

# Overview

Resources and Energy Quarterly June 2018

## Resources and energy sector

**7.8%**

of Australia's GDP growth in the March quarter of 2018

**7%**

share of Australia's GDP in 2016-17

**53%**

Australia's goods and services exports in 2016-17

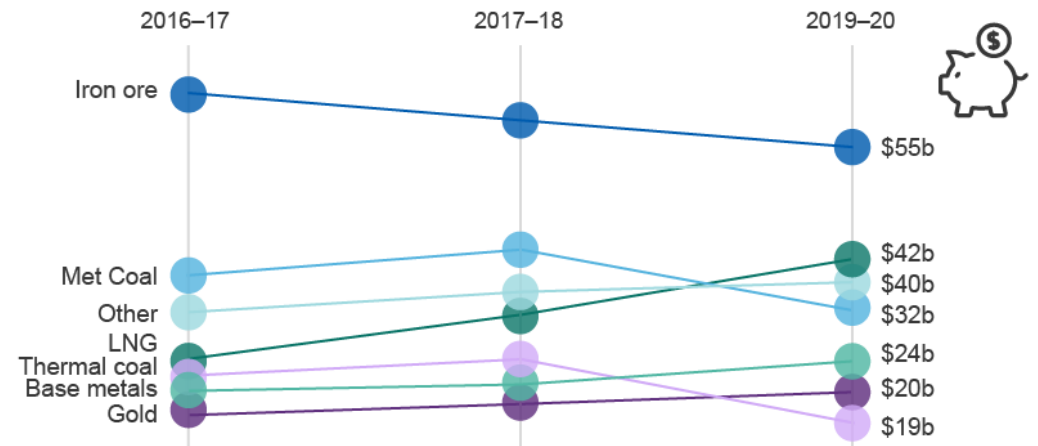
**234,000**

people employed (as at May 2018)

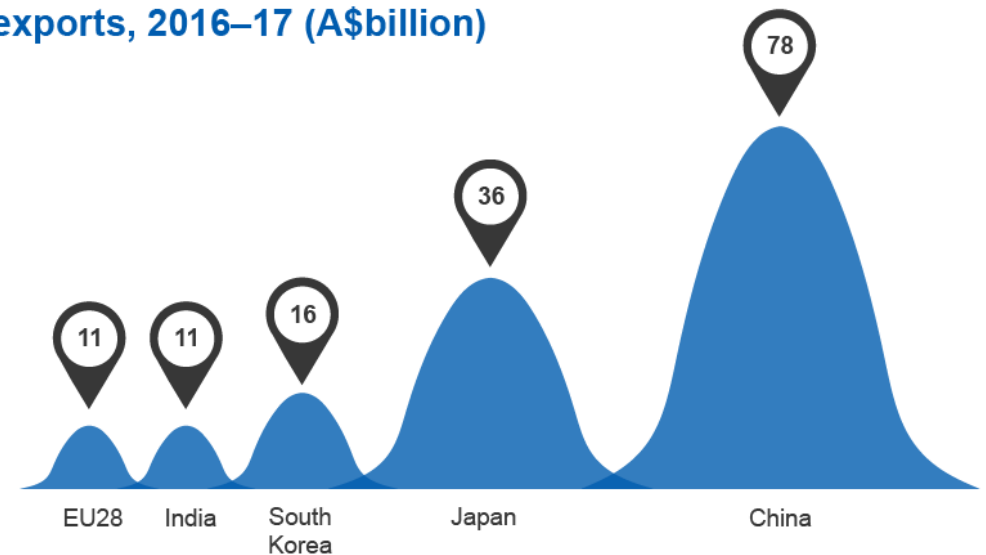
**68%**

Australia's goods exports in 2016-17

## Australia's resources and energy exports, A\$billion



## Major markets for Australia's resources and energy exports, 2016-17 (A\$billion)



## 1.1 Summary

- Resource and energy commodity prices rose firmly during the June quarter, the latter driven by strong demand and concerns about supply.
- Growth in global industrial production and manufacturing output appears to have peaked in the first-half of 2018, suggesting that resource commodity prices may generally have set their highs for the cycle.
- Australia's resources and energy export volumes are expected to continue to grow at a robust pace over the next year — driven by LNG — but grow less quickly in 2019–20.
- With oil (and hence LNG) prices expected to hold some of their recent gains, exports in 2018–19 are expected to be a record \$238 billion.

## 1.2 Export values

### Australia's export values to reach record high in 2018–19

The Office of the Chief Economist's (OCE) Resources and Energy Export Values Index (preliminary estimate) rose by 18 per cent year-on-year in the June quarter 2018. This was due to an 11 per cent rise in prices and a 6.5 per cent rise in volumes. Export values are estimated to have grown by 18 per cent in 2017–18, to reach \$226 billion, a record in nominal terms.

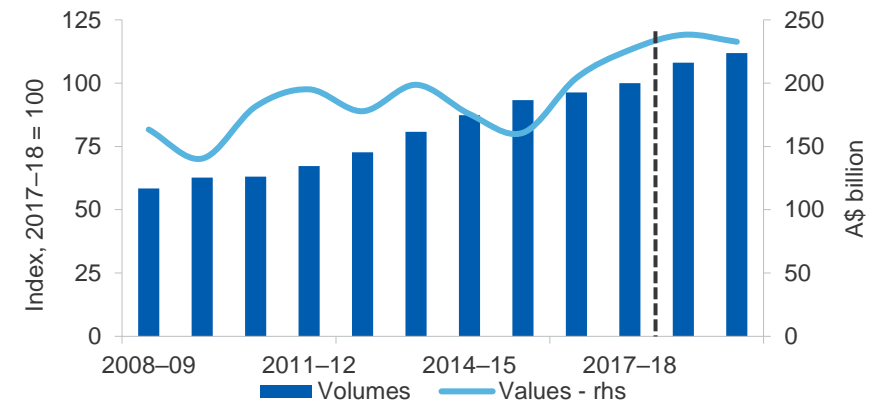
In 2018–19, an expected 2.0 per cent drop in prices is forecast to partly offset the impact of an 8.0 per cent increase in export volumes. As a result, the value of resource and energy exports is forecast to rise by 5.1 per cent to a record \$238 billion.

2019–20 is forecast to see export values drop by 2.3 per cent to \$233 billion, as a 6.1 per cent fall in prices is only partly offset by a 3.5 per cent rise in volumes.

### Commodity returns were lifted by a depreciation in the Australian dollar

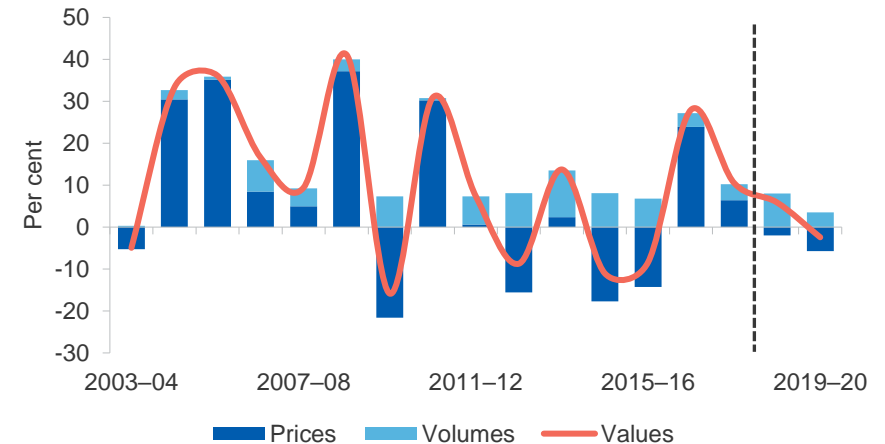
In Australian dollar terms, the OCE Resources and Energy Commodity Price Index grew by 5.1 per cent in the June quarter 2018 (preliminary estimate), to be 13.0 per cent higher than a year earlier.

**Figure 1.1: Australia's resources and energy export values and volumes**



Source: ABS (2018) International Trade in Goods and Services, 5368.0; Department of Industry, Innovation and Science (2018)

**Figure 1.2: Annual growth in Australia's resources and energy export values, contributions from prices and volumes**



Source: ABS (2018) International Trade in Goods and Services, 5368.0

Roughly two thirds of the rise in commodities prices in AUD terms was due to a depreciation in the Australian dollar against the US dollar. In US dollar terms, commodity prices rose by 1.6 per cent.

Prices for resources commodities rose by 3.7 per cent, while prices of energy commodities grew by 6.8 per cent in the June quarter 2018 in Australian dollar terms.

A surge in the (Australian dollar) prices of oil, LNG and thermal coal drove the rise in energy prices. Oil rose as the market anticipated tighter supply on lower Iranian and Venezuelan exports. Iran oil exports are expected to decline as a result of the US Administration’s withdrawal of the US from the Iran nuclear deal. The price received by Australian LNG exporters (which is mostly on oil-linked contracts) rose more than 11 per cent. LNG spot prices in Asia declined as strong winter heating demand abated and fewer production outages affected supply.

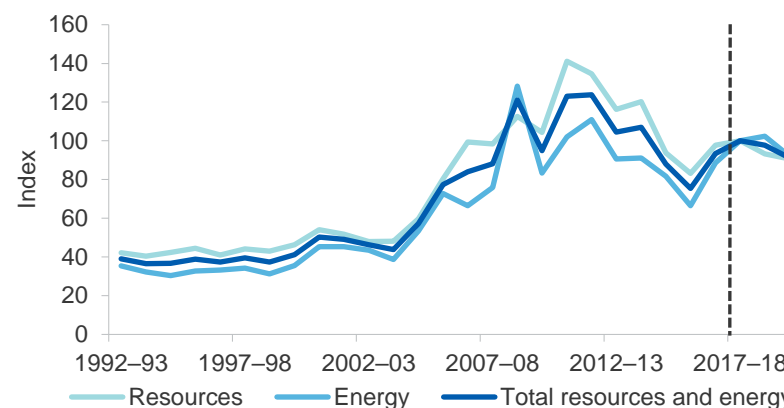
### 1.3 Prices

The iron ore price was supported by the recent ramp up in China’s steel production (following winter production cuts and a seasonal rebound in demand from the construction and manufacturing sectors). The iron ore price is forecast to gradually decline over the next two years, as Chinese steel production eases and Australian and Brazilian supplies grow.

Thermal coal spot prices rebounded from early weakness to finish down modestly in the June quarter. Prices are expected to ease through the latter half of 2018 and early 2019, as supply rises and demand moderates. Metallurgical coal spot prices declined noticeably in the June quarter, though declines early in the quarter were largely reversed in early June. Price swings were largely driven by variations in Chinese demand, with concerns about weaker Australian supply supporting prices.

The gold price recently drifted below the US\$1,310–1,360 an ounce range it had traded since the early days of 2018. Gold’s losses could have easily been worse considering the strength of the US dollar and rising bond yields; safe haven demand appears to have helped support the price.

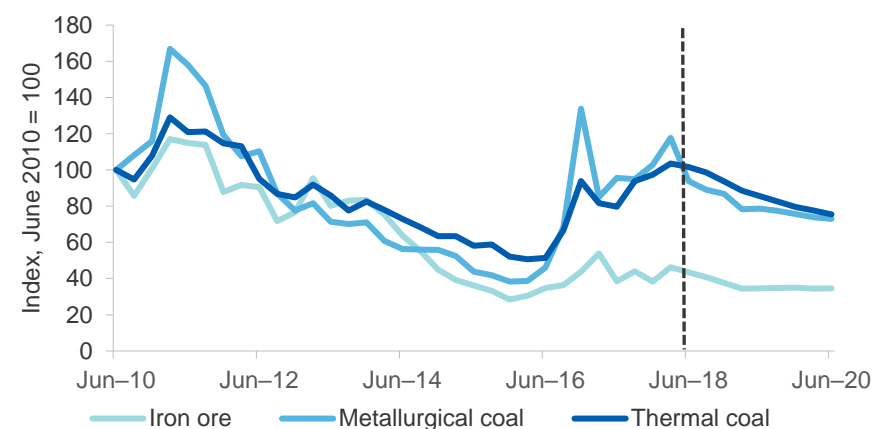
**Figure 1.3: Resources and energy export prices, AUD terms**



Notes: The export price index is based on Australian dollar export unit values (EUVs, export values divided by volumes); the export price index is a Fisher Price Index, which weights each commodity’s EUV by its share of total export values

Source: ABS (2018) International Trade in Goods and Services, 5368.0; Department of Industry, Innovation and Science (2018)

**Figure 1.4: Bulk commodity spot prices**



Notes: Prices are in US dollars, and are the international benchmark prices

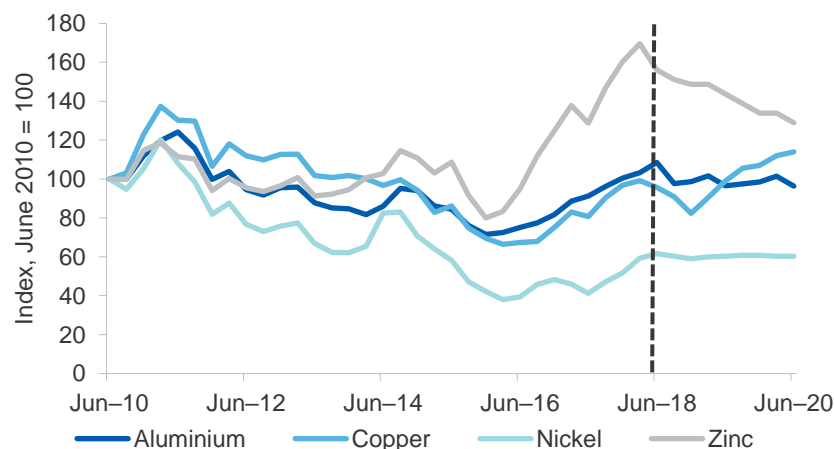
Source: Bloomberg (2018)

The rising US dollar and higher real US Treasury bond yields are expected to weigh on gold prices over the next two years. However, rising inflation and growing investor caution over the outlook for the global economy are expected to raise the demand for gold as an inflation hedge and a safe haven.

Base metal prices were mixed in the June quarter, with particularly upward moves in aluminium as US tariffs and sanctions on Rusal led to concerns about supply. Zinc prices appear to have peaked, as supply improves. The copper price finally broke decisively through the US\$7,000 per tonne mark, but may fall back over the rest of 2018. The lack of mine supply is expected to become a big issue in 2019 and 2020, driving prices higher.

The two year outlook for base metals prices is mixed. The aluminium price is likely to hold at relatively high levels, as China rationalises its production capacity. Nickel is forecast to be relatively stable, while zinc and copper prices are forecast to show opposite moves, as supply factors impact.

**Figure 1.5: Base metal spot prices**



Notes: Prices are in US dollars, and are the international benchmark prices

Source: Bloomberg (2018) London Metals Exchange

## 1.4 Export volumes

### Export volumes to grow, driven by LNG and iron ore

The 6.9 per cent year-on-year gain in the OCE's Resources and Energy Export Volumes Index (preliminary estimate) in the June quarter 2018 took the index to a new record high. The strong growth was boosted by weak exports in the June quarter 2017, when Cyclone Debbie cut exports of metallurgical coal.

LNG export volumes declined in the June quarter as Asian demand eased after the end of winter. The completion of the three remaining LNG projects currently under construction — Wheatstone, Ichthys and Prelude — over the rest of 2018, should boost resources and energy export volumes growth over the forecast period.

Iron ore supported growth in overall resources and energy export volumes in the June quarter, growing by almost 12 per cent. Growth in iron ore exports is forecast to be 3.2 per cent in 2018-19, before moderating to 1.3 per cent in 2019-20. Higher volumes will be driven by productivity improvements and replacement mines at Rio Tinto and BHP's operations, as well as the commissioning and ramp up of some smaller projects, including Mount Gibson Iron's Koolan Island. Higher volumes will be partly offset by the closure of some mines due to depletion, and the announced cessation of production at Cliff's Koolyanobbing mine in late 2018.

Metallurgical coal export volumes appear to have recovered further in the June quarter, and are forecast to grow modestly in 2018-19 and 2019-20. Strong prices will encourage a rise in production and export volumes. However, the potential capacity losses from proposed changes to Aurizon's maintenance schedule (the rail network operator of the Central Queensland Coal Network) continues to present a risk to the outlook

Thermal coal export volumes are forecast to rise modestly in the next two years. The only substantial addition over the outlook period is MACH Energy's Mount Pleasant mine, which is expected to start operations later in 2018 and gradually ramp up to 7.5 million tonnes of output annually.

Exports of gold and most base metals are forecast to grow modestly over the forecast period. The collective gains of aluminium, alumina and bauxite in 2017-18 will likely be maintained. Metal production has been incentivised by more supportive price environment in recent quarters. In particular, the volume of copper exports, which took a hit in 2016–17 is forecast to show strong growth in the forecast period. The growth will be largely due to a return to normal operations at existing mines such as Rocklands, Cadia Valley and Mount Lyell. Zinc exports dropped by a third in 2016–17, but are expected to grow by 28 per cent in 2018–19. New Century Resources, which acquired the Century mine — once the world’s largest zinc mine — in 2017, is seeking to extract ore from the mine’s huge tailings dam, which potentially holds more than 2.3 million tonnes of zinc.

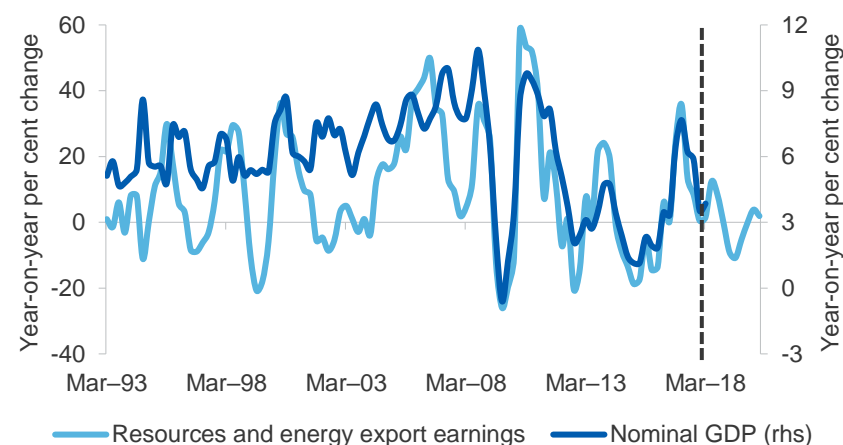
### 1.5 Contribution to GDP growth and investment

#### Mining industry continues to support overall economic growth

Australia’s Gross Domestic Product (GDP) grew by 1.0 per cent in the March quarter 2018, with mining industry value-added also growing by 1.0 per cent. The mining industry directly accounted for 7.8 per cent of the growth in Australia’s GDP in the quarter.

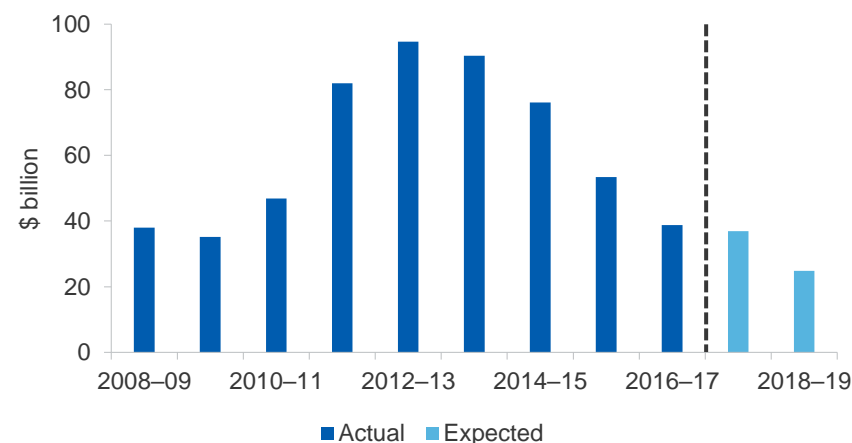
Oil and gas extraction and iron ore mining have been the largest contributors to mining industry value-added growth in the last two years, propelled by growing export volumes. In the case of oil and gas extraction, the contribution of rapidly growing export volumes has been partially offset by declining investment (from a high base). In the coming few years, it is likely that slowing exports growth, coupled with low investment, will see a declining contribution from the oil and gas sector to Australia’s GDP growth. Nonetheless, the absolute value of oil and gas’s contribution to Australia’s economy will remain high for many years to come. The contribution of mining services (particularly exploration services) and other mining to GDP is expected to grow in the coming quarters, as a more supportive price environment (for gold, base metals and lithium) incentivises exploration activities.

**Figure 1.6: Australia’s nominal GDP vs resources and energy export earnings**



Source: ABS (2018) National Accounts, 5206.0; International Trade in Goods and Services, 5368.0; Department of Industry, Innovation and Science (2018)

**Figure 1.7: Mining industry capital expenditure, fiscal year**



Notes: Chart data is in nominal terms

Source: ABS (2018) Private New Capital Expenditure and Expected Expenditure, 5625.0

### Mining investment appears to be bottoming out

Investment in Australia's mining industry eased in the March quarter 2018, and is expected to be little changed through the remainder of the year. Mining investment is expected to have declined by around 5–10 per cent in 2017–18, to around \$35 billion. This follows several years of sharp declines from the 2012–13 peak, when investment reached \$95 billion.

These figures are in line with those of the OCE *Resources and Energy Major Projects* survey published in the December 2017 *Resources and Energy Quarterly*, which points to a small downturn in mining investment in the short-term and then a levelling out in capex by the sector. A slight lift in publicly announced projects and projects under consideration should help to place a floor under mining investment beyond 2017–18.

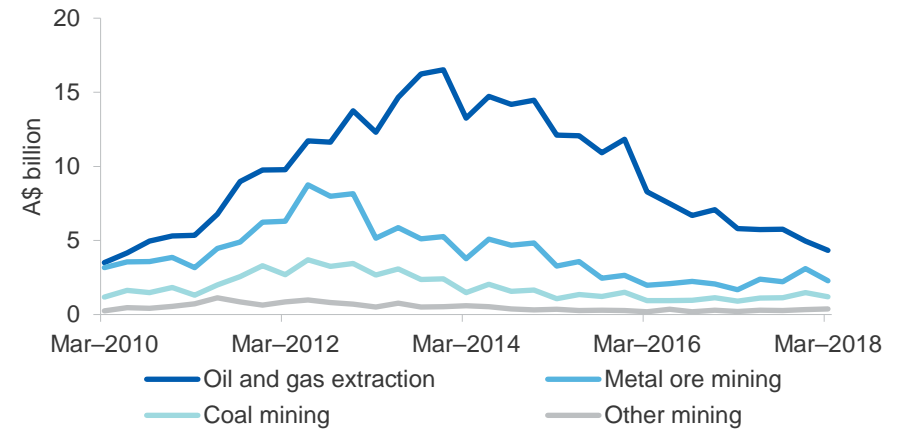
Oil and gas investment remains the largest driver of recent declines in overall capital spending, reflecting the progressive completion of the biggest LNG projects. Investment in the sector dropped by 13 per cent in the March quarter, to be down 25 per cent through the year. Projects completed or virtually completed include the US\$54 billion Gorgon LNG, as well as the substantial Wheatstone, Ichthys, and Prelude projects.

Coal mining investment picked up from its historically low level of a year ago, though some ground was lost in the latest quarter. Investment in metal ore mining rose by 36 per cent year-on-year. Investment is responding to recent strong gains in prices for copper, nickel and zinc, and on signs that higher demand growth for these metals will be sustained.

### 1.6 Revisions to the outlook

The outlook for Australia's resources and energy export earnings in 2017–18 has been revised down by around \$3.3 billion from the March 2018 *Resources and Energy Quarterly*. The downward revision reflects lower iron ore production and higher domestic consumption, as well as lower prices for metallurgical coal. The forecast for Australia's resources and energy export earnings has been revised up by \$7.8 billion (2018–19) and \$6.1 billion (2019–20), reflecting the larger than previously forecast rise in energy prices, and a weaker outlook for the AUD-USD exchange rate.

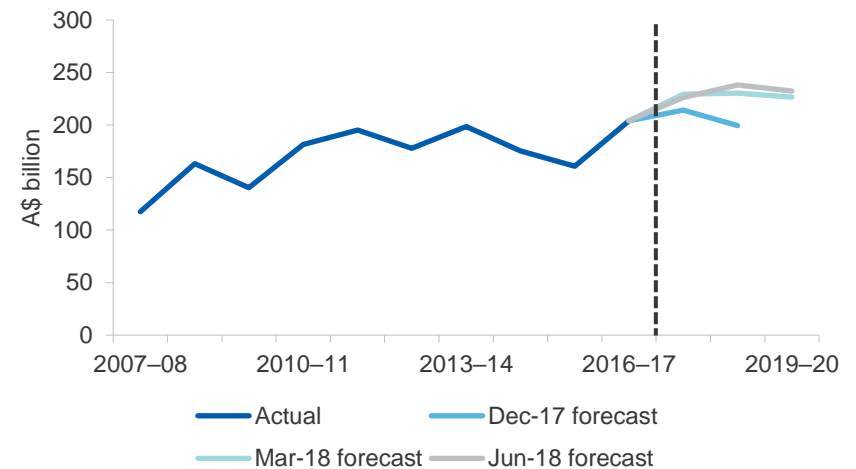
**Figure 1.8: Mining industry capital expenditure by commodity**



Notes: Other mining includes non-metallic mineral mining and quarrying and exploration and other mining support services; chart data is in nominal terms

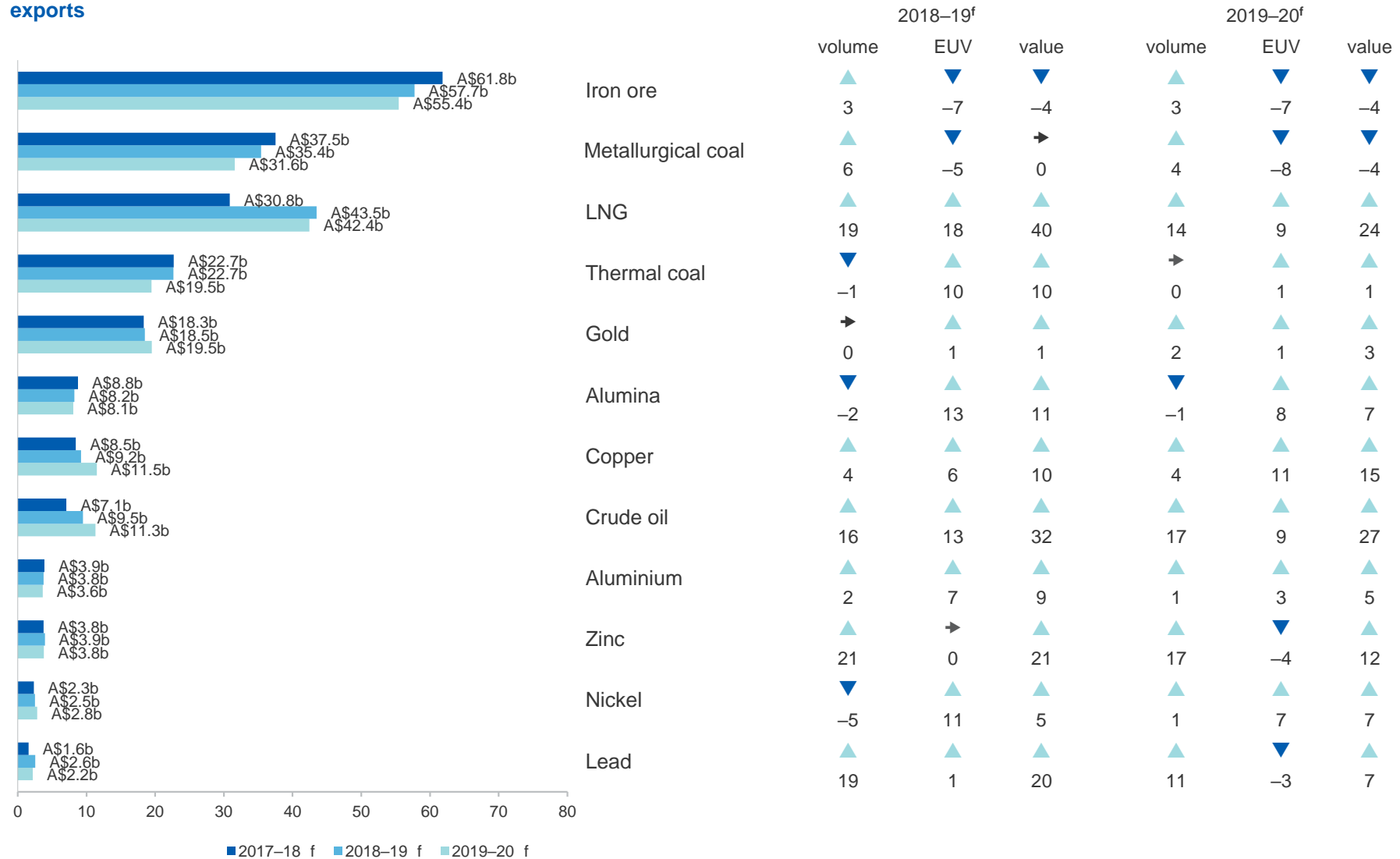
Source: ABS (2018) Private New Capital Expenditure and Expected Expenditure, 5625.0

**Figure 1.9: Revisions to the outlook**



Source: Department of Industry, Innovation and Science (2018)

**Figure 1.10: Australia's major resource and energy commodity exports**



Source: ABS (2018) International Trade in Goods and Services, 5368.0; Department of Industry, Innovation and Science (2018)  
Notes: per cent change is compound annual growth (CAGR) from 2016-17 to the specified year; f forecast.

**Table 1.1: Outlook for Australia's resources and energy exports**

	Unit	Annual percentage change						
		2016–17	2017–18 <sup>s</sup>	2018–19 <sup>f</sup>	2019–20 <sup>f</sup>	2017–18	2018–19 <sup>f</sup>	2019–20 <sup>f</sup>
Resources and energy	A\$m	204,130	226,312	238,183	232,692	10.9	5.2	-2.3
– real <sup>b</sup>	A\$m	208,131	226,312	232,714	222,128	8.7	2.8	-4.5
Energy	A\$m	85,328	101,929	115,863	109,829	19.5	13.7	-5.2
– real <sup>b</sup>	A\$m	87,000	101,929	113,203	104,843	17.2	11.1	-7.4
Resources	A\$m	118,802	124,383	122,320	122,863	4.7	-1.7	0.4
– real <sup>b</sup>	A\$m	121,131	124,383	119,511	117,285	2.7	-3.9	-1.9

Notes: **b** In 2017–18 Australian dollars; **f** forecast; **s** estimate.

Source: ABS (2018) International Trade in Goods and Services, 5368.0; Department of Industry, Innovation and Science (2018)

**Table 1.2: Australia's resources and energy commodity exports, selected commodities**

	unit	Volume			Value			
		2016–17	2019–20 <sup>f</sup>	CAGR	unit	2016–17	2019–20 <sup>f</sup>	CAGR
Alumina	kt	18,230	17,638	-1.1	A\$m	6,655	8,070	6.6
Aluminium	kt	1,329	1,380	1.3	A\$m	3,167	3,629	4.6
Copper	kt	920	1,030	3.8	A\$m	7,569	11,498	15.0
Gold	t	334	356	2.2	A\$m	18,013	19,528	2.7
Iron ore	Mt	818	887	2.7	A\$m	62,617	55,437	-4.0
Nickel	kt	190	194	0.7	A\$m	2,275	2,823	7.5
Zinc	kt	1,008	1,601	16.7	A\$m	2,688	3,820	12.4
LNG	Mt	52	77	13.7	A\$m	22,308	42,446	23.9
Metallurgical coal	Mt	177	200	4.2	A\$m	35,335	31,577	-3.7
Thermal coal	Mt	202	201	-0.1	A\$m	18,902	19,465	1.0
Oil	kbd	221	355	17.2	A\$m	5,476	11,311	27.4
Uranium	t	7,081	7,240	0.7	A\$m	596	693	5.2

Notes: **f** forecast; CAGR is compound annual growth rate in percentage terms from 2016–17 to 2019–20.

Source: ABS (2018) International Trade in Goods and Services, 5368.0; Department of Industry, Innovation and Science (2018)