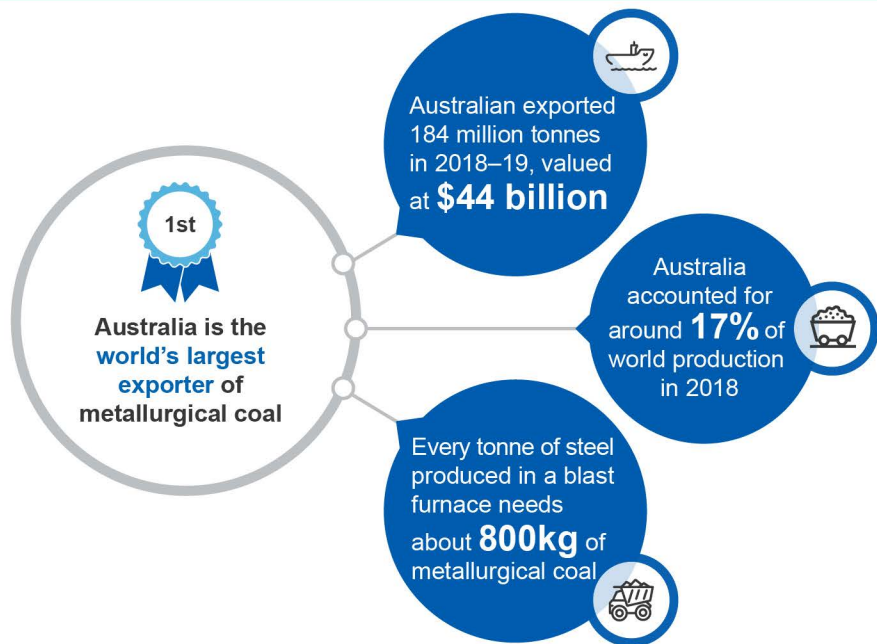
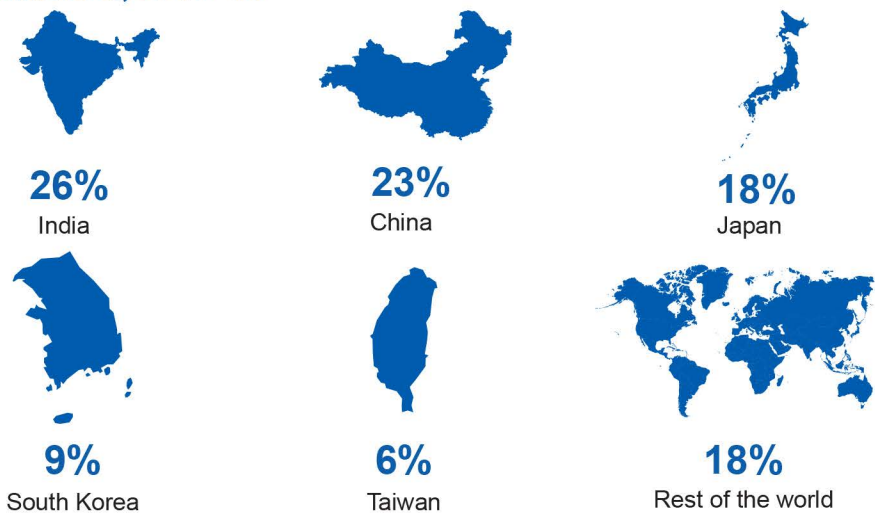


Metallurgical Coal

Resources and Energy Quarterly December 2019

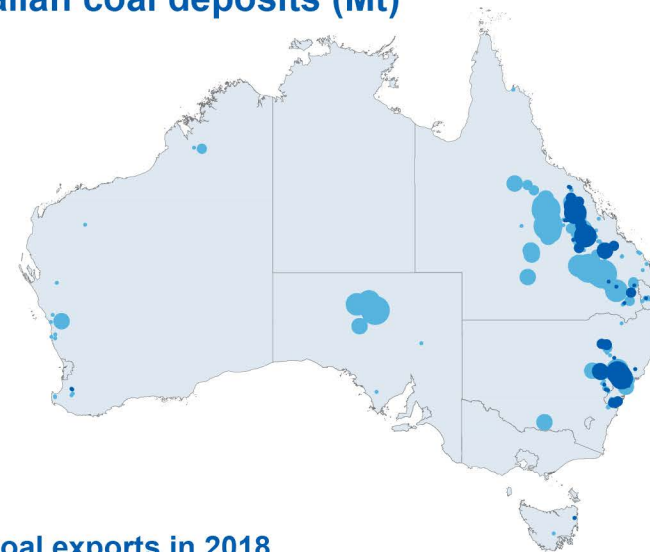


Australia's metallurgical coal export earnings by destination, 2018–19

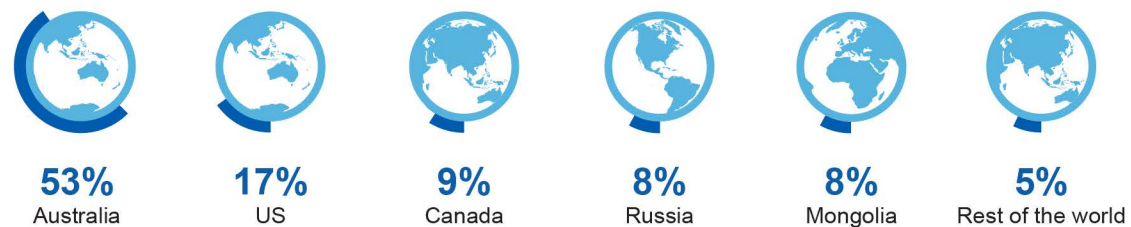


Major Australian coal deposits (Mt)

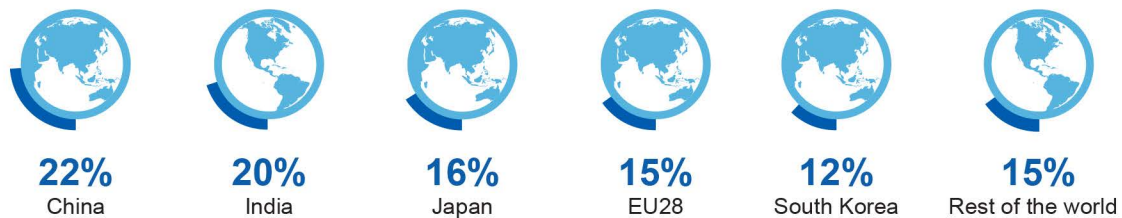
- <500
- 500-1,000
- 1,001-2,000
- 2,001-4,000
- >4,000
- Deposit
- Operating mine



Global share of metallurgical coal exports in 2018



Global share of metallurgical coal imports in 2018



5.1 Summary

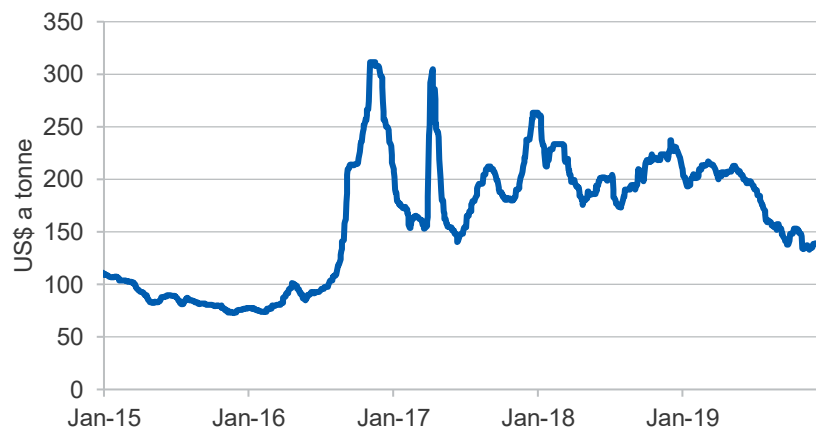
- The December quarter has seen a further fall in the premium Australian hard coking coal (HCC) spot price, a decline that commenced in the second half of 2018. Rising supply and soft demand is expected to see the price trade in a US\$120–170 a tonne range over the outlook period.
- Australia's export volumes are forecast to grow from 184 million tonnes in 2018–19 to 197 million tonnes by 2020–21, reflecting production growth from restarts and new capacity in Queensland's Bowen Basin.
- Australia's metallurgical coal export earnings reached a new record of \$44 billion in 2018–19. However, low prices are expected to drive a reduction in export earnings, to \$35 billion in 2019–20 and 2020–21.

5.2 Prices

The premium Australian HCC spot price has hit a three year low

The premium Australian HCC spot price declined noticeably over the December quarter, hitting a 38-month low of US\$134 a tonne in early November (Figure 5.1). At an estimated average of US\$140 a tonne in the December quarter, the price was around 10 per cent lower than the September quarter, and more than a third lower year-on-year.

Figure 5.1: Australian premium HCC spot price, daily



Source: Platts (2019); Department of Industry, Innovation and Science (2019)

In recent months, the price has declined more than previously anticipated, driven by a combination of factors. Demand growth has been relatively muted — against a background of deteriorating global economic conditions (see the *macroeconomic outlook* chapter) — and there has been weak ex-China steel output. While Chinese imports of metallurgical coal have been strong, the seaborne market has been anticipating action by Beijing to enforce an (unspecified) annual cap, declining steel margins in China and slowing ex-China demand. Indian steel demand has been weak, thanks to relatively sluggish steel production. In the meantime, supply has been growing from Australia, Canada and Mongolia.

The metallurgical coal price is forecast to level out

The outlook for Chinese imports remains subject to substantial uncertainty, with the extent of any economic slowdown, stimulatory macroeconomic policies and environmental and import measures representing key (opposing) risks. Chinese metallurgical coal imports are expected to be around 68 million tonnes in 2019, slightly higher than in 2018. Imports of that level in 2020 and 2021 would be likely to see seaborne metallurgical coal prices recover.

The seaborne market is forecast to see supply remain firm, as the low Australian dollar allows Australian producers to remain profitable, and as Canada steadily brings on new capacity. United States exports will remain under pressure at prices averaged in the December quarter: unless the US dollar undergoes a substantial decline against the currencies of Australia and Canada, high-cost US exporters will continue to cut back production and close mines. Given Australia's dominance of the seaborne market, weather, logistics and other disruptions in Queensland have the potential to drive intermittent spikes in the metallurgical coal price.

India is expected to be the key source of import growth, offsetting a gradual easing in demand from China. Strong demand from India and emerging Asia, in combination with high-cost supply exiting the market, is expected to help put a floor under prices.

Over the outlook period, the premium HCC spot price is expected to fall from an average of US\$181 a tonne in 2019 to US\$158 a tonne in 2021.

5.3 World trade

After three years of robust gains, growth in world metallurgical coal trade is expected to be relatively sluggish over the outlook period to 2021. The decisions of the Chinese Government will (continue to) have a significant impact on the market: Beijing’s efforts to maintain economic growth — through a series of measures including looser controls on the property market and higher infrastructure spending — will be offset by the impact of import and winter pollution restrictions. Recent low prices are expected to both boost demand and reduce supply from high-cost producers.

World imports

Resilient steel production in China has not been sufficient to offset weaker ex-China seaborne demand for metallurgical coal in recent months.

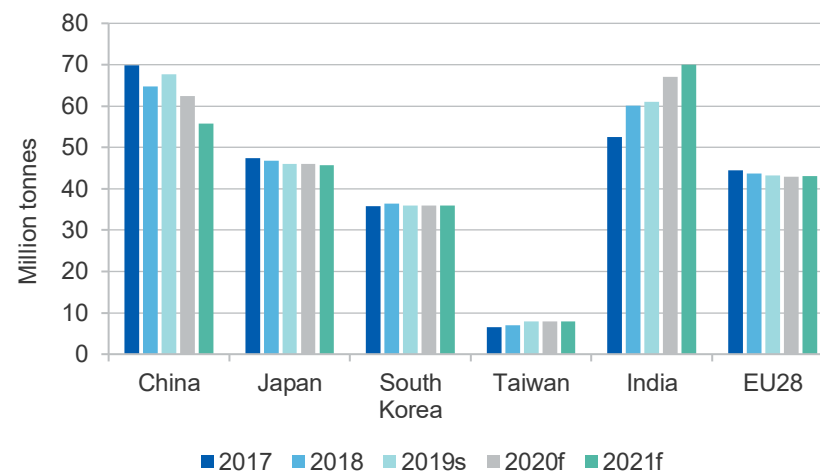
Demand is projected to be subdued or decline marginally among most major importers, including China, as world industrial production growth slows and possibly even contracts. European Union (EU) steel demand looks set to fall by 3 per cent in 2019. Underlying the bearish outlook is an ongoing slump in the manufacturing sector, weak steel exports, uncertainty around Brexit and the impact of trade tensions between the US and several of its major trading partners. India is expected to emerge as the key source of demand growth over the outlook period (Figure 5.2).

China’s metallurgical coal imports forecast to ease

With metallurgical coal imports in 2019 (Figure 5.3) already significantly higher on a year-on-year basis — up by 6.1 per cent on 2018 — the market is seeing a drop in imports as 2019 ends. Importers scrambled to land cargoes in August-September before Chinese ports reached their calendar 2019 quotas. Chinese demand for metallurgical coal has been driven by robust steel production, which grew by around 8 per cent year-on-year (see the *Steel* chapter).

The Chinese government has acknowledged a challenging external environment, due to the US-China trade tensions. The resolution of those tensions — in part or in full — would likely see a rebound in economic activity but an offsetting fall in government stimulus efforts.

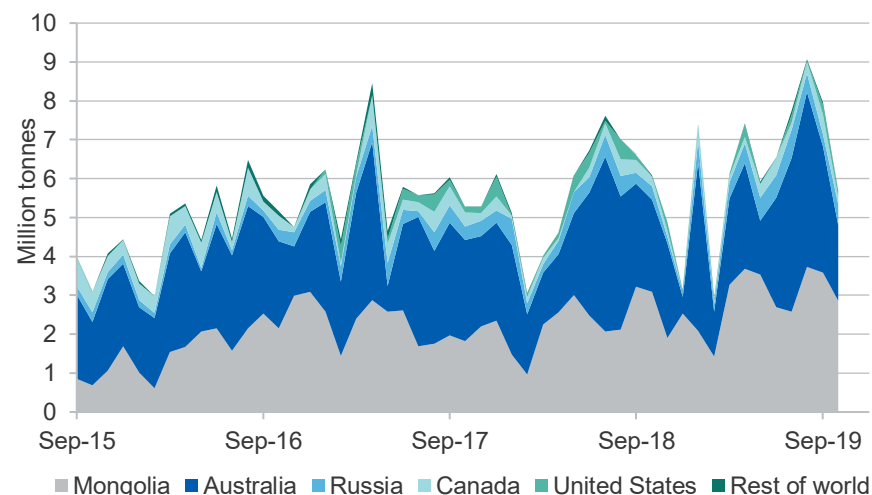
Figure 5.2: Metallurgical coal imports



Notes: s Estimate f Forecast

Source: IHS (2019); Department of Industry, Innovation and Science (2019)

Figure 5.3: China’s metallurgical coal imports



Source: Bloomberg (2019) National Bureau of Statistics of China

In the face of fallout from the US-China trade tensions, the Chinese government appears less intent on enforcing winter production curbs on metal producing operations (enforced in order to limit smog) which would have otherwise potentially lowered economic activity.

At current price levels, China's metallurgical coal producers will face significant competition from imports. Imports are forecast to fall back, as steel production eases in line with economic growth.

India's metallurgical coal imports have swung around in 2019

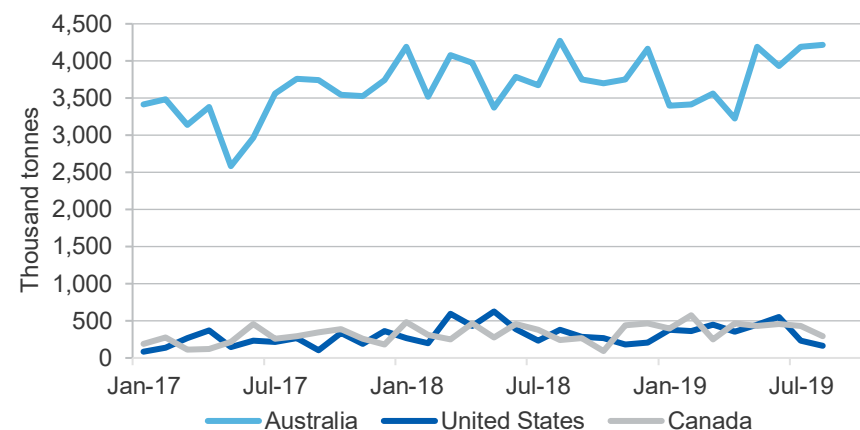
India's metallurgical coal imports have remained at record levels in recent months, well above the 5 million tonne mark. Australia remains the supplier of an overwhelming majority of these imports, with the US and Canada well behind (Figure 5.4).

Government initiatives are underway to diversify the country's sources of metallurgical coal imports, and one such recent outreach resulted in an agreement to co-operate with Russia for the supply of coal for use in plants using the pulverised coal injection (PCI) method. The Indian government is planning heavy infrastructure spending, aiming to bring electricity and housing to all citizens and also build 60,000 kilometres of additional highways, dedicated freight corridors, 100 airports, double its port capacity and build metro networks in 50 cities.

Steel production is expected to grow to meet rising domestic consumption. However, the pace at which India's steel sector is able to expand remains uncertain, and presents a risk to the outlook. Slowing economic growth has been impacting on steel demand — and consequently metallurgical coal — however recent stimulatory monetary and fiscal measures are expected to underpin growth in 2020 and 2021.

India's metallurgical coal imports are forecast to grow at an average annual rate of 5.2 per cent over the outlook period, reaching 70 million tonnes in 2021. India is expected to overtake China as the world's largest importer of metallurgical coal next year, as the degree of China's self-sufficiency rises and India's import needs grow.

Figure 5.4: India's metallurgical coal imports by country



Source: IHS Markit (2019)

Japan and South Korea's imports forecast to remain subdued

Metallurgical coal imports into Japan fell by 2.1 per cent in the first ten months of 2019. Steel output — which fell by 3.1 per cent over the same period — has weakened, as motor vehicle sales/production weakens and construction activity for the 2020 Tokyo Olympics comes to an end.

South Korea's imports of metallurgical coal grew by 0.8 per cent year-on-year in the first nine months of 2019, consistent with trends in steel output (which grew by 0.6 per cent over the same period).

Metallurgical coal imports by both Japan and South Korea — the third and fourth largest importers, respectively — are forecast to remain subdued over the outlook period. Relatively slow global and domestic economic growth is expected to weigh on demand for steel products in both nations.

Metallurgical coal imports forecast to rise in emerging economies

Metallurgical coal imports are forecast to grow in South East Asia, although from a low base. Several blast furnace steel plants are expected to come online over the outlook period — notably in Vietnam — supporting import demand for metallurgical coal.

World exports

Global metallurgical coal exports are forecast to show minor growth over the outlook period, as weak prices induce some production cuts. Australia is expected to lead the bulk of the additions to seaborne supply (see section 5.4) and to comfortably dominate the seaborne metallurgical coal market. Australia's market share is expected to account for 55 per cent of world exports in 2021, lower than 60 per cent — the share achieved in the pre-Cyclone Debbie period. Russia, Canada, Mozambique and Mongolia have all raised their exports and their market share in recent years.

Exports from the United States forecast to remain under pressure

The US is the world's second largest exporter of metallurgical coal. Exports grew substantially between 2016 and 2018 — in line with higher prices, and to fill the supply gap created by the loss of Australian supply caused by Cyclone Debbie in 2017. However, US exports have declined significantly in 2019, driven by a halving in exports to China (Figure 5.5).

Some US producers have filed for bankruptcy protection as prices fall and profits disappear and even turn negative. Others are believed to be considering eliminating overtime and cutting operations to a five-day work week. US miners have relatively high costs and freight rates to Asian markets, and have the added handicap of a strong currency compared with Australia. A resolution of US-China trade tensions could see a modest recovery in Chinese imports of US metallurgical coal.

Mongolia's metallurgical coal exports to China have surged

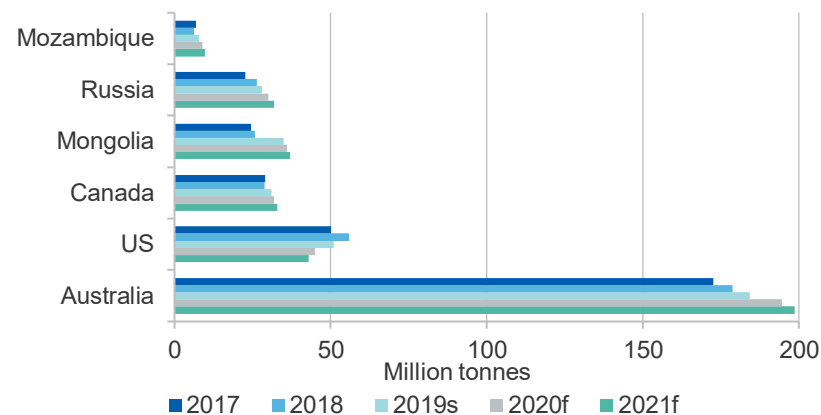
Mongolian metallurgical coal exports have risen by 28 per cent in 2019, and Mongolia has overtaken Canada as the world's third largest exporter. Mongolia is set to exceed Australia as the largest supplier to China in 2019. In November, Beijing ordered tighter controls on imports trucked in from Mongolia, slowing the flow sharply. Growth in Mongolia's metallurgical coal exports is thus likely to slow over the outlook period.

New capacity expected to support Canada's export growth

Canada's metallurgical coal exports grew by 5.4 per cent year-on-year in the first nine months of 2019, driven by a sharp increase in shipments to

China, South Korea and India. India is seeking higher diversity of supply, after being caught out by weather-related disruptions to Australian supply in 2018. Canada's metallurgical coal exports are forecast to grow modestly over the outlook period, driven by new additions to capacity.

Figure 5.5: Metallurgical coal exports



Notes: s Estimate, f Forecast

Source: IHS (2019); Department of Industry, Innovation and Science (2019)

Exports from Russia have levelled out

After strong growth in 2018, Russia's exports of metallurgical coal have been flat in 2019. Stronger exports to Japan and China have been offset by weaker exports to South Korea. Russia is forecast to add another 4 million tonnes to seaborne supply in 2020 and 2021. Growth is expected to be driven by new capacity, rail and port expansions and a weak Ruble.

Mozambique's exports to grow, but headwinds remain

Mozambique currently has two exporting metallurgical coal mines: Vale's Moatize and Jindal Steel's Songa mines. Mozambique has faced a number of headwinds in growing its exports. Mozambique's metallurgical coal exports are forecast to rise modestly, as Moatize ramps up to full capacity, but the outlook is clouded by considerable risks, stemming from transport, quality and community opposition issues. Moatize's owners are aiming for annual production of 18 million tonnes in the medium term.

5.4 Australia

Metallurgical coal export earnings set to decline from a record high

After a record year in 2018–19, Australia’s metallurgical coal export earnings are set to decline noticeably over the outlook period (Figure 5.6). Significantly lower prices (than in 2018) over the outlook period will more than offset the impact of higher export volumes (Figure 5.7).

Metallurgical coal export earnings estimated to have reached a record high

Relatively low prices are expected to drive the sharp fall in metallurgical coal export earnings in 2019–20 (Figure 5.6). Exports are forecast to be \$35.6 billion, and then remain largely flat in 2020–21. Export volumes are forecast to be 187 million tonnes in 2019–20, and rise to 197 million tonnes in 2020–21.

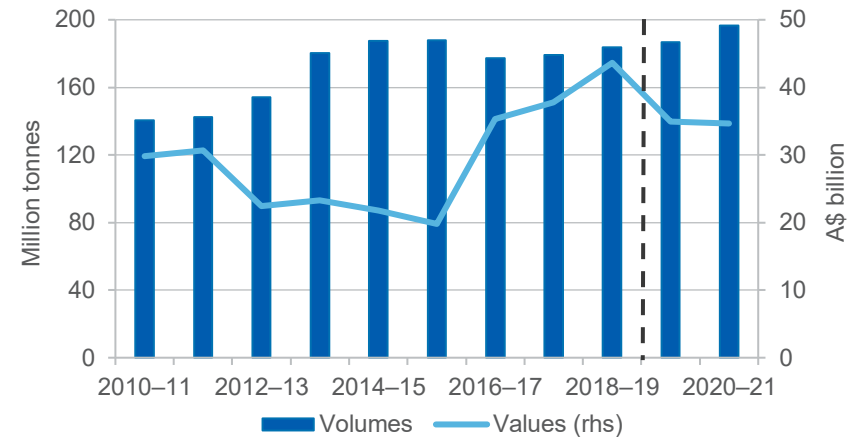
The forecast growth in Australia’s metallurgical coal export volumes reflects restarts and ramp-ups at several mines. Supply has also been recovering from disruptions caused by weather, technical and transport issues. However, the pipeline of new projects is likely to thin out if prices defy expectations and fall substantially further from current levels.

Beyond the outlook period, Anglo American has approved the Aquila project at the Capcoal operations, which will replace the Grasree underground mine. Anglo is also studying phase 2 at the Moranbah-Grosvenor operations. This will include de-bottlenecking and expansion of the coal handling and preparation plant, in order to increase capacity by 4-6 million tonnes per annum (30-40 per cent) from 2021.

Revisions to the outlook

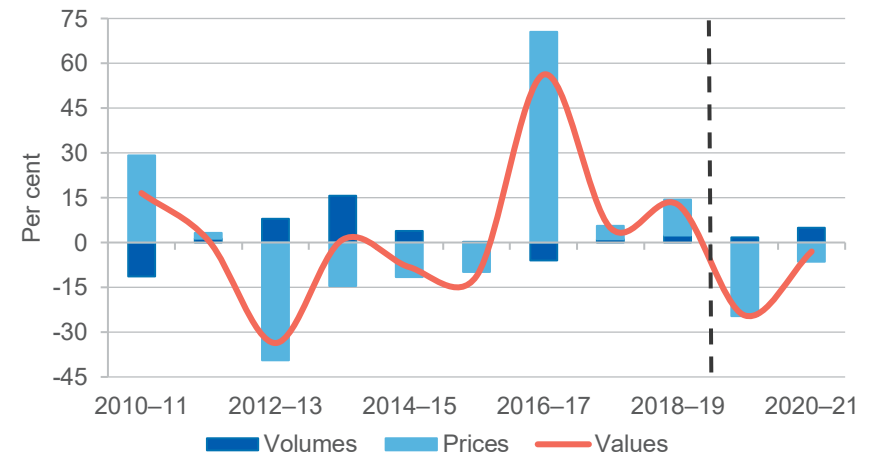
The forecasts for Australia’s metallurgical coal export earnings have been revised down by \$1.7 billion in 2019–20 compared to the September 2019 *Resources and Energy Quarterly*. This reflects a downward revision to the forecast price in 2019 and 2020 — which has declined in the December quarter 2019 more rapidly than expected — more than offsetting the impact of a downward revision to the exchange rate. Forecast export earnings in 2020–21 are broadly unchanged.

Figure 5.6: Australia’s metallurgical coal exports



Source: ABS (2019) International Trade, Australia 5368.0; Department of Industry, Innovation and Science (2019)

Figure 5.7: Annual growth in Australia's metallurgical coal exports values, and contributions from export volumes and prices



Notes: Price changes are based on export unit values.

Source: ABS (2019) International Trade, Australia 5368.0; Department of Industry, Innovation and Science (2019)

Table 5.1: World trade in metallurgical coal

	Unit	2018	2019 ^s	2020 ^f	2021 ^f	Annual percentage change		
						2019 ^s	2020 ^f	2021 ^f
World trade	Mt	337	347	355	358	3.2	2.1	1.1
Metallurgical coal imports								
China	Mt	65	68	62	56	4.5	-7.6	-10.8
India	Mt	60	61	67	70	1.4	9.8	4.5
Japan	Mt	47	46	46	46	-1.5	0.0	-0.8
European Union 28	Mt	44	43	43	44	-0.9	-0.9	2.5
South Korea	Mt	36	36	36	36	-1.3	0.0	0.0
Metallurgical coal exports								
Australia	Mt	179	184	195	199	3.1	5.6	2.1
United States	Mt	56	51	45	43	-8.6	-11.8	-4.4
Canada	Mt	29	31	32	33	7.2	3.2	3.1
Russia	Mt	26	28	30	32	6.0	7.1	6.7
Mongolia	Mt	26	35	36	37	36.2	2.9	2.8
Mozambique	Mt	6	8	9	10	28.2	11.1	10.0

Notes: **e** Estimate. **f** Forecast

Source: IEA (2019) Coal Information; IHS (2019); Department of Industry, Innovation and Science (2019)

Table 5.2: Metallurgical coal outlook

World	Unit	2018	2019 ^s	2020 ^f	2021 ^f	Annual percentage change		
						2019 ^s	2020 ^f	2021 ^f
Contract prices ^e								
– nominal	US\$/t	208	187	156	159	-9.8	-16.8	2.1
– real ^d	US\$/t	211	187	153	153	-11.3	-18.5	0.0
Spot prices ^g								
– nominal	US\$/t	207	181	158	158	-12.7	-12.9	0.5
– real ^d	US\$/t	211	181	154	152	-14.2	-14.7	-1.6
Australia	Unit	2017–18	2018–19	2019–20 ^f	2020–21 ^f	2018–19	2019–20 ^f	2020–21 ^f
Production	Mt	184	187	188	200	2.1	0.2	6.3
Export volume	Mt	179	184	187	197	2.4	2.0	5.3
– nominal value	A\$m	37,793	43,638	35,576	35,566	15.5	-18.5	0.0
– real value ⁱ	A\$m	39,080	44,393	35,576	34,904	13.6	-19.9	-1.9

Notes: **d** In 2019 US dollars. **e** Contract price assessment for high-quality hard coking coal. **i** In 2019–20 Australian dollars. **s** Estimate **f** Forecast **g** Hard coking coal fob Australia east coast ports **h** European Union 28 encompasses the aggregate output and demand for the 28 states which comprise the European Union.

Source: ABS (2019) International Trade in Goods and Services, Australia, 5368.0; Department of Industry, Innovation and Science (2019); Platts (2019)