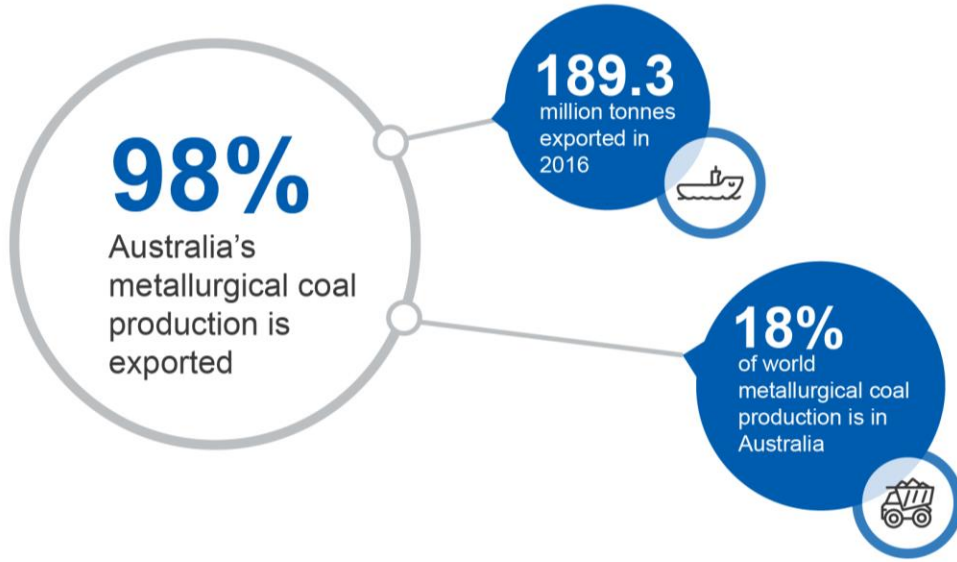
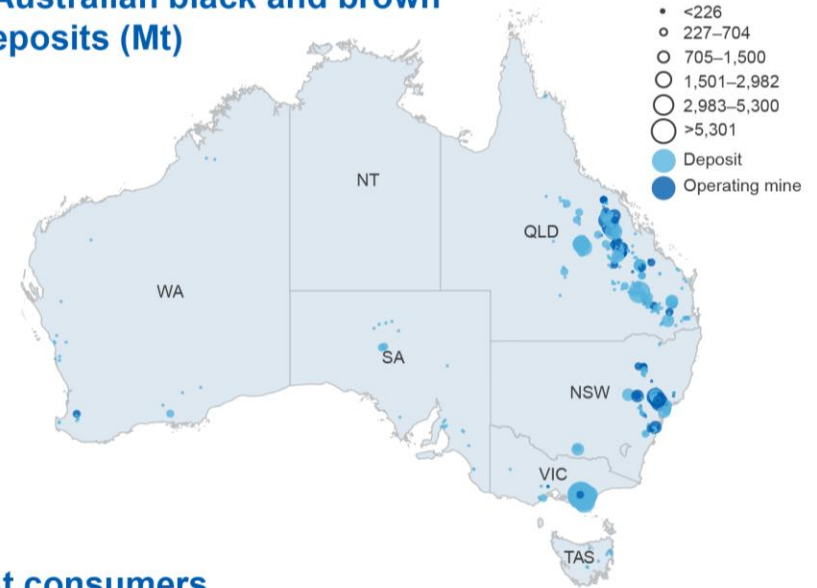


Metallurgical coal

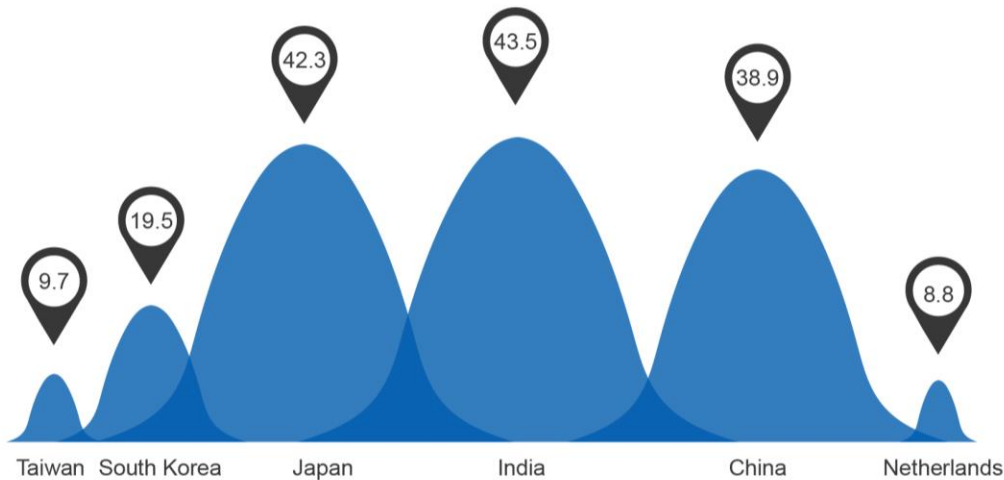
Resources and Energy Quarterly June 2017



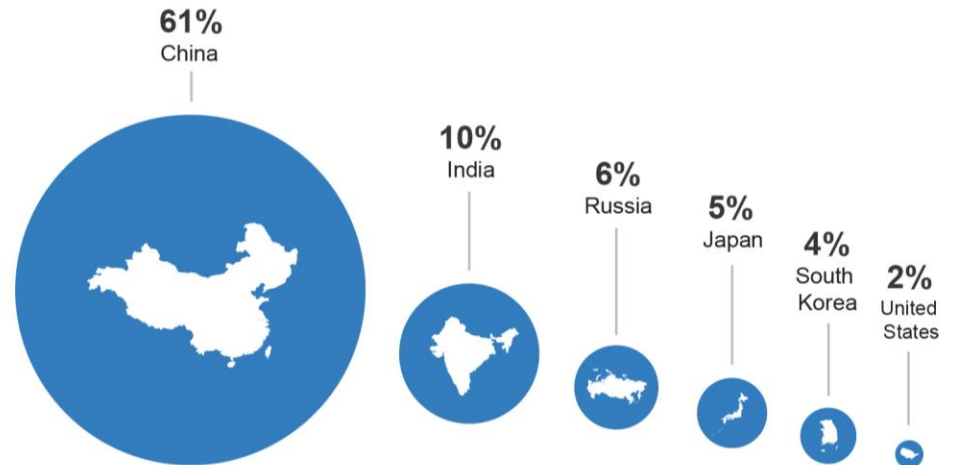
Major Australian black and brown coal deposits (Mt)



Australian metallurgical coal importers (million tonnes)



Largest consumers



Market Summary

Global metallurgical coal spot prices spiked in April, in the wake of the destruction left by Cyclone Debbie in Queensland, the world's largest metallurgical coal producing region. Important rail links to export ports were cut, tightening the export market. Since April, a return to normal of rail operations has seen prices decline. Prices are forecast to fall modestly further over the rest of the outlook period. Overall export earnings for 2016–17 are estimated to have been a record \$36 billion. However, due to price declines over the outlook period, export earnings for 2017–18 and 2018–19 are forecast to be lower.

Prices

Spot price decline expected to continue

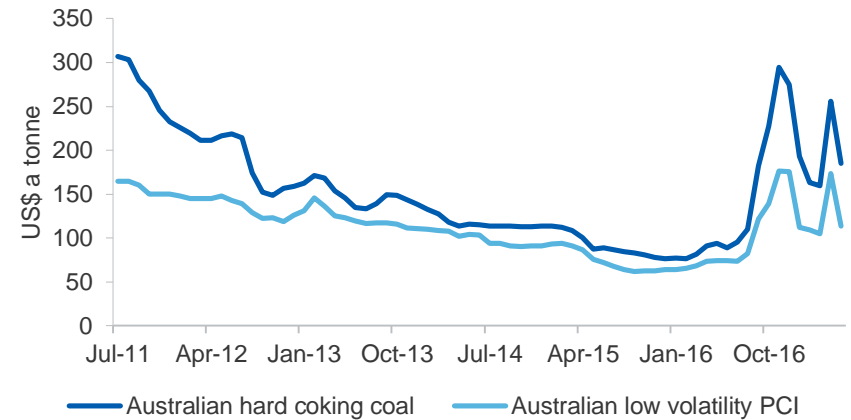
Spot prices rallied in April 2017, to average US\$261 a tonne for the month. The rally in price was largely driven by a sharp decline in exports from Queensland, caused by the fallout from Cyclone Debbie. Since the rally in April, spot prices have started to decline, with prices in the June quarter estimated to have averaged US\$187 a tonne.

The combination of easing Government-mandated coal mine closures — and restricted days of coal mine operation in — China, and a recovery in metallurgical coal operations in Australia, are expected to have a normalising (no weather disruptions) impact on global production levels. These factors are forecast to result in spot prices in 2017 averaging around US\$158 a tonne.

June quarter benchmark contract prices paid to Australian metallurgical coal producers by Japanese steel producers were still not settled as of late-June. The significant delay in landing on a June quarter price was largely due to Cyclone Debbie. Reports suggest that, in lieu of a quarterly contract price, producers and consumers adopted a spot or index-linked approach as a pricing mechanism for the June quarter.

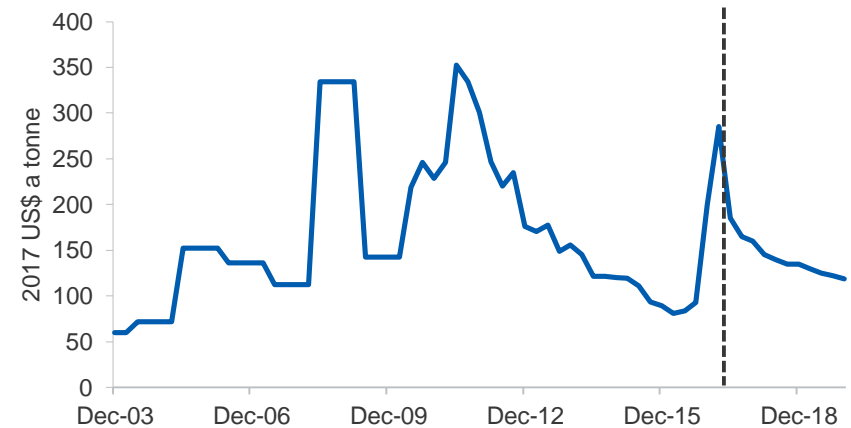
Australian benchmark prime hard metallurgical coal contract prices are forecast to average US\$191 a tonne in 2017 — a 67 per cent increase from 2016, reflecting the high March quarter contract price of US\$285 a tonne. Contract prices for the remaining two quarters are forecast to be substantially lower.

Figure 5.1: Spot prices



Source: IHS (2017)

Figure 5.2: Benchmark contract prices for Australian metallurgical coal



Source: Department of Industry; Innovation and Science (2017)

The fall in price in the latter half of 2017 is expected to be driven by both increased metallurgical coal production in China and a return to average production levels in Australia. Price declines may also be exacerbated by further increases in metallurgical coal production at mines unaffected by Cyclone Debbie, as producers (even high-cost ones) respond to the (still relatively high) price level.

Australian benchmark metallurgical coal contract prices are forecast to decline by 28 per cent in 2018, to US\$137 a tonne. A further decline of 13 per cent to US\$119 a tonne is forecast in 2019, as import demand and supply normalise. China is expected to be a large contributor to the improved balance between supply and demand, as its metallurgical coal production increases. Spot prices are expected to follow the same trend as contract prices, with an increase in the average price in 2017 but declines in 2018 and 2019.

Premium hard coking coal spot prices are forecast to increase by 8.0 per cent in 2017 to US\$159 a tonne. In 2018, premium spot prices are forecast to decline by 18 per cent to US\$130 a tonne, with a further 14 per cent decline to US\$112 a tonne forecast in 2019.

World trade

World metallurgical coal trade in 2017 is forecast to decline by 3.0 per cent from 2016 levels, to 306 million tonnes, as import demand from China declines. In 2018, a decline in metallurgical coal demand for steel production in China is expected to be partially offset by increased import demand from India, with trade forecast to decline by only 1.0 per cent to 302 million tonnes. In 2019, world trade is forecast to increase by 1.0 per cent to 306 million tonnes. This increase is expected to be driven by growing demand from India.

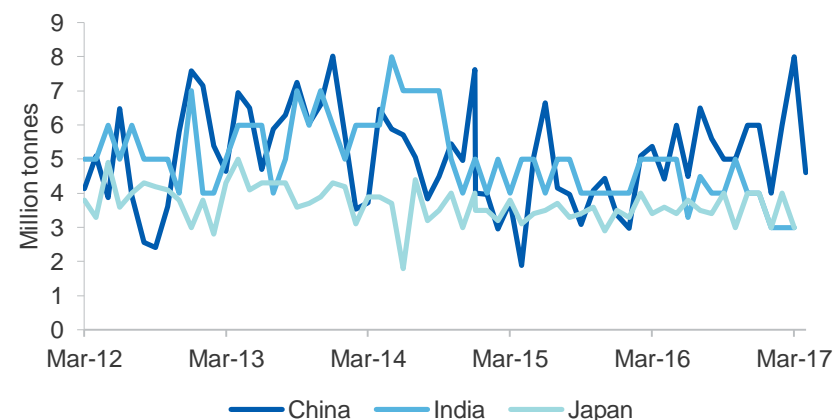
China's metallurgical coal imports to decline over the outlook period

China is the largest metallurgical coal consumer, the second largest importer, and the fourth largest consumer of Australian metallurgical coal. China's metallurgical coal imports rose by 42 per cent year-on-year in the five months to May 2017. The increase in imports was supported by the highest steel production output on record in China in April 2017.

Despite the year-on-year lift in imports in the first four months of 2017, metallurgical coal imports are forecast to gradually decline from 2016 levels over the rest of 2017 — declining by 5.9 per cent to 56 million tonnes, as China's revised coal mining closure policies continue to take effect. The Chinese Government has made it clear that specialty coal output (i.e. metallurgical coal) will not be cut. This change in policy — as well as a moderate level of imports — is expected to ensure sufficient metallurgical coal supply for China's domestic steel production over 2017.

China's metallurgical coal imports are forecast to decline by 11 per cent in 2018 to 50 million tonnes, and by a further 12 per cent in 2019 to 44 million tonnes. The outlook for metallurgical coal imports in China is expected to be impacted by moderating growth in domestic steel demand, as Beijing's fiscal stimulus fades and activity cools in the construction sector.

Figure 5.3: Monthly import volumes of top three major importers



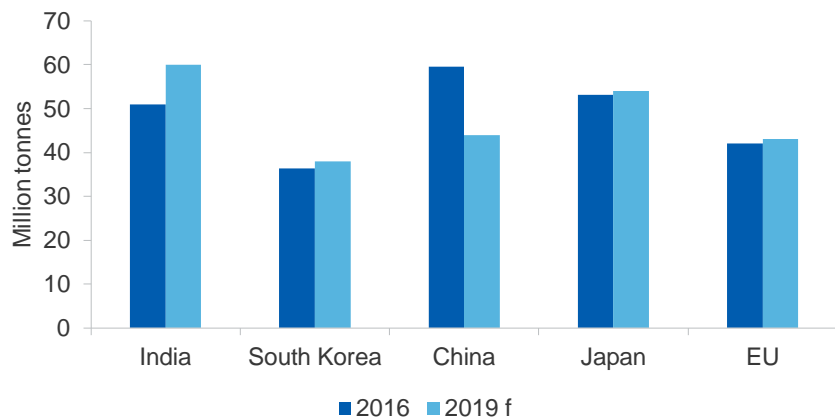
Source: IHS (2017)

India's metallurgical coal imports are forecast to increase

India is the world's largest importer of metallurgical coal. It is also the largest consumer of Australia's high quality metallurgical coal, and is expected to remain so over the outlook period. India's metallurgical coal imports declined by 16 per cent year-on-year in the March quarter. This decline follows a year-on-year 12 per cent increase in the December quarter, which came about despite the sharp rise in metallurgical coal prices.

Despite the March quarter year-on-year decline, India's metallurgical coal imports are forecast to increase by 2.0 per cent from 2016 levels to 52 million tonnes in 2017. The rise will be driven by an increased need for metallurgical coal to support local steel production. Government investment is expected to spur spending on infrastructure, and increase growth in the construction sector, both of which require steel.

Figure 5.4: Major importers



Source: IHS (2017), Department of Industry, Innovation and Science (2017)

India's metallurgical coal imports are forecast to increase by 8.5 per cent to 56 million tonnes in 2018, and by a further 6.3 per cent to 60 million tonnes in 2019. While the further development and expansion of India's steel industry could underpin even stronger metallurgical coal import growth, challenges surrounding access to raw materials, land and finance, have the potential to limit growth in the steel industry.

Japan's metallurgical coal imports hold steady

Japan is the third largest importer of metallurgical coal, and the second largest consumer of Australian metallurgical coal. Japan's metallurgical coal imports declined by 5.9 per cent year-on-year in the four months to April 2017, following a 5.8 per cent year-on-year increase over 2016. The increase in imports in 2016 can be partially attributed to re-stocking activities by steel producers. Metallurgical coal imports in 2017 are forecast to remain similar to 2016 levels, at 53 million tonnes, supported by expected higher steel exports and exports of finished goods (such as automobiles).

Japan's metallurgical coal imports are forecast to increase by 0.9 per cent to 54 million tonnes in 2018, and stay close to that level in 2019. Steady growth in imports is expected to be supported by steady Japanese steel production and exports of steel-intensive goods.

World exports

United States' metallurgical coal exports rise for the first time in 5 years

Australia is the world's largest metallurgical coal exporter. The United States, Canada, Russia and Indonesia, all rank after Australia. The US makes up 17 per cent of the seaborne market.

In the four months to April, 2017, the United States' metallurgical coal exports increased by 24 per cent year-on year, as producers responded to higher metallurgical coal prices. This significant increase in exports follows continuous calendar year declines since 2012.

Over the rest of 2017, exports are expected to fall back in line with falling metallurgical coal prices. Falling metallurgical coal prices will affect US producers in particular, due to the relatively high cost nature of their operations. In 2017, US exports are forecast to decline by 2.7 per cent to 36 million tonnes.

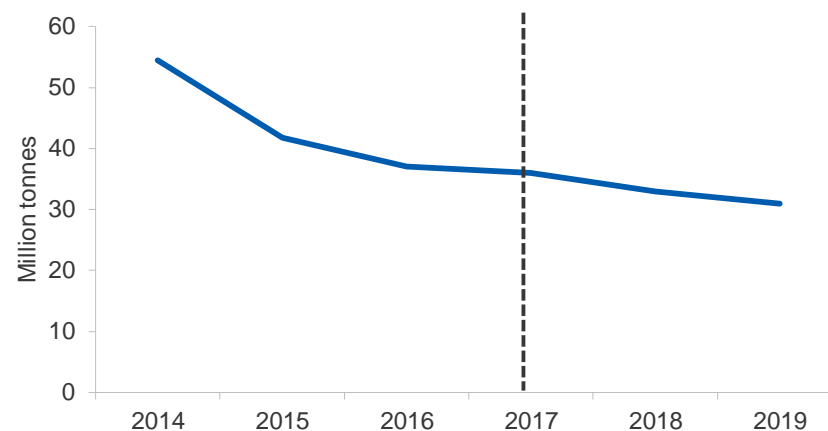
US metallurgical coal exports are forecast to decline by 8.3 per cent to 33 million tonnes in 2018, with a further decline of 6.1 per cent to 31 million tonnes in 2019. Declines will be underpinned by softer import demand from China, and by declines in the metallurgical coal price, which will deter high-cost producers.

Russia's exports continue to increase year-on-year

Russia's metallurgical coal exports increased by 12 per cent, year-on-year in the first four months of 2017 — on the back of higher metallurgical coal prices. The majority of Russia's metallurgical coal exports to date in 2017, when to Ukraine. Exports over 2017 are forecast to increase by 7.0 per cent to 24 million tonnes, due to strong import demand from Russia's key markets, such as Ukraine and South Korea.

In 2018 Russia's exports are forecast to increase by 3.0 per cent to 24 million tonnes and to increase by a further 3.0 per cent to 25 million tonnes, in 2019. Growth in exports are expected to be supported by lower domestic production costs and profitable metallurgical coal prices.

Figure 5.5: United States exports of metallurgical coal



Source: IEA (2017); Department of Industry, Innovation and Science

Table 5.1: World metallurgical coal trade

World	Unit	2016 s	2017 f	2018 f	2019 f	Annual percentage change		
						2017 f	2018 f	2019 f
Metallurgical coal imports								
— European Union 28	Mt	42	43	43	43	1.7	0.0	0.8
— Japan	Mt	53	53	54	54	-0.3	0.9	0.9
— China	Mt	60	56	50	44	-5.9	-10.7	-12.0
— South Korea	Mt	36	37	37	38	2.0	0.0	2.7
— India	Mt	51	52	56	60	2.0	8.5	6.3
Metallurgical coal exports								
— Australia	Mt	186	183	186	192	-1.7	1.8	3.2
— Canada	Mt	28	28	29	29	1.2	1.2	1.2
— United States	Mt	37	36	33	31	-2.7	-8.3	-6.1
— Russia	Mt	22	23	24	25	7.0	3.0	3.0
World trade	Mt	315	306	302	306	-3.0	-1.0	1.0

Notes: s Estimate; f Forecast

Source: IEA (2017) Coal Information 2016; Department of Industry, Innovation and Science (2017)

Australia's production and exports

Australia's production to stay robust

Australia's metallurgical coal production is estimated to have increased by 2.0 per cent to 193 million tonnes in 2016–17. A number of mines were adversely affected by Cyclone Debbie late in the March quarter and into the June quarter. However, the cyclone affected export tonnage more so than production; many mines reported that the effects of the cyclone on production were minimal. In 2016–17, the metallurgical coal market highlights were higher metallurgical coal prices and a strong rebound in import demand from China.

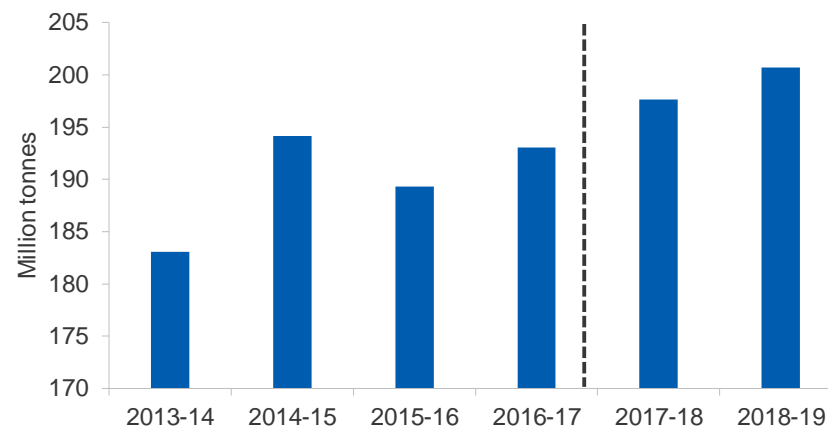
In 2017–18, production is forecast to increase by 2.4 per cent to 198 million tonnes, assisted by the start-up of operations at the Byerwen mine in Queensland. In 2018–19, production is expected to increase by a further 1.6 per cent to 201 million tonnes, as ramp-ups in production at Byerwen (3.5 million tonnes) and the start-up of operations at Eagle Downs (1.4 million tonnes) — both in Queensland — take effect.

Australia's export volumes and export earnings are estimated to increase amidst higher prices

Australia's metallurgical coal export volumes in 2016–17 are estimated to have declined by 2.9 per cent to 183 million tonnes. Export volumes were adversely affected by export tonnage delays in the June quarter, due to damage from Cyclone Debbie.

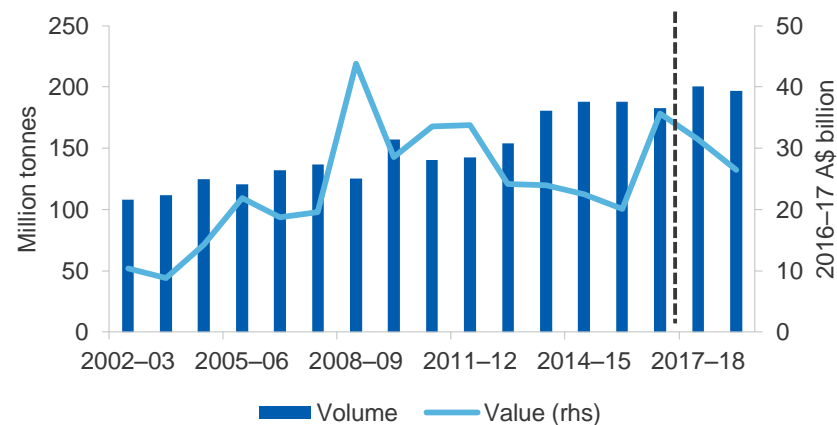
Many mines' ability to transport their output to the major metallurgical coal export terminal (Dalrymple Bay) for export were affected by the temporary closure of the Goonyella rail line, which was damaged by the floods associated with Cyclone Debbie. Affected mines included Hail Creek, South Walker Creek, Isaac Plains, Carborough Downs, Caval Ridge, Peak Downs and Foxleigh. Around 6 million tonnes of exports are estimated to still be affected by the temporary closure of the Goonyella rail line.

Figure 5.6: Australia's metallurgical coal production



Source: Department of Industry; Innovation and Science (2017)

Figure 5.7: Australia's metallurgical coal export volumes and values



Source: Department of Industry; Innovation and Science (2017)

Stockpiled tonnages have been, or are in the process of being sent as delayed cargoes. As of mid-May, around 29 ships had been waiting to be loaded at Dalrymple Bay Coal Terminal. Export unit values in the June quarter are expected to be affected by a change in pricing mechanisms, with more cargoes priced off spot rather than the contract price (due to no settled contract price in the June quarter).

While the price spike in late 2016 and April 2017 bumped up the export earnings of some Australian producers, other producers were adversely affected due to the export delays. Overall, 2016–17 export earnings are estimated to have increased by 77 per cent to reach a record high of \$36 billion.

In 2017–18, Australia's export volumes are forecast to increase by 10 per cent from 2016–17 levels, to 201 million tonnes. The export of cargoes delayed by Cyclone Debbie in the March and June quarters of 2017 is expected to more than offset the impact of weaker demand from China. Export earnings in 2017–18 are forecast to decline by 12 per cent from 2016–17 levels to \$31 billion, impacted by lower prices.

Export volumes in 2018–19 are forecast to decline by 2.0 per cent to 197 million tonnes. This decline is expected to be largely due to a return to normal export volumes, as the backlog from Cyclone Debbie is worked off. Import demand from traditional consumers — including India and Japan, as well as demand from ASEAN economies — are forecast to increase, outweighing a decline in import demand from China. Export earnings in 2018–19 are forecast to decline by 16 per cent to \$26 billion, driven by lower export volumes and prices.

Table 5.2: Australia's metallurgical coal outlook

World	Unit	2016	2017 f	2018 f	2019 f	Annual percentage change		
						2017 f	2018 f	2019 f
Contract prices b c								
– nominal	US\$/t	114.4	191.3	140.3	124.5	67.2	-26.7	-11.2
– real	US\$/t	116.9	191.3	137.0	118.8	63.5	-28.4	-13.2
Spot prices g								
– nominal	US\$/t	143.5	158.5	133.5	117.3	10.4	-15.8	-12.1
– real	US\$/t	146.8	158.5	130.4	112.0	8.0	-17.7	-14.1
Australia	Unit	2015–16	2016–17 s	2017–18 f	2018–19 f	Annual percentage change		
						2016–17 s	2017–18 f	2018–19 f
Production	Mt	189.3	193.0	197.6	200.7	2.0	2.4	1.6
Export volume	Mt	188.0	182.5	200.7	196.7	-2.9	10.0	-2.0
– nominal value	A\$m	19,790	35,673	32,137	27,652	80.3	-9.9	-14.0
– real value e	A\$m	20,136	35,673	31,460	26,487	77.2	-11.8	-15.8

Notes: **b** Fob Australian basis; **c** Contract price assessment for high-quality hard coking coal; **d** In 2017 calendar year US dollars; **f** Forecast; **g** Hard coking coal fob Australia east coast; **s** Estimate

Source: ABS (2017) International Trade, cat.no 5465.0; Company Reports; Bloomberg (2017) Steel Business Briefing; Department of Industry, Innovation and Science (2017)