



2017

KEY STATISTICS



appea

the voice of australia's
oil and gas industry

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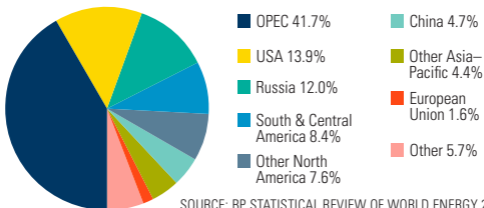


ENERGYQUEST

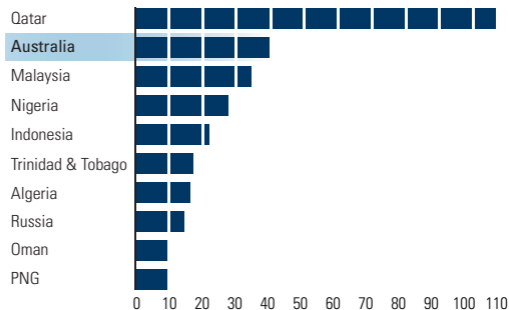
2 World supply of oil and LNG

In 2015, world oil supply averaged 91.7 million barrels a day—increasing by 3.2% or 2.8 million barrels a day from 2014.

Share of world oil supply 2015



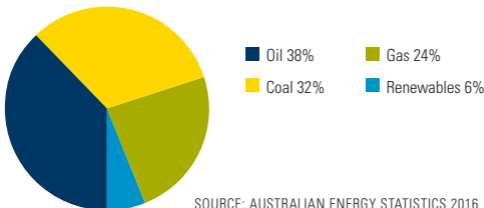
Top 10 LNG exporting countries 2015 (billion cubic metres)



Energy use: Australia and global 3

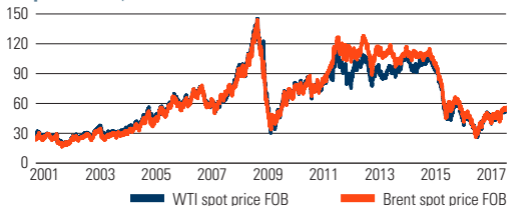
In 2014–15, oil remained Australia's largest primary energy source—providing 38% of all energy. Natural gas delivered 24% of primary energy. Renewables maintained a 6% share of Australia's energy.

Share of primary energy consumption 2014–15



After falling from more than US\$100 per barrel in 2014 to about US\$26 per barrel in January 2016, oil prices recovered somewhat in the second half of 2016. The average for 2016 was US\$43 per barrel. Steady demand growth and production cuts in OPEC nations drove recovery. The forecast average oil price for 2017 is US\$55 per barrel.

Oil price (US\$ per barrel)

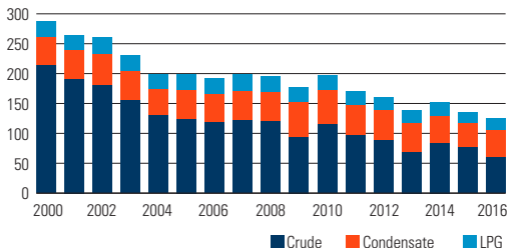


SOURCE: US ENERGY INFORMATION ADMINISTRATION

4 Production—petroleum liquids

In 2016, Australian petroleum liquids production was 126 million barrels—less than half the peak of 287 million barrels in 2000.

Australian petroleum liquids production (millions of barrels)



SOURCE: APPEA (UNTIL 2013), ENERGYQUEST (2014 ONWARDS)

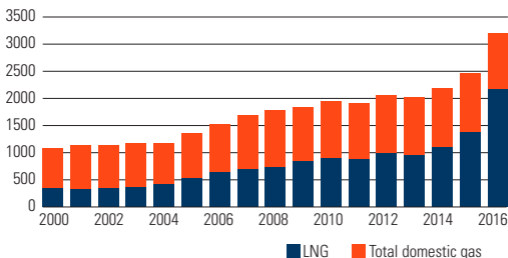
Production of petroleum liquids by state/territory (millions of barrels)

	Crude		Condensate		LPG	
	2015	2016	2015	2016	2015	2016
NSW	–	–	–	–	–	–
NT	1.6	1.2	–	–	–	–
Qld	–	–	–	–	–	–
SA	12.1	10.5	1.5	1.5	2.2	2.2
Tas	–	–	0.5	0.6	0.5	0.6
Vic	5.8	6.4	7.1	8.6	9.4	10.4
WA	56.1	41.8	31.7	35.7	5.9	6.8
Total	75.6	59.9	40.8	46.4	18.0	20.0

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

Australia's gas production (LNG and domestic use) increased by almost 30% in 2016. It has more than doubled in the last decade.

Total domestic natural gas production and LNG exports (bcf)



SOURCE: APEA (UNTIL 2013), ENERGYQUEST (2014 ONWARDS)

Production of natural gas by state/territory (bcf)

	Conventional gas		Natural gas from coal seams		LNG exports	
	2015	2016	2015	2016	2015	2016
NSW	–	–	4.7	4.6	–	–
NT	3.2	5.1	–	–	–	–
Qld	3.1	2.3	592.7	1089.9	311.6	915.6
SA	94.1	91.1	–	–	–	–
Tas	14.1	15.7	–	–	–	–
Vic	316.7	362.5	–	–	–	–
WA	1439.0	1626.7	–	–	1065.2	1243.1
Total	1870.2	2103.4	597.4	1094.5	1376.8	2158.7

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

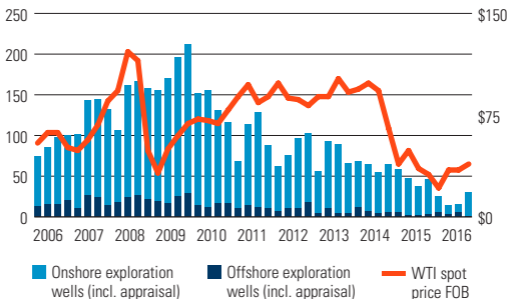
6 Petroleum exploration

The long-term growth in the Australian oil and gas industry depends on the level of exploration.

Oil and gas cannot be produced without first finding new resources and these cannot be discovered without drilling wells. Key variables driving exploration decisions include: available and prospective acreage; capital availability; exploration costs; and the ability to commercialise discovered resources.

The depressed crude oil price, regulatory and policy uncertainty, and restricted access to resources are inhibiting exploration. Companies are cutting their exploration expenditure and fewer exploration wells are being drilled in Australia.

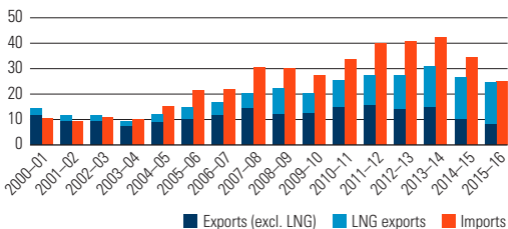
Exploration well activity and West Texas intermediate oil price



SOURCE: US ENERGY INFORMATION ADMINISTRATION, APEA

Australia imports and exports significant quantities of petroleum and petroleum-related products. Until 2003–04, Australia had a surplus in the trade of oil and gas, but since then it has been a net importer. This is likely to change in coming years, as the expected increase in LNG and condensate exports offsets falling domestic oil production (and the associated increase in oil imports).

Trade in oil, gas and petroleum products (\$ billion)



SOURCE: DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE

Oil and gas imports and exports 2015–16 (\$ billion)

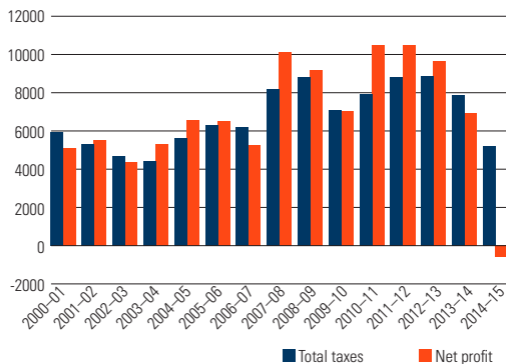
	Exports	Imports
Crude	5.4	7.9
LNG	16.6	–
LPG	0.5	–
Products	0.4	16.9
Bunkers	1.4	–
Total	24.3	24.8

SOURCE: DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE

Economic significance 8 of the industry — taxation

The fiscal framework strongly influences oil and gas companies' investment decisions. Oil and gas producers face many taxes, charges and fees covering petroleum activities. Fiscal imposts include resource taxes (such as petroleum resource rent tax, petroleum royalties and production excise), company income tax and other taxes, fees and charges.

Industry taxes paid and net profit (\$ million)

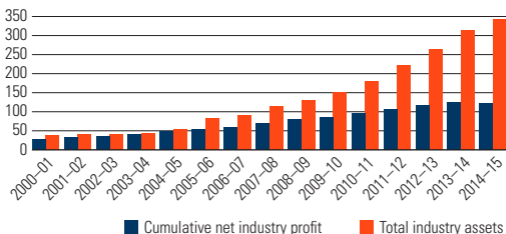


SOURCE: APPEA FINANCIAL SURVEY

From 2007-08 to 2013-14, total payments to governments averaged about \$8 billion a year. But in 2014-15, these payments fell to \$5 billion because of low prices, high costs and the industry recording a net loss.

Over the last decade, the oil and gas industry has invested more than \$250 billion in the Australian economy. The cumulative investment since 2000–01 is almost three times the industry’s cumulative net profit. This investment is now leading to increased production.

Industry cumulative profits and investments (\$ billion)



SOURCE: APEA FINANCIAL SURVEY

As at October 2016, the industry still had more than \$250 billion worth of projects being developed.

LNG, gas, oil major project investment pipeline, October 2016

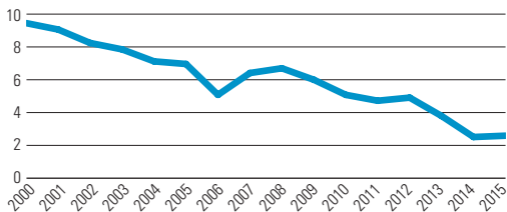
	2015		2016	
	No. of projects	Range A\$billion	No. of projects	Range A\$billion
Publicly announced	4	12.5+	4	15.5+
Feasibility stage	16	50.8+	10	42.6+
Committed	14	196.7	11	169.0
Completed	2	23.5	3	23.8

SOURCE: DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE

10 Safety information

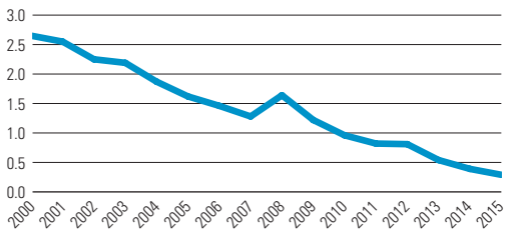
Over the last decade, there has been a significant improvement in the Australian oil and gas industry's safety performance. In that time, the industry has experienced rapid growth and has introduced new operations.

Total recordable injury frequency rate (per million hours worked)



SOURCE: APPEA

Lost time injury frequency rate (per million hours worked)



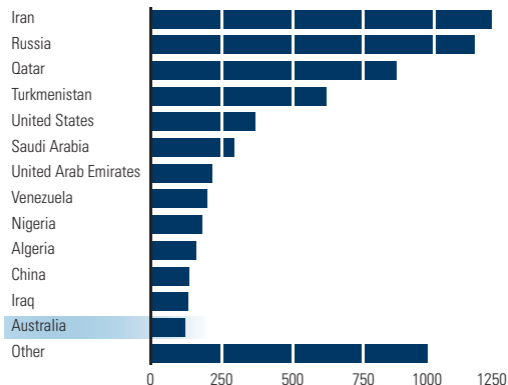
SOURCE: APPEA

Australia's estimated petroleum resources (petajoules)

	Conventional gas	CSG	Tight gas	Shale gas	Total gas	Oil	Condensate	LPG
Reserves	77,253	45,949	39	–	123,241	–	–	–
Contingent resources	108,982	33,634	1709	12,252	156,578	–	–	–
All identified resources	186,235	79,583	1748	12,252	279,819	7066	16,463	5957
Prospective resources	235,913	6890	48,894	681,273	972,969	–	–	–

SOURCE: GEOSCIENCE AUSTRALIA

Proven gas reserves by country and rank 2015 (tcf)



SOURCE: BP STATISTICAL REVIEW OF WORLD ENERGY 2016

Glossary of terms

CSG	coal seam gas
JPDA	Joint Petroleum Development Area zone in the Timor Sea
LNG	liquefied natural gas
LPG	liquid petroleum gas
bcf	billion cubic feet
mmbbl	million barrels
PJ	petajoules
tcf	trillion cubic feet

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