



ap<sup>pea</sup>

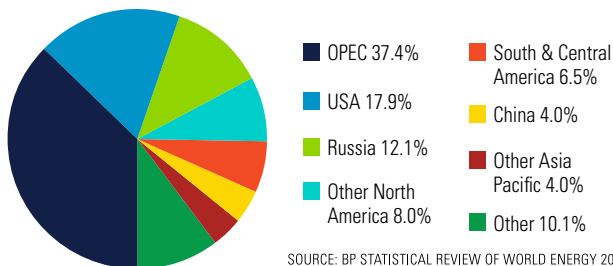


# Key Statistics **2021**

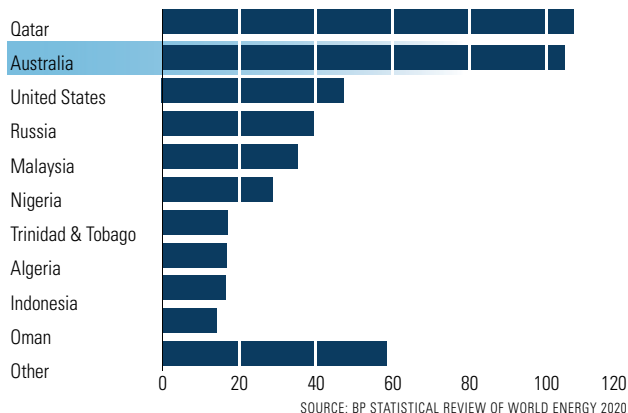
# World supply of oil and Liquefied natural gas (LNG)

World oil supply averaged 95.2 million barrels a day in 2019, a slight decline of 0.1% or 62 thousand barrels a day compared to 2018.

## Share of world oil supply 2019



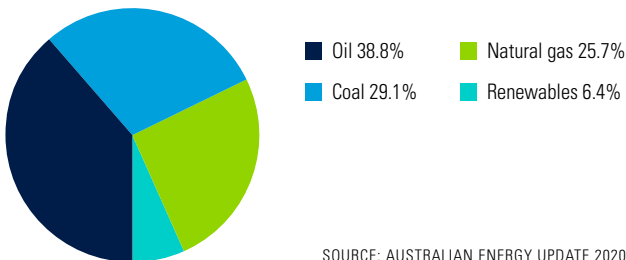
## Top 10 LNG exporting countries 2019 (billion cubic metres)



# Energy use in Australia

In 2018-19, oil was the largest primary energy source in Australia providing nearly 39% of all energy consumed. Natural gas provided 26% of primary energy. Renewables accounted for just over 6% of Australia's primary energy consumption in 2018-19.

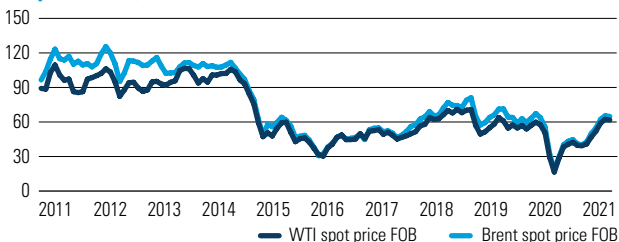
## Share of primary energy consumption 2018-19



SOURCE: AUSTRALIAN ENERGY UPDATE 2020

The COVID-19 global pandemic caused oil prices to plummet in the first half of 2020 with prices dropping in April 2020 to levels last seen in 1999. The prices have since recovered significantly as demand recovered and production lagged. The WTI crude oil price averaged US\$39 in 2020 and is forecast to average US\$59 per barrel in 2021.

## Oil price (US\$ per barrel)

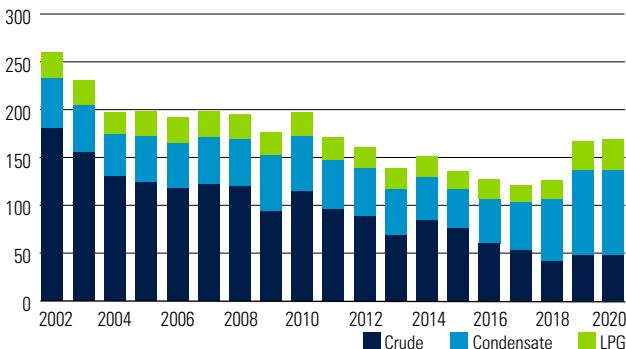


SOURCE: US ENERGY INFORMATION ADMINISTRATION

# Australian production petroleum liquids

Australian petroleum liquids production increased slightly in 2020 to 169 million barrels up 2% as compared to 2019. However, it is still significantly lower than peak production in 2000 at 287 million barrels. The increase in 2020 was limited by demand destruction due to the COVID-19 global pandemic and low prices not providing an incentive for increased production.

## Australian petroleum liquids production (millions of barrels)



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

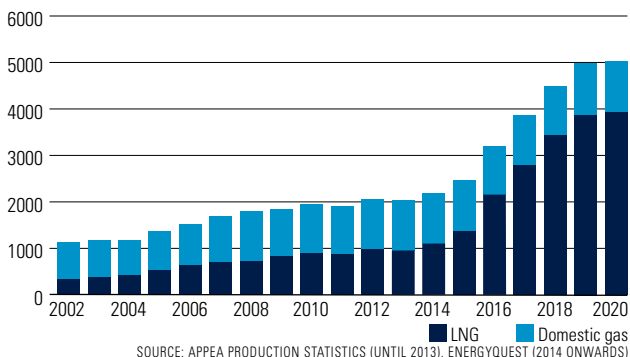
	Crude		Condensate		LPG	
	2019	2020	2019	2020	2019	2020
New South Wales	–	–	–	–	–	–
Northern Territory	0.1	–	20.7	28.3	13.9	15.7
Queensland	–	–	–	–	–	0.1
South Australia	12.5	12.8	1.8	2.2	2.6	3.3
Tasmania	–	–	0.4	0.4	0.4	0.4
Victoria	3.3	3.0	7.5	6.7	8.0	8.0
Western Australia	31.5	32.2	57.2	50.4	6.1	5.4
<b>Total</b>	<b>47.5</b>	<b>48.0</b>	<b>87.5</b>	<b>88.0</b>	<b>31.0</b>	<b>32.8</b>

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

# Australian production natural gas

Australia's natural gas production (domestic use and LNG) increased slightly in 2020 as compared with 2019. The increased production was an outstanding achievement, given the industry faced the double whammy of demand destruction in our key markets due to COVID-19 global pandemic related shutdowns and lower prices, which made conditions challenging for the industry.

## Total domestic natural gas production and LNG exports (billion cubic feet)



## Production of natural gas by state/territory (billion cubic feet)

	Conventional gas production		Coal seam gas		LNG exports	
	2019	2020	2019	2020	2019	2020
New South Wales	–	–	4.5	4.1	–	–
Northern Territory	450.7	494.1	–	–	393.7	448.8
Queensland	3.9	8.2	1,398.2	1,419.1	1,166.0	1,179.4
South Australia	97.7	110.1	–	–	–	–
Tasmania	10.7	10.5	–	–	–	–
Victoria	307.4	283.1	–	–	–	–
Western Australia	2,726.8	2,692.5	–	–	2,333.9	2,304.2
<b>Total</b>	<b>3,597.1</b>	<b>3,598.5</b>	<b>1,402.7</b>	<b>1,423.3</b>	<b>3,893.5</b>	<b>3,932.5</b>

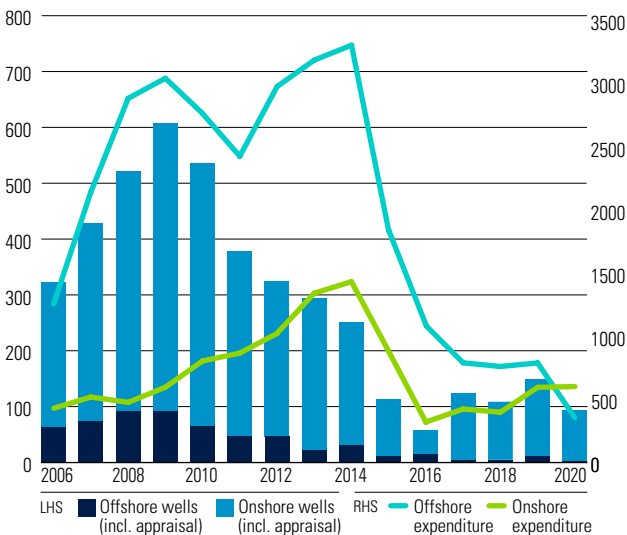
SOURCE: ENERGYQUEST. Note: includes production from Commonwealth waters adjacent to each state or territory and excludes production from the JPDA.

# Petroleum exploration

Oil and gas exploration is vital for Australia's energy security. The sustainable growth of Australia's oil and gas industry depends on continuous exploration. Production cannot occur without first locating 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 COVID-19 global pandemic significantly impacted exploration activity. Offshore exploration expenditure in 2020 fell to its lowest level since 1991 while onshore expenditure was similar to 2019.

## Annual exploration well activity and expenditure

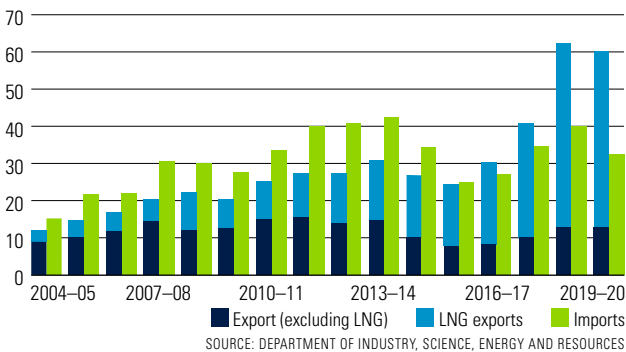


SOURCE: ABS, APPEA

## Economic contribution: trade

Australia imports and exports significant quantities of petroleum and petroleum-related products. In 2019–20, Australia recorded a A\$27.9 billion surplus in the trade of oil and gas — the highest surplus since 1990. This is primarily due to \$47.5 billion worth of LNG exports. LNG exports have made a significant contribution to Australia’s economic growth over the last few years and helped Australia maintain economic resilience in the face of COVID-19-related economic challenges.

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



### Oil and gas imports and exports 2019–20 (A\$ billion)

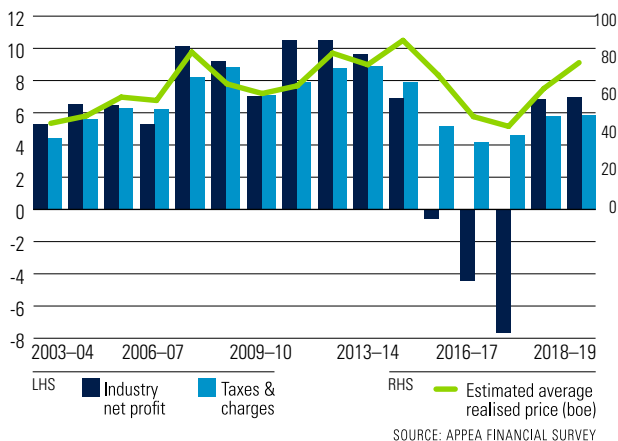
	Exports	Imports
Crude	9.0	9.7
LNG	47.5	–
LPG	1.6	–
Products	0.6	22.7
Bunkers	1.5	–
<b>Total</b>	<b>60.2</b>	<b>32.3</b>

SOURCE: DEPARTMENT OF INDUSTRY, SCIENCE, ENERGY AND RESOURCES

# Economic contribution: taxation

The fiscal framework is a key factor shaping investment decisions in the oil and gas industry. Producers are confronted with an array of taxes, charges and fees covering petroleum activities. Fiscal imposts include resource taxes (the petroleum resource rent tax, petroleum royalties and production excise), company income tax and a wide variety of other taxes, fees and charges.

## Industry taxes paid, profit (before) taxes, average realised price (A\$/bbl)



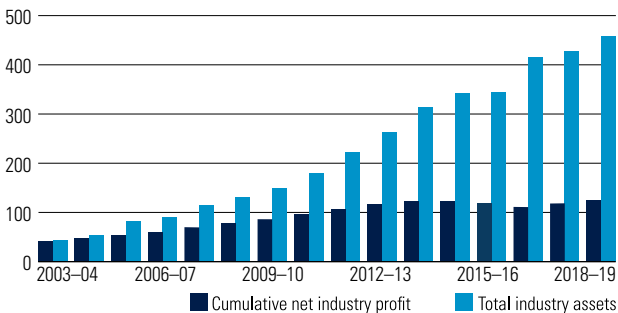
APPEA's 2018–19 Financial Survey, the 32nd instalment of the survey outlining the financial performance of the sector, showed the Australian industry's major tax, rents and royalty contributions of around \$5.85 billion. In the past decade, the industry paid more than \$66.2 billion to governments with contributions since 1985 totalling \$156 billion. Building on the 2017–18 rebound, the 2018–19 survey revealed an overall industry profit of \$6.96 billion, driven by a 40% increase in sales revenue to \$76 billion. This was on the back of higher production volumes and improvement in the oil price that year.



# Industry Investment

The Australian oil and gas industry has invested approximately \$473 billion over the last decade to 2020. Since APPEA's Financial Survey commenced in the mid-1980s, cumulative investment over the period has been almost four times greater than the industry's cumulative net profit. This investment will continue to deliver decades of cleaner energy, economic growth, exports and jobs for Australia.

## Industry cumulative profits and investment (A\$ billion)



SOURCE: APPEA FINANCIAL SURVEY

While COVID-19 has seen projects delayed in the face of challenging market conditions, as of October 2020, the oil and gas industry had over A\$135 billion worth of projects in the pipeline.

## LNG, gas, oil major projects investment pipeline (October 2020)

	2019		2020	
	No. of projects	Range \$ billion	No. of projects	Range \$ billion
Publicly announced	13	29.4+	23	40.5+
Feasibility stage	19	44.8+	19	75.7+
Committed	6	14.3	10	19.7
Completed	5	3.6	2	0.9

SOURCE: DEPARTMENT OF INDUSTRY, SCIENCE, ENERGY AND RESOURCES.

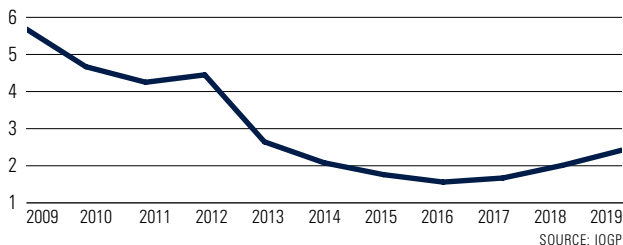
# Safety Performance

The International Association of Oil & Gas Producers (IOGP) collects global safety performance data from both the onshore and offshore petroleum industry.

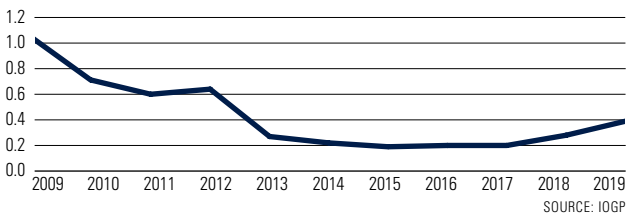
For 2019, the total recordable injury frequency rate (TRIFR)—the number of recordable injuries (fatalities + lost work day cases + restricted work day cases + medical treatment cases) per million hours worked was 2.42, up from 2018.

The lost time injury frequency rate (LTIFR)—the number of lost time injuries (fatalities + lost work day cases) per million hours worked was 0.39, up from 2018.

## Australian TRIFR (per million hours worked)



## Australian LTIFR (per million hours worked)



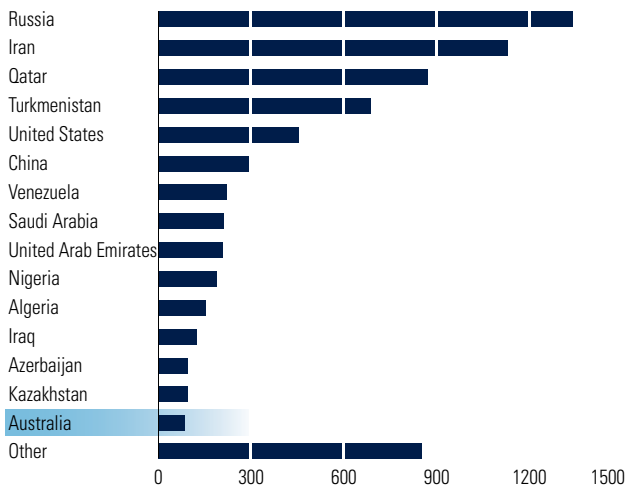
# Resources

## Australia's estimated petroleum resources (petajoules)

	Conventional Gas	CSG	Tight Gas	Shale Gas	Total Gas	Oil	Condensate	LPG
Reserves	77,253	45,895	39	–	123,187	3,286	7,421	2,633
Contingent resources	108,982	33,555	1,709	12,252	156,498	3,780	9,042	3,324
All identified resources	186,235	79,450	1,748	12,252	279,685	7,066	16,463	5,957
Prospective resources	235,913	6,890	2,650,622	9,577,353	12,470,778	85,483	41,148	–

SOURCE: GEOSCIENCE AUSTRALIA

## Proved gas reserves by country and rank 2019 (trillion cubic feet)



SOURCE: BP STATISTICAL REVIEW OF WORLD ENERGY 2020

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#### Glossary

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

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