



2014

KEY STATISTICS



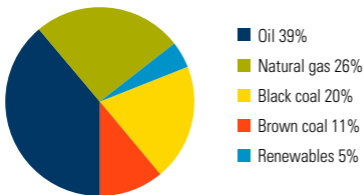
appea

the voice of australia's
oil and gas industry

2 Energy use in Australia

Australia's energy consumption continues to increase, although recent growth has been lower than the average of the past five years (2.7%) at 2% per annum.

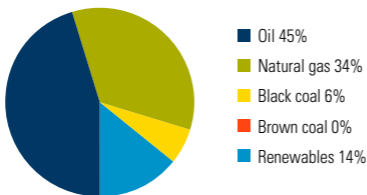
Share of primary energy consumption 2013–14



SOURCE: BREE AUSTRALIAN ENERGY STATISTICS 2013

Petroleum (oil and gas) accounts for 62% of primary energy consumed in Australia in 2013–14. Petroleum consumption is expected to increase to 80% in 2049–50.

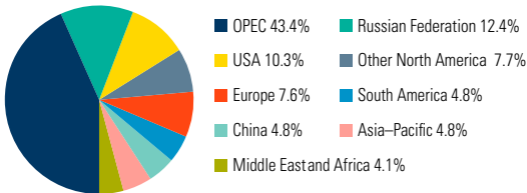
Share of primary energy consumption 2049–50



SOURCE: BREE AUSTRALIAN ENERGY STATISTICS 2013

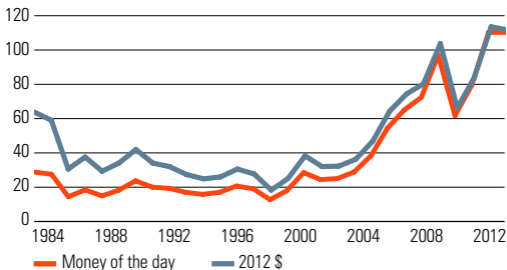
World oil supply averaged 86.2 million barrels a day in 2012, an increase of 2.2 % or 1.9 million barrels a day from 2011.

World oil supply 2013



SOURCE: BP STATISTICAL REVIEW 2013

Historical oil price (\$US per barrel)

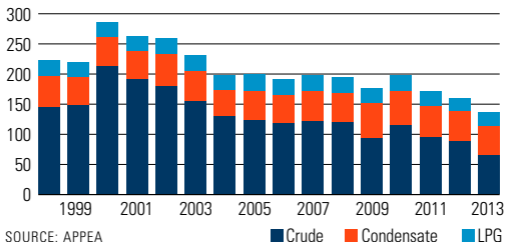


SOURCE: BP STATISTICAL REVIEW 2013 | Note 1984–2012 Brent

Australian production 4 of petroleum liquids

Australia's production of oil, condensate and LPG has been in decline since it peaked in 2000.

Historical Australian petroleum liquids production (millions of barrels)



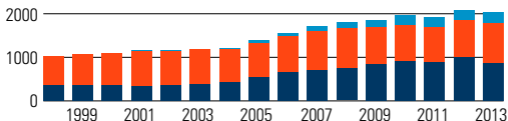
Production of petroleum liquids by state (millions of barrels)

	Crude		Condensate		LPG	
	2012	2013	2012	2013	2012	2013
NSW	–	–	–	–	–	–
NT	2.5	1.8	–	–	–	–
Qld	5.0	5.0	1.7	1.6	2.4	2.2
SA	3.7	7.2	0.1	1.3	–	–
Tas	–	–	0.1	0.6	0.1	0.6
Vic	11.8	9.3	7.8	7.8	10.3	10.9
WA	63.7	44.6	39.3	36.6	9.4	7.9
Total	86.7	67.9	49.0	47.9	22.1	21.6

SOURCE: APPEA | Note: includes production from Commonwealth Waters adjacent to each state or territory and excludes production from the JPDA.

Australia's production of natural gas has more than doubled since 1998. This increase in production has met both domestic and international market needs.

Historical Australian natural gas production (mmcf)



SOURCE: APPEA ■ LNG ■ Conventional gas ■ Natural gas from coal seams

Australia has significant quantities of discovered gas resources, many of which remain undeveloped. Opportunities exist to develop new gas projects, including for residential and commercial use, domestic gas processing industries and export sales.

Production of natural gas by state (mmcf)

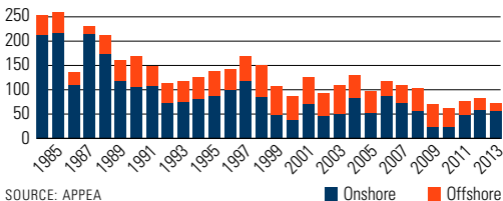
	LNG		Conventional gas		Natural gas from coal seams	
	2012	2013	2012	2013	2012	2013
NSW	-	-	-	-	5.6	2.7
NT	-	-	3.9	0.5	-	-
Qld	-	-	109.7	96.7	240.2	230.1
SA	-	-	5.2	4.3	-	-
Tas	-	-	4.5	17.3	-	-
Vic	-	-	354.0	341.1	-	-
WA	840.9	887.9	347.4	384.1	-	-
Total	840.9	887.9	824.7	844.0	245.7	232.9

SOURCE: APPEA | Note: includes production from Commonwealth Waters adjacent to each state or territory and excludes production from the JPDA.

6 Petroleum exploration

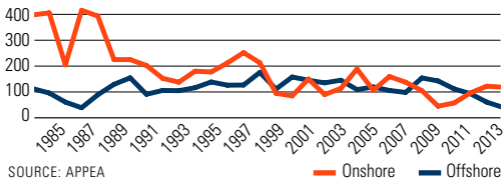
The number of exploration wells drilled in offshore waters has halved over the past decade while the number of conventional wells onshore fluctuates on a year-to-year basis, but continues to trend downwards.

Exploration wells spudded — Australia (no. of wells)



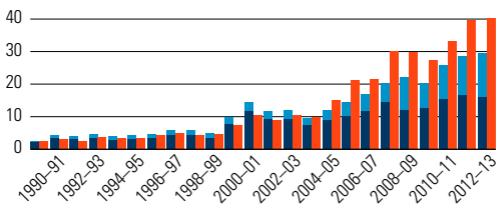
The level of exploration activity onshore (measured by metres drilled) continues to trend up towards levels seen in the mid 2000s. Offshore exploration has remained relatively consistent over the last decade, but has declined since 2009.

Exploration drilling activity (000s metres)



Australia imports and exports significant quantities of petroleum and petroleum related products. Australia was in a surplus position in the trade of oil and gas until 2003–04, however has been a net importer since that time. Australia is expected to remain a net importer in the short term, with the increase in LNG and condensate exports somewhat offsetting the reduction of domestic oil production.

Imports and exports of petroleum products (\$billion)



SOURCE: BREE ■ Exports (excluding LNG) ■ LNG exports ■ Imports

Oil and gas imports and exports 2012–13 (\$billion)

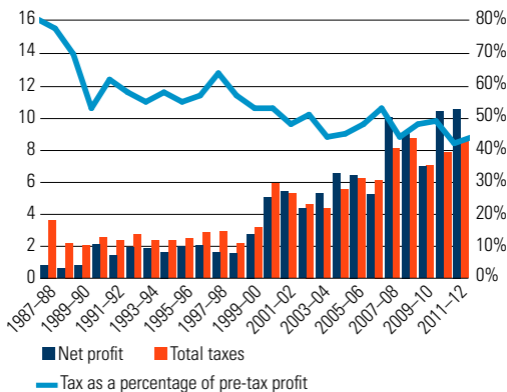
	Exports	Imports
Crude	12.5	20.4
LNG	13.7	–
Natural Gas	–	2.4
LPG	1.1	0.0
Products	1.6	17.9
Bunkers	1.6	–
Total	30.5	40.8

SOURCE: BREE

Economic significance 8 of the industry — taxation

The oil and gas industry in Australia pays a variety of taxes, charges and fees in relation to petroleum production activities. On average, taxes account for just under half of the industry's overall level of pre-tax profit.

Estimated petroleum industry profit (before tax) and taxation payments (\$ billion)

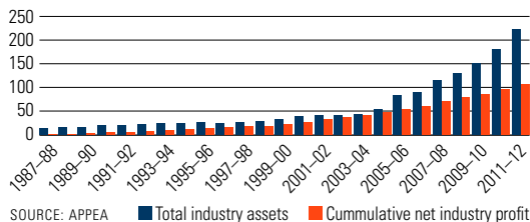


SOURCE: APPEA

Total payments have averaged around \$8 billion per year over the last five years, with company taxes estimated to account for slightly more than half of the total amount.

The oil and gas industry has traditionally invested amounts that are greater than the level of profits. Since 1987–88, based on the value of total assets, the industry has spent more than twice as much on capital investment compared to cumulative profits over the period.

Asset values and cumulative profits (\$ billion)



The number of projects in the publicly announced and feasibility stages has fallen between 2012 and 2013.

LNG, gas, oil major project investment pipeline, April 2013

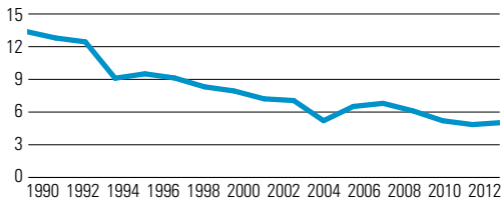
	2012		2013		Change
	No. of projects	Range A\$billion	No. of projects	Range A\$billion	
Publicly announced*	13	27-32+	9	25-27+	-4
Feasibility stage	11	105	9	63	-2
Committed	18	195	14	195	-4
Completed	1	0.5	5	10	

SOURCE: BREE | Note: *To include a project on the major projects list at this stage, preliminary information on project schedule, planned output or cost must be publicly available.

10 Safety information

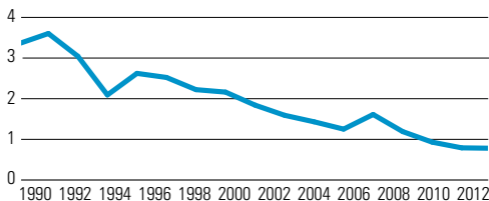
There has been a significant improvement over the last decade in the rates of injuries and safety performance across the Australia oil and gas industry. In that time, the industry has experienced rapid growth and emerging new sectors.

Total recordable injury frequency rate (per million hours worked)



SOURCE: APPEA

Lost time injury frequency rate (per million hours worked)



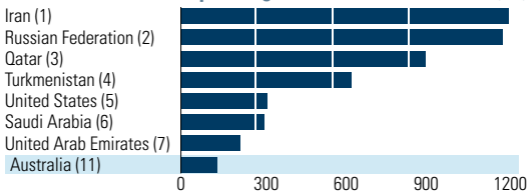
SOURCE: APPEA

Australia's estimated petroleum resources

	Crude oil	Condensate	LPG	Conventional gas	Coal seam gas	Shale gas	Tight gas	Total gas
	mmbbl	mmbbl	mmbbl	tcf	tcf	tcf	tcf	tcf
EDR	966	2110	964	103	33	–	–	136
SDR	298	622	377	54	60	2	–	116
Inferred	–	–	–	~10	111	–	20	141
All identified resources	1264	2733	1342	167	203	2	20	392
Potential in-ground resource	~~	~~	~~	~~	235	396	~~	631
Resources: identified, potential and undiscovered	1264	2733	1342	167	235	396	20	819

SOURCE: GEOSCIENCE AUSTRALIA BREE 2013 | ~ unknown

Selected international proven gas reserves and rank 2012 (tcf)



SOURCE: BP STATISTICAL REVIEW 2013

Glossary of terms

BREE	Bureau of Resources and Energy Economics
EDR	economic demonstrated resources
LNG	liquified natural gas
LPG	liquid petroleum gas
mmcf	million cubic feet
mmbbl	million barrels
PJ	petajoules
SDR	sub-economic demonstrated resources
Spudded	the process of commencing a well drilling process removing rock, dirt and other sedimentary material with the drill bit
tcf	trillion cubic feet

www.appea.com.au

Head Office

Level 10
60 Marcus St
Canberra ACT 2601

T +61 2 6247 0960

appea@appea.com.au

Brisbane

Level 36
32 Turbot St
Brisbane QLD 4000

T +61 7 3231 0500

brisbane@appea.com.au

Darwin

Suite 16, First Floor
48–50 Smith St
Darwin NT 0800

T +61 433 917 317

darwin@appea.com.au

Perth

Level 4
190 St George's Tce
Perth WA 6000

T +61 8 9426 7200

perth@appea.com.au

Sydney

Suite 4, Level 8
3 Spring Street
Sydney NSW 2000

T +61 2 8241 1900

sydney@appea.com.au



appea