



ENERGYQUEST

# Changing Dynamics of Australian Oil and Gas

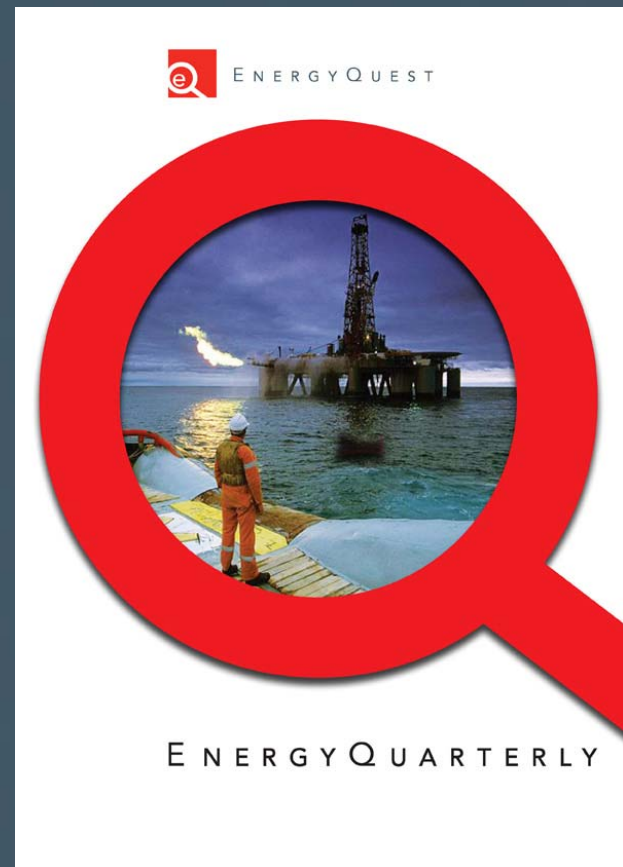
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**Australasian Oil and Gas Conference Perth 21 February 2007**



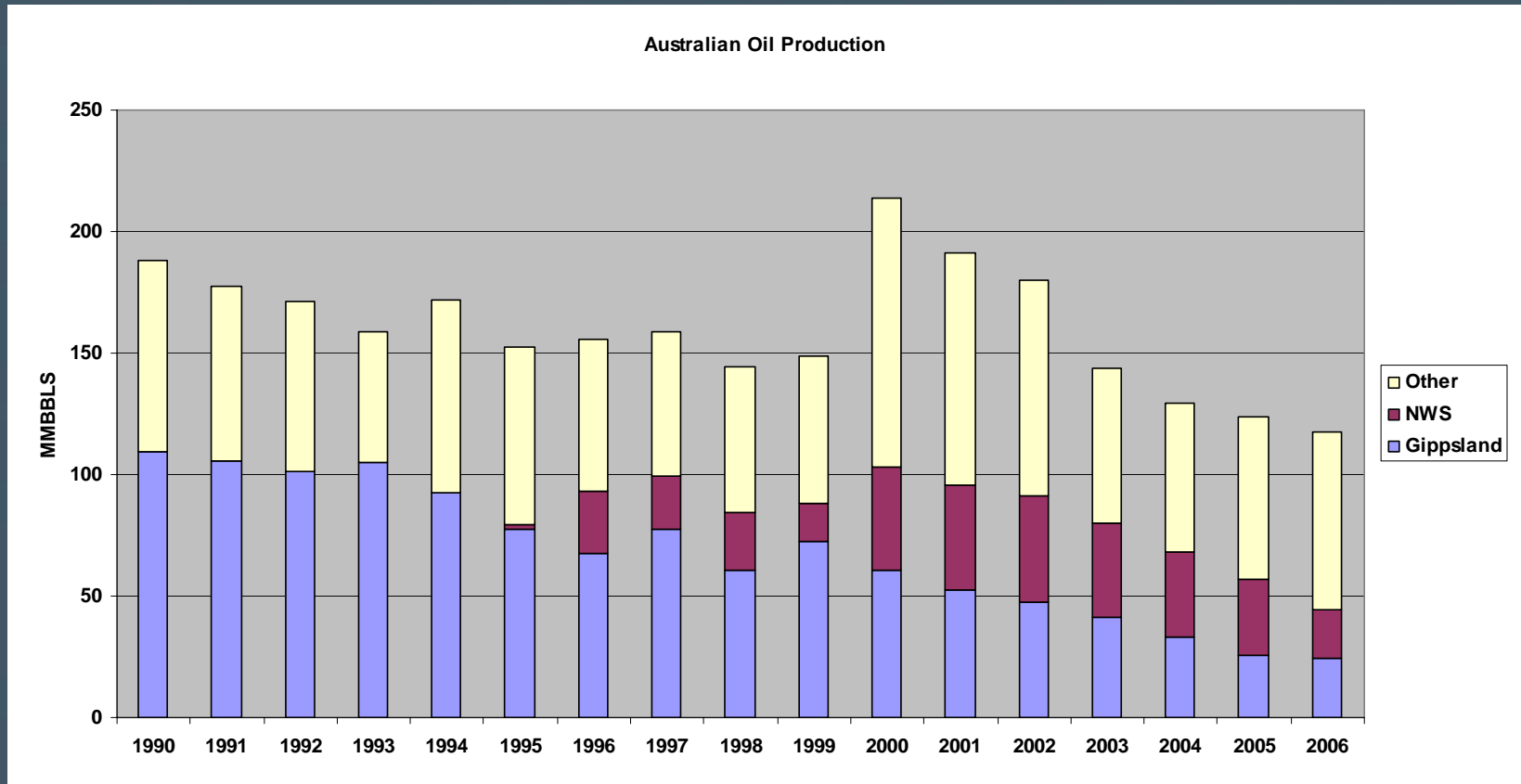
# Market analysis

- EnergyQuarterly provides timely analysis of Australian gas and oil production and reserves by field, basin, company and state
- Conventional gas, coal seam gas, oil and liquids





# Australian oil production





# Oil and NGL down

	2005	2006	% Change
<b>Oil (mmbbls)</b>	124	117	-5.6%
<b>Condensate (mmboe)</b>	41	39	-4.9%
<b>LPG (mmboe)</b>	19	19	-
<b>Oil and NGL (mmboe)</b>	184	175	-4.9%



# 2006 Oil production: basins

	<b>% Share</b>	<b>% Change</b>
<b>1. Carnarvon</b>	61.5	-9.1
<b>2. Gippsland</b>	21.3	-0.8
<b>3. Bonaparte</b>	7.8	-0.9
<b>4. Cooper</b>	5.7	-3.3
<b>5. Perth</b>	3.3	+32.0



# Oil developments

			<b>BBLS/d</b>
<b>Basker-Manta</b>	Anzon	2006	25,000
<b>Puffin</b>	AED	2007	35,000
<b>Vincent</b>	W'side	2008	100,000
<b>Stybarrow</b>	BHPB	2008	80,000

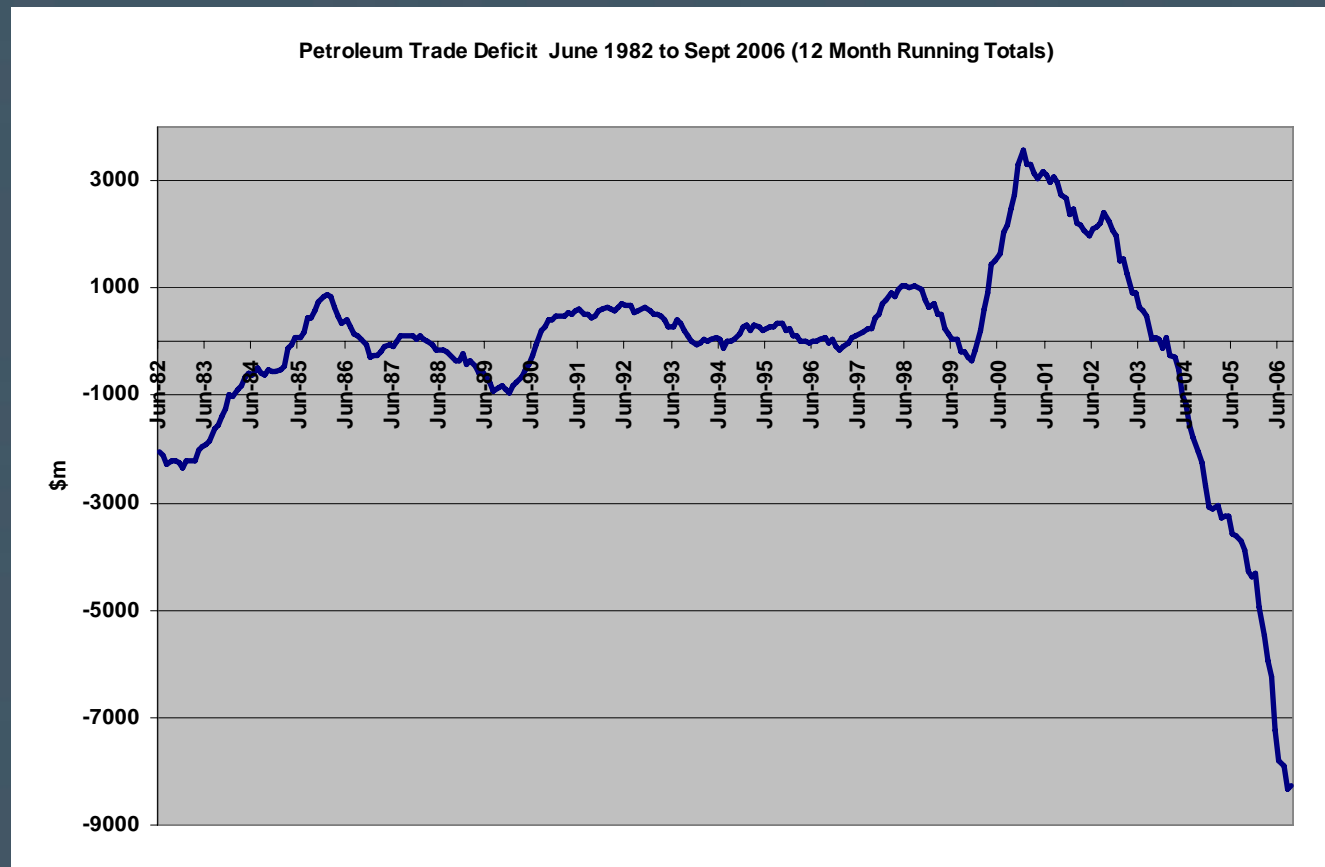


# Top 5 Oil producers 2006

	<b>% Share</b>	<b>% Change</b>
<b>1. BHP</b>	15.4	-7.1
<b>2. Woodside</b>	14.0	+22.5
<b>3. Exxon</b>	12.1	-10.9
<b>4. Santos</b>	11.1	-11.1
<b>5. Chevron</b>	5.8	-8.9



# Petroleum trade deficit





# Corporate strategies

- Overseas exploration
- Commercialisation of marginal fields (eg Basker-Manta, Puffin)
- Increasing production from existing basins (eg Cooper oil program)
- Focus on liquids-rich gas developments
- Non-conventional sources (GTL, CTL, STL, biofuels)



# Liquids reserves and resources

(Million barrels)

	<b>Crude oil</b>	<b>Condensate</b>	<b>LPG</b>
<b>Category 1</b>	714	634	736
<b>Category 2</b>	781	1841	1095

Source: Geoscience Australia 1 January 2005

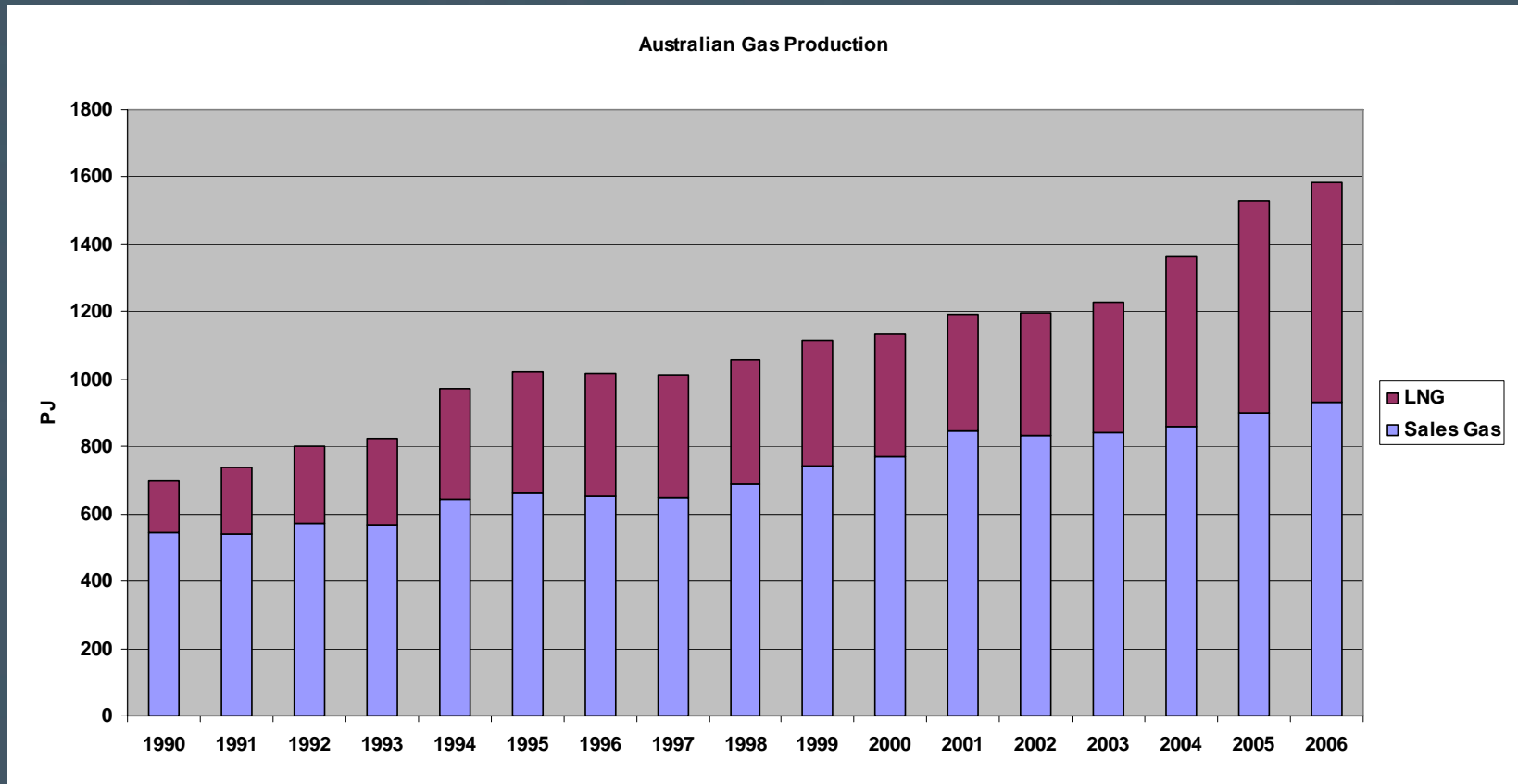


# Non-conventional sources

- Gas-to-liquids: Sasol-Chevron
- Coal-to-liquids: Monash Energy
- Shale-to-liquids: enormous Queensland resources
- Biofuels: rapidly growing capacity



# Australian gas production





# Gas production up

	2005	2006	% Change
<b>Conventional Dom Gas (PJ)</b>	817	828	+1.3%
<b>CSM (PJ)</b>	61	81	+32.8%
<b>Total Dom Gas (PJ)</b>	878	909	+3.5%
<b>LNG (PJ)</b>	658	681	+3.4%
<b>Total (PJ)</b>	1536	1590	+3.5%



# 2006 Gas production: basins

	% Share	% Change
1. Carnarvon	59.8	+3.1
2. Gippsland	15.3	-3.6
3. Cooper	10.7	-12.9
4. Surat	5.8	+48.5
5. Otway	4.4	+22.9



# Domgas developments

Turrum	Spring Gully
Kipper	Tipton West
Longtom	Daandine
Basker-Manta	Argyle
Thylacine	Blacktip
Fairview	Reindeer



# LNG developments

NWS Train 5	Ichthys
Gorgon	Scarborough
Pluto	Sunrise
Torosa	



# Top 5 gas producers 2006

	<b>% Share</b>	<b>% Change</b>
<b>1. BHP</b>	17.8	-4.0
<b>2. Santos</b>	13.2	+15.6
<b>3. Woodside</b>	12.7	-2.6
<b>=4. BP</b>	8.8	-0.5
<b>=4. Chevron</b>	8.8	-0.5



# Other growing gas producers

(2006 PJ)

Beach	+18	Arrow	+5
Apache	+16	QGC	+5
AWE	+11	Inpex	+2
Mitsui	+10	Eni	+1
ConocoPhillips	+7	Tokyo	+1
AGL	+5	CalEnergy	+1



# Top 5 petroleum producers in Australia 2006

	<b>% Share</b>	<b>% Change</b>
<b>1. BHP</b>	17.7	-4.7
<b>2. Woodside</b>	13.3	+2.6
<b>3. Santos</b>	12.0	+6.5
<b>4. Exxon</b>	9.3	-5.4
<b>5. Chevron</b>	8.0	-3.2



# Largest growth 2006

	<b>Mmboe</b>
<b>1. Mitsui</b>	+4.9
<b>2. Beach</b>	+4.2
<b>3. Santos</b>	+3.2
<b>4. AWE</b>	+2.5
<b>5. Apache</b>	+1.6
	+16.4



# Mitsui 2006

	<b>% Share</b>	<b>Volume change</b>
<b>#12 Dom gas</b>	1.4	+9.5 PJ
<b>LNG (ex MIMI)</b>	-	-
<b>#11 Oil &amp; NGL</b>	7.2	+ 3.2 Mmboe
<b>#12 Petroleum</b>	1.4	+4.9 Mmboe



# Apache 2006

	<b>% Share</b>	<b>Volume change</b>
<b>#5 Dom gas</b>	7.4	+16.4 PJ
<b>LNG</b>	-	-
<b>#10 Oil &amp; NGL</b>	2.5	-1.3 Mmboe
<b>#9 Petroleum</b>	3.6	+1.6 Mmboe



# New Australian independents 2006

	<b>Rank</b>	<b>Mmboe</b>
<b>Origin</b>	10	14.1
<b>Beach</b>	13	5.3
<b>AWE</b>	18	2.8
<b>ARC</b>	20	2.3
<b>Tap</b>	21	1.7
<b>Roc</b>	29	0.8



# Conclusion

- Maturity of basins, high oil prices, growing gas demand are providing growth opportunities for companies in Australia
- Leading to emergence of new players, local and foreign, with further potential
- Contributing to an increasingly diverse, competitive and innovative sector



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