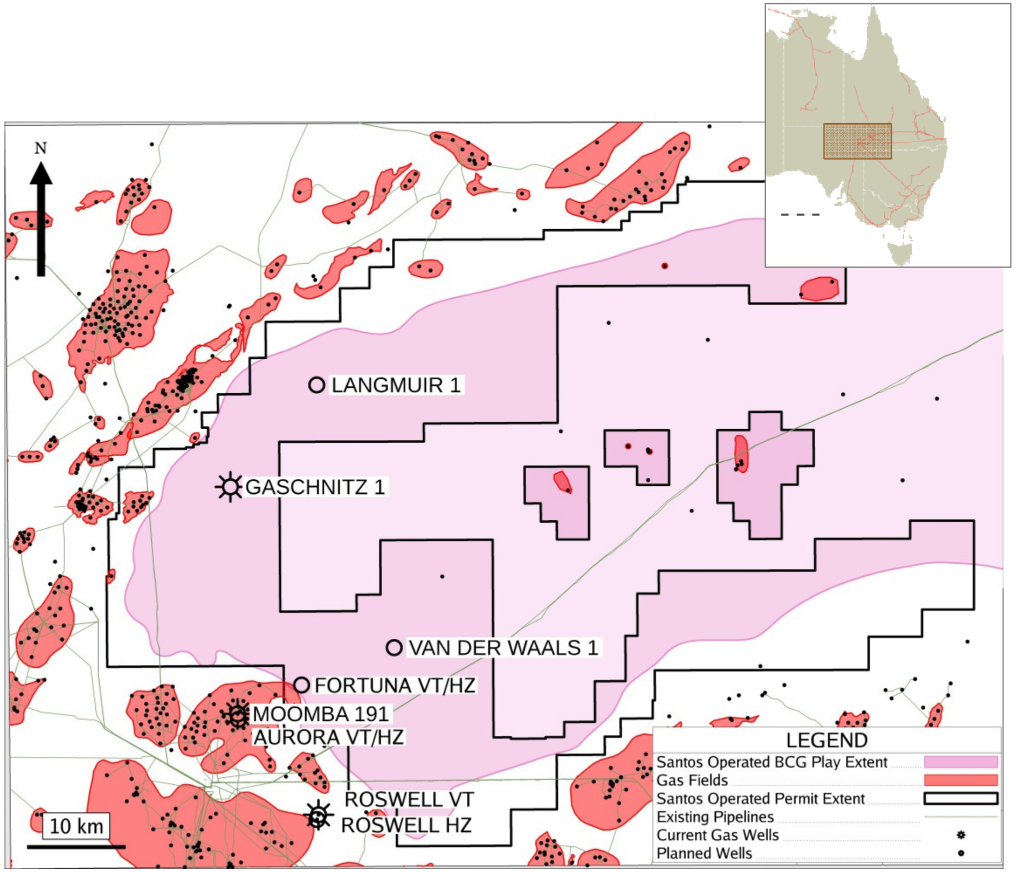
- Current unmet demand in 2020 is ~90mtpa, growing to ~170mtpa by 2025
- New sources of LNG supply will be required – between 20 and 40 LNG trains
- CSG-to-LNG projects at Gladstone have long-term binding off-take agreements
- Fixed oil linkage prices for the life of the contract

Source: Wood Mackenzie, ACIL Tasman and Santos analysis
LNG supply represents contracted supply from existing and sanctioned projects
Assuming LNG train nominal capacity of 4mtpa

Santos
We have the energy.

Santos poised to commercialise Cooper's unconventional position

- Large unconventional gas resource 85[(1)] Tcf
- 9 well, $200MM[(2)] work program over 2 years
- Encouraging initial results
  - Moomba 191 (Shale Play) sustained average gas flow at 2.3mmscf/d
  - Gaschnitz-1 (Basin Centred Gas) confirms c.1,000m gas saturated section
- Existing infrastructure to aid timely conversion from resource to production



Making unconventional gas development in Australia an attractive investment

1. Gross Cooper Basin technically recoverable resource estimate
2. Australian dollars

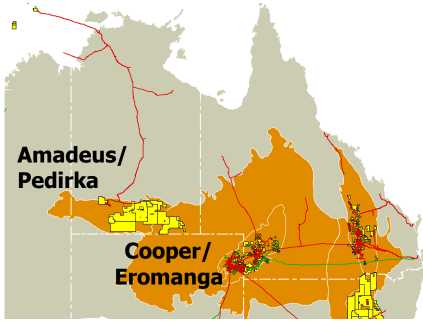
Source: EIA World Shale Gas Resources 2011

Santos
We have the energy.

Key Messages

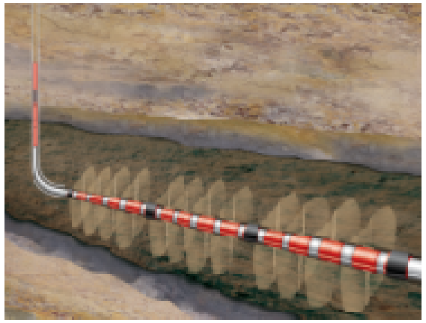
Australia is well positioned to convert unconventional gas potential

- Large unconventional resource base
- Growing domestic and proximity to Asian LNG demand
- Politically stable development opportunity



Majors are early movers in the development life cycle

- Australia is well placed to adapt U.S. shale commercialisation lessons
- Major international E&P companies are taking large acreage positions



Early commercialisation will depend upon access to infrastructure and market

- Infrastructure limited to existing developed basins
- Processing and marketing capacity important

Santos
We have the energy.