



CorpStrategy
CONSULTING

Aussie Black Gold

An Overview



Glossary :

MB: Million Barrel

PJ: Petajoule

BP: British Petroleum

APPEA: Australian Petroleum Production and Exploration Association

MT: Metric Ton

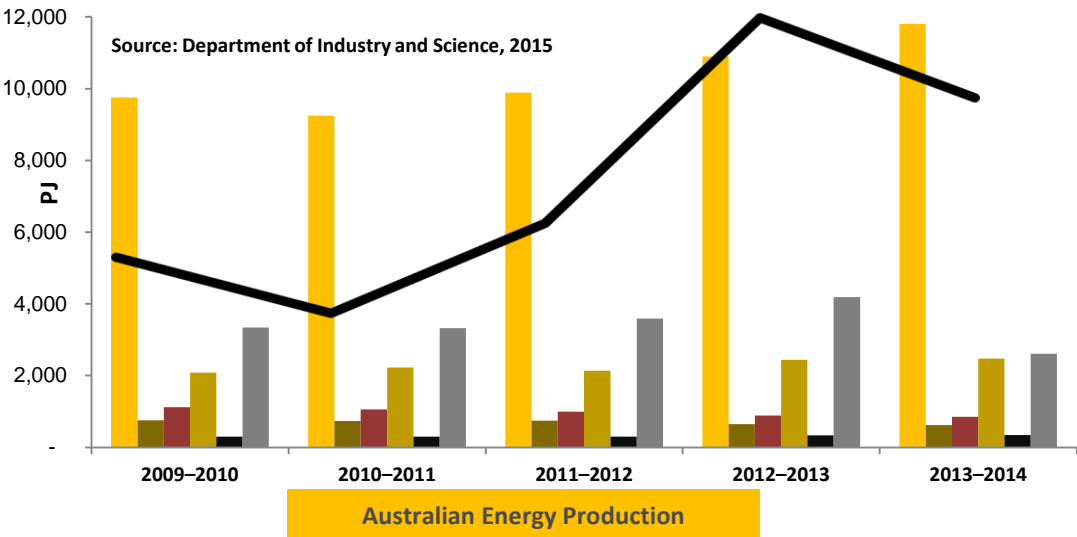
MMCF: Million Cubic Feet

BBL: Oil Barrel

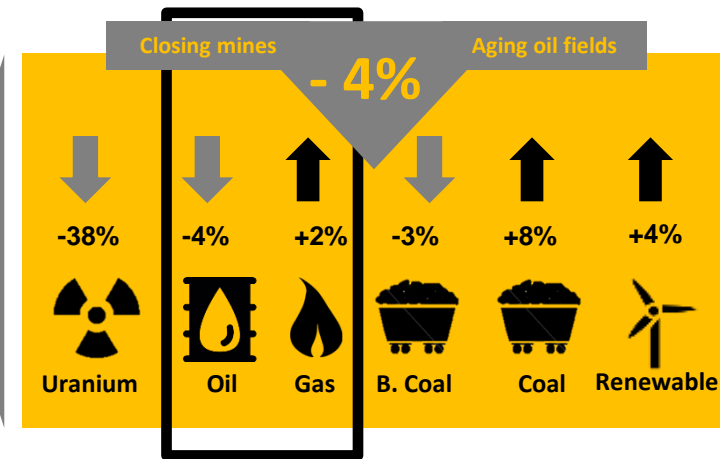
CSC: CorpStrategy Consulting



Black coal Brown coal Oil and LPG Natural gas Renewables Uranium oxide

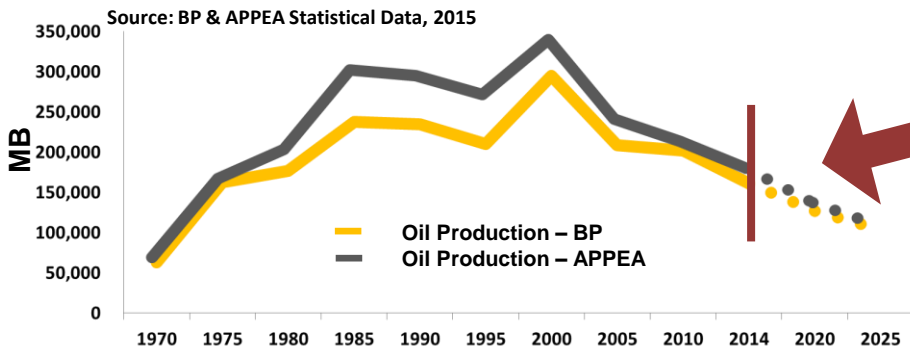
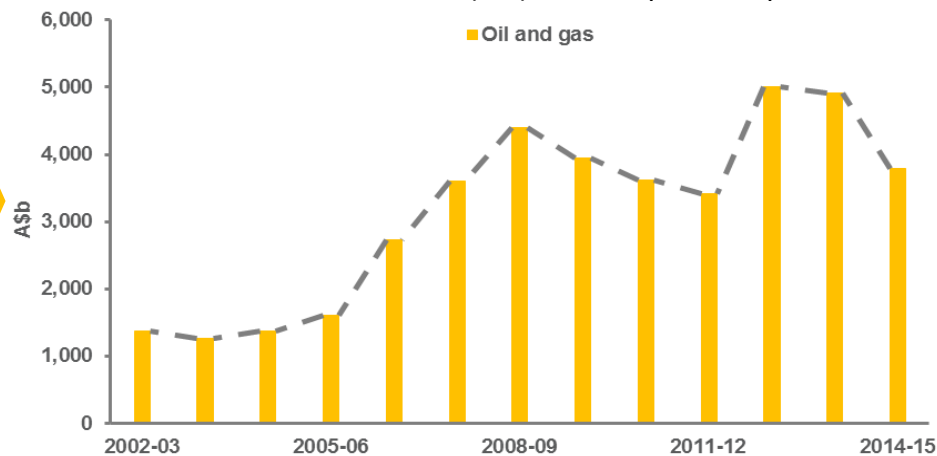


AUS Energy Production 2013 – 2014



- Australia holds around 0.2 per cent of world crude oil.
- The major capital expenditure in the natural resources has been in the oil and gas sector, which has partially offset the decline in iron ore and mining capital expenditure over the past years.
- The emerging markets (Asian countries) expected to be the main driver of growth in energy demand over the next 30 – 40 years, investments and exploration expenditures in the sector have increased strongly in the past decade.
- By end of 2015 the total number of oil and gas projects were 29 project with value of \$315.6B. There are 16 project under feasibility study phase with approximate value of AUD \$97B.

Source: Australian Bureau of Statistics (2015), Mineral and petroleum exploration



Australia's energy exploration expenditure

- Based on BP and APPEA oil conventional production historical data and current market prices, CSC predicts that Australian oil production will decrease by 4% annually to reach 94 million barrels (based on APPEA historical data), and 103 million barrel in 2025 respectively (based on BP historical data).

%35 gas consumption by WA

By 2020 LNG production will reach 86 Mt p/a

11th largest gas reserve in the world

\$ 17 billion gas exports in 2015

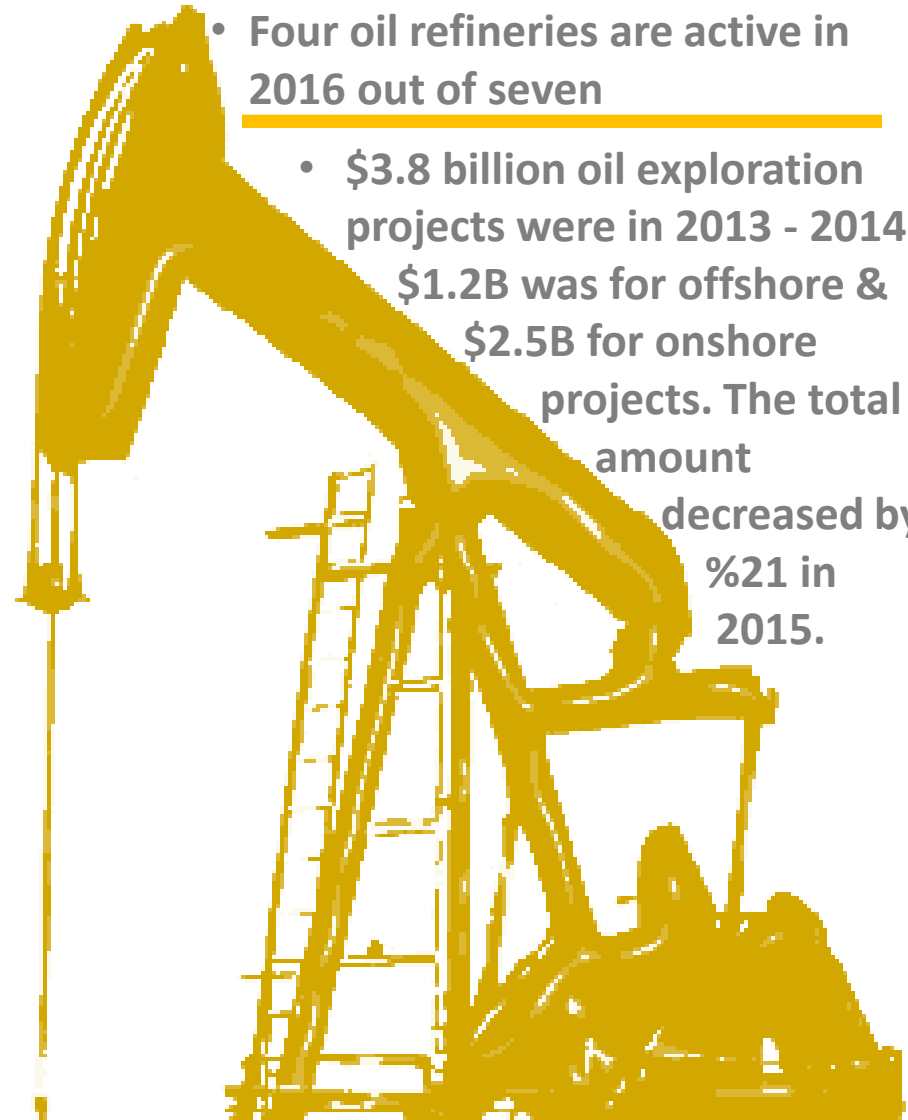
- **%60 oil consumption by NSW/ACT**
- **Oil production is decreasing %4.4 p/a**
- **Oil production will reach 161 PJ by 2049**
- **Four oil refineries are active in 2016 out of seven**

3rd largest LNG exporter in 2014

Major LNG customers are Japan & China

- **\$3.8 billion oil exploration projects were in 2013 - 2014. \$1.2B was for offshore & \$2.5B for onshore projects. The total amount decreased by %21 in 2015.**

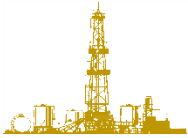
- In 2000 the total number of oil refineries were seven. By the end of 2016, the number of refineries will decrease to four, namely, Caltex, Mobil, BP and Vitol.
- The current energy consumption will continue to grow over the next forty to fifty years, with a lower rate than experienced in the past twenty years. This is due to the substitution of renewables, energy efficiency improvements and higher energy prices.
- The demand for oil & gas exports will remain strong and it is projected to grow over the medium term. However, the downturn in oil & gas prices has pushed many companies to apply cost cutting to remain profitable. Other ways to reduce costs were reducing exploration expenditure and project development. The focus of companies has shifted from developing new projects to ensuring the commercial viability of existing assets.



NSW/ACT



0 mb, Oil Production



4.6 mmcf, Gas Production



Botany Port



Kurnell Refinery, Caltex, 124,000 bbl

Clyde Refinery, Shell, 85,000 bbl, Shutdown in 2012



**Oil & Gas State Consumption
710PJ, 2014**



VIC



32 mb, Oil Production



338.5 mmcf, Gas Production



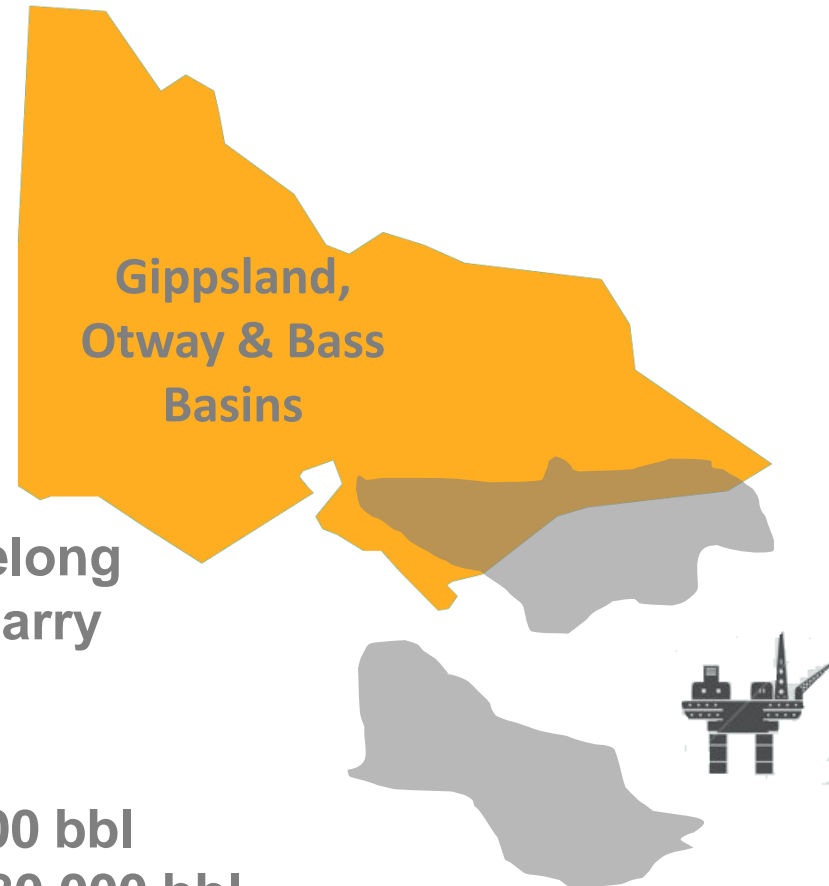
Port of Melbourne, Port of Geelong and Portland, Exxon Mobil's Barry Beach Port



**Geelong Refinery, Vitol, 120,000 bbl
Altona Refinery, ExxonMobil, 80,000 bbl**



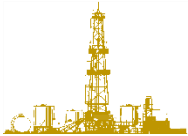
**Oil & Gas State Consumption
688PJ, 2014**



WA



92.8 mb, Oil Production



1,351 mmcf, Gas Production



Port of Dampier, Port of Bunbury



Kwinana Refinery, BP, 138,000 bbl



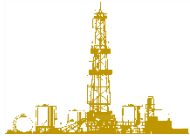
**Oil & Gas State Consumption
658PJ, 2014**



NT



1.7 mb, Oil Production



1 mmcf, Gas Production



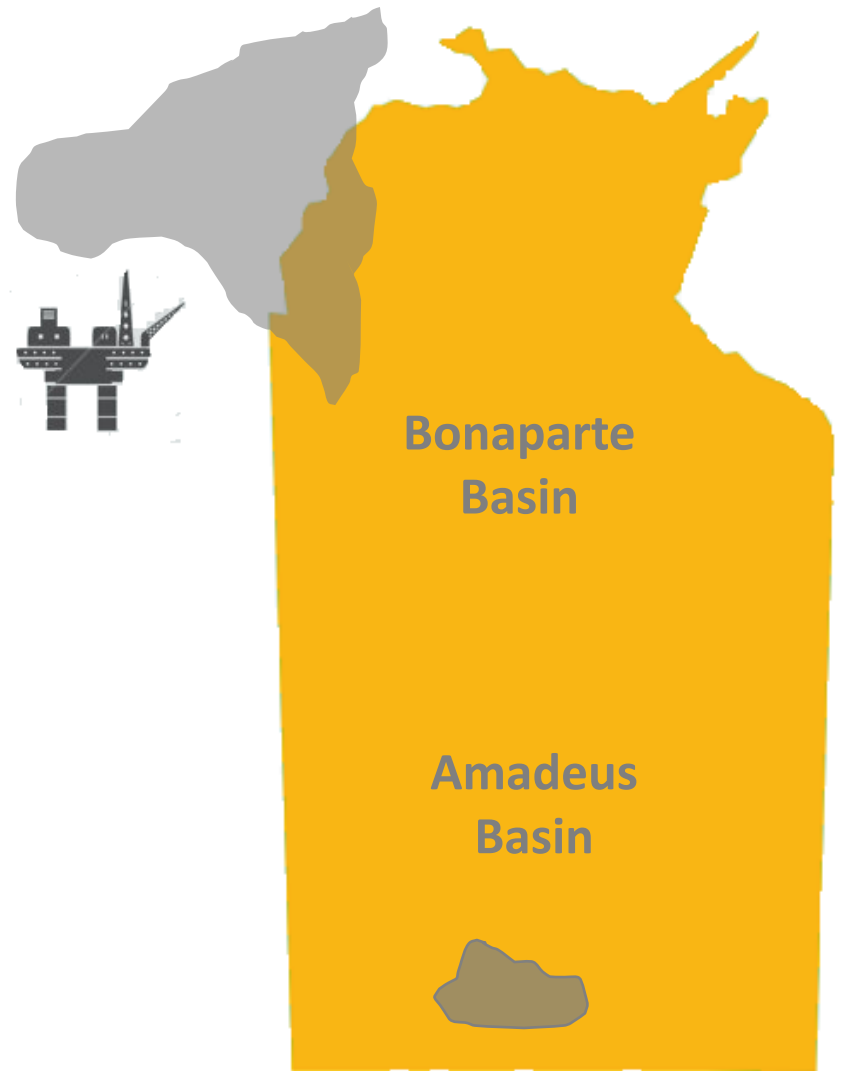
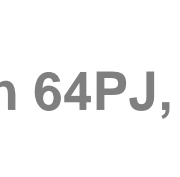
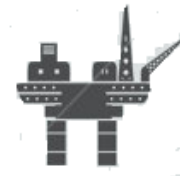
Port of Darwin



No Refinery



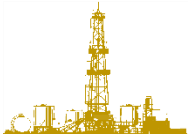
**Oil & Gas State Consumption 64PJ,
2014**



QLD



9.2 mb, Oil Production



323.8 mmcf, Gas Production



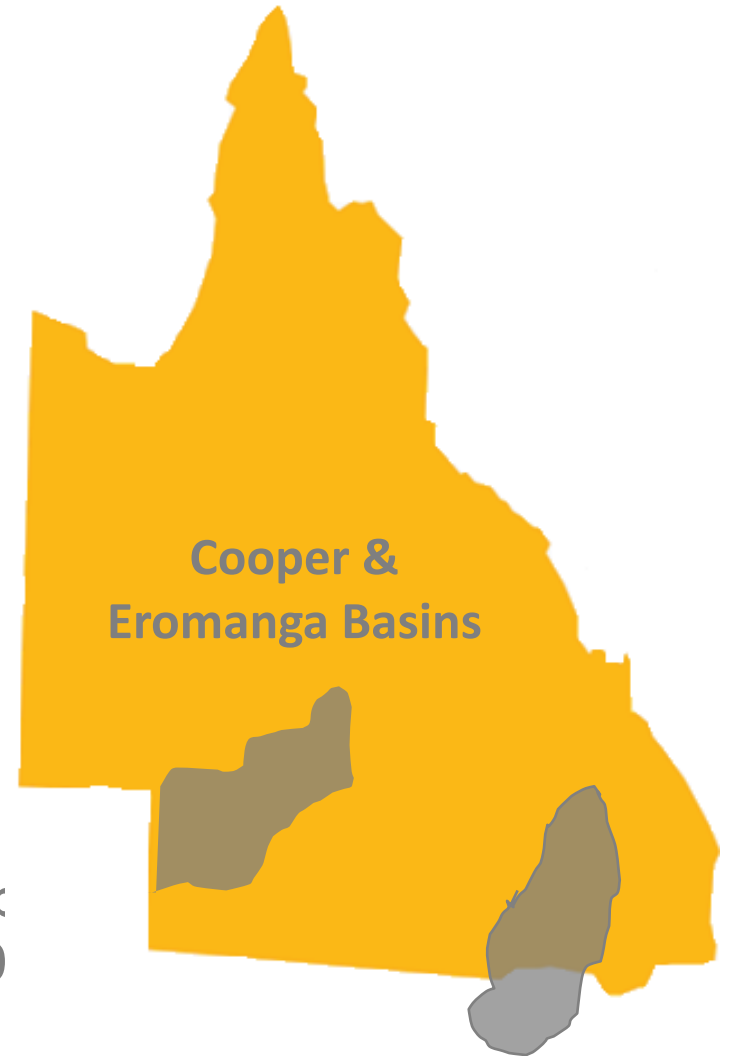
Port of Brisbane



**Lytton Refinery, Caltex, 106,000 k
Bulwer Island Refinery, BP, 102,0
bbl, Shutdown in 2015**



**Oil & Gas State Consumption
617PJ, 2014**



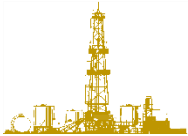
**Cooper &
Eromanga Basins**

**Bowen & Surat
Basins**

SA



8.4 mb, Oil Production



0.00 mmcf, Gas Production



Port of Bonython



**Stanvac Refinery, ExxonMobil, 3.3
MT, Shutdown in 2003**



**Oil & Gas State Consumption
183PJ, 2014**





This Report Developed By:

Reda Haddadeh, MBA

Lead Consultant

CorpStrategy Consulting

Email: reda@corpstrategyconsulting.com.au

Mob: +61420508944

References:

1. Department of Industry and Science, **Australian Energy Statistics, 2015**
2. Department of Industry and Science, **Energy in Australia, 2015**
3. Department of Industry and Science, **Energy in Australia Data, 2015**
4. Department of Industry and Science, **Resources & Energy Major Projects, 2015**
5. Bureau of Resources and Energy Economics, **Australian Energy Projections to 2049-50, 2012**
6. Bureau of Resources and Energy Economics, **Energy in Australia, 2015**
7. Department of Industry and Science, **Energy White Paper – at glance, 2015**
8. APPEA, **Key Statistics, 2015**
9. APPEA, **Annual Production Statistics Data, 2014**
10. Australian Institute of Petroleum, **Maintaining Supply Security & Reliability for liquid fuels in Australia, 2013**
11. **Value Adding, Australian Oil & Gas Industry, 2014**
12. **BP statistical review of world energy, 2015**