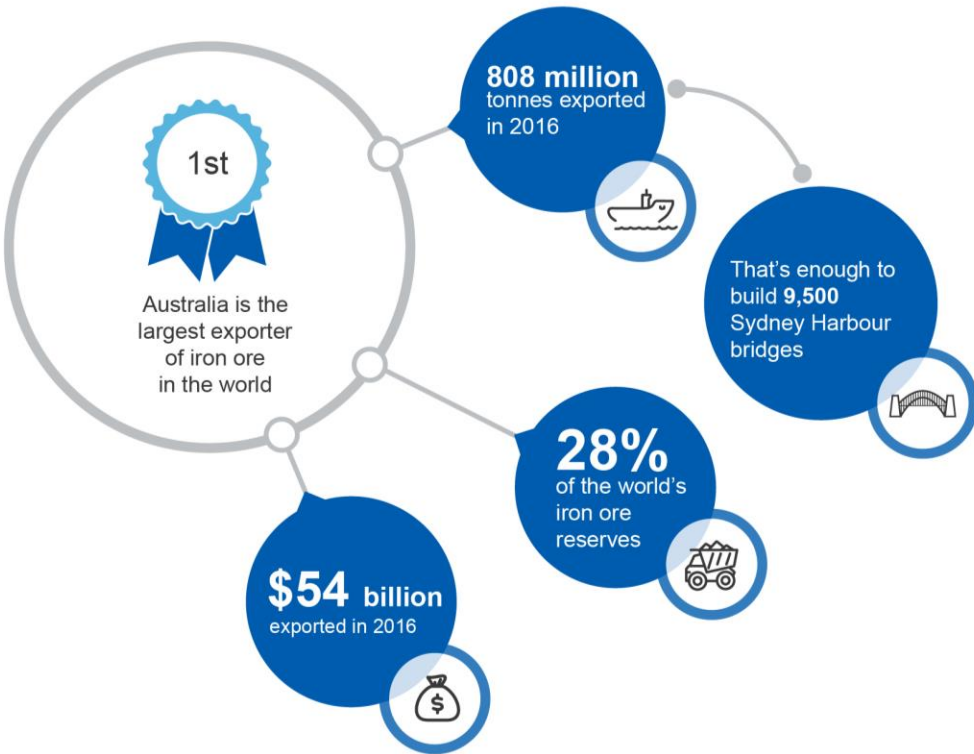
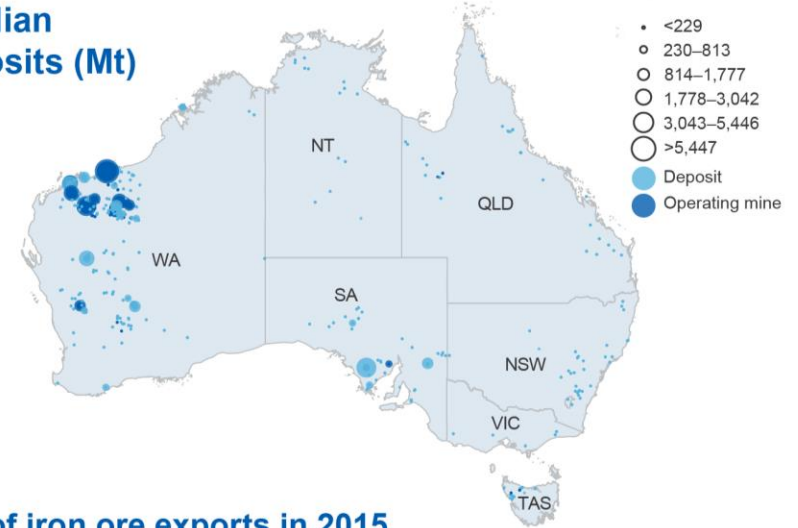


Iron ore

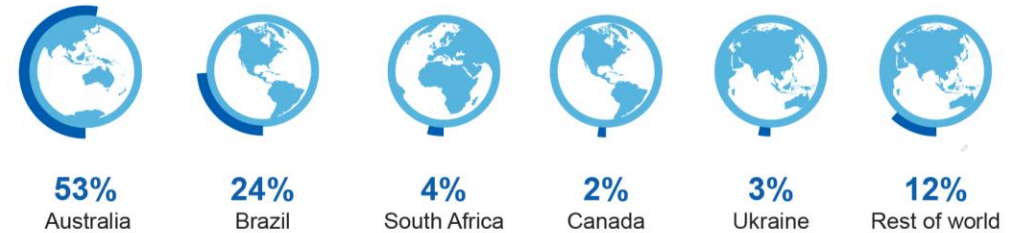
Resources and Energy Quarterly June 2017



Major Australian iron ore deposits (Mt)



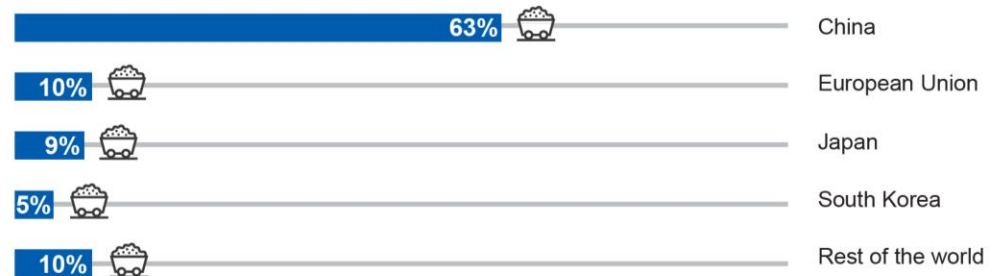
Global share of iron ore exports in 2015



Australia's iron ore key export destinations, 2015–16



Key world importers of iron in 2015–16



Market summary

Australia's iron ore export earnings for 2016–17 have been revised down by \$7.5 billion from the forecast in the March 2017 *Resources and Energy Quarterly*, to \$65 billion, reflecting an earlier than expected decline in the iron ore price. This nevertheless still represents an increase in export earnings of 33 per cent on 2015–16.

The iron ore price has been revised down slightly for the next three years. Higher prices at the end of 2016 and start of 2017 stimulated additional supply, placing additional downward pressure on prices. The iron ore price is now forecast to average US\$62 a tonne (FOB Australia) in 2017. With demand expected to be steadily outpaced by the growth of low-cost supply, the price is forecast to decline to US\$48 a tonne in 2018 and to US\$47 a tonne in 2019. Australia's export earnings are forecast to decline to \$58 billion in 2017–18, and \$55 billion in 2018–19.

Prices

Growing low-cost supply to place downwards pressure on iron ore price

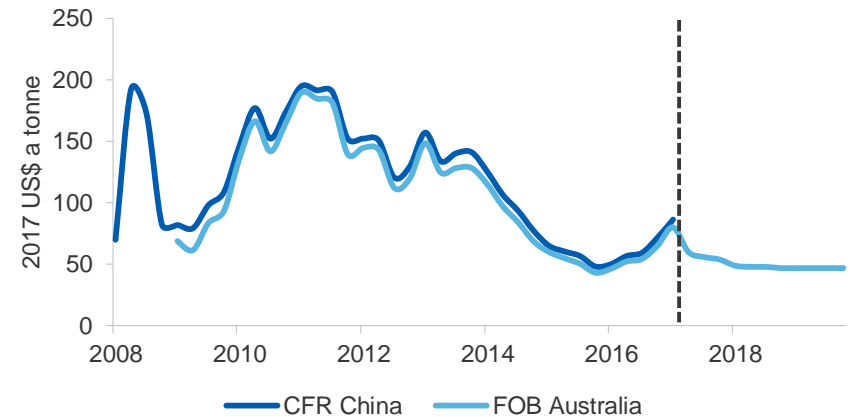
The iron ore price fell sharply in the June quarter, at one point reaching a 12-month low of US\$47 a tonne (FOB Australia) in mid-June, before rebounding late in the month. While the decline in the iron ore price was expected, it occurred earlier than forecast in the March 2017 *Resources and Energy Quarterly*. As a result, the iron ore price forecast has been revised down from US\$65 a tonne (average) to US\$62 a tonne in 2017.

The iron ore price is forecast to average US\$55 a tonne in the second half of 2017. The recent strength of China's steel sector (please refer to the Steel chapter) is expected to provide some short-term support.

Nevertheless, the iron ore price is forecast to ultimately decline. Iron ore port stocks in China have steadily grown to record highs, reaching an estimated 140 million tonnes in June 2017. The seaborne iron ore market is forecast to remain well-supplied by low-cost producers in 2018 and 2019. Demand for iron ore is forecast to moderate over the same period, as steel production declines in China.

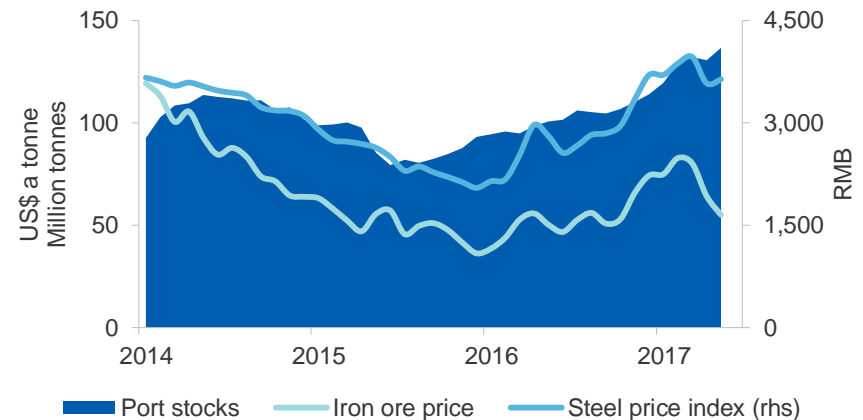
High iron ore prices at the end of 2016 and start of 2017 resulted in a rebound in iron ore production in China and other nations, such as Iran. An extended period of low prices is likely to be required to displace the additional supply. The price forecast has been revised down from US\$51 per tonne to US\$48 a tonne in 2018, and to US\$47 a tonne in 2019.

Figure 4.1: Iron ore price, quarterly, FOB Australia and CFR China



Source: Bloomberg (2017) *Metal Bulletin*; Department of Industry, Innovation and Science (2017)

Figure 4.2: Monthly iron ore and steel prices, end of month port stocks



Notes: Iron ore price is FOB Australia; Steel price is a composite of China's steel prices
Source: Bloomberg (2017) *SteelHome*; Bloomberg (2017) *Metal Bulletin*; Bloomberg (2017) *Custeel*; Department of Industry, Innovation and Science (2017)

Box 4.1: Growing spread between low and high grade iron ore price

While the ‘benchmark’ iron ore price is for 62 per cent iron content ore, usable iron ore for steelmaking generally ranges between 58 to 65 per cent iron content. There are premiums/discounts for the price of higher/lower grade ores.

A growing divergence between the price for low grade ores compared with 62 per cent ores has recently emerged. In April–May 2017, the price for 58 per cent iron content fines was 27 per cent lower than the 62 per cent price, compared to 19 per cent a year earlier. The difference has averaged 14 per cent since 2012.

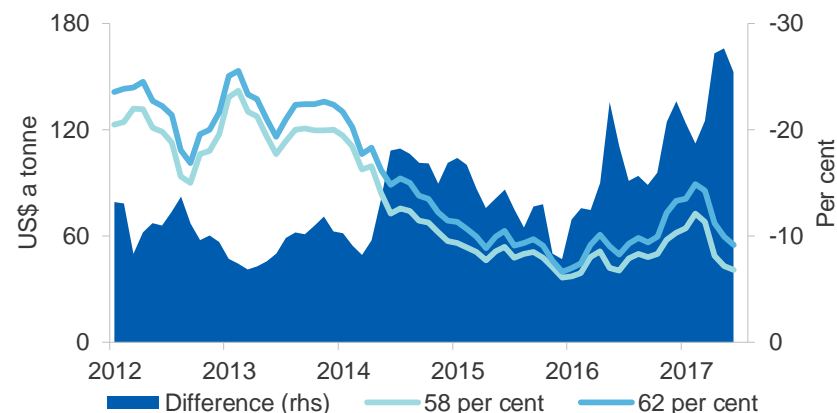
Factors likely to impact on the price spread over the short and long term include:

- the increase in the metallurgical coal price following Cyclone Debbie. The higher metallurgical coal prices has increased demand for higher grade iron ore, as it requires less metallurgical coal for the steel-making process. The effects of this are expected to be short-lived, as the effect of Cyclone Debbie on the metallurgical coal price dissipates.
- increased low-grade exports from India, following the resumption of mining and the removal of export taxes in the last couple of years. The additional supply may weigh on the price of low-grade ores. However, exports from India should ease, as their monsoon season peaks (usually lasting from May to September).
- more stringent environmental regulations in China. This drives a growing preference for higher grade iron ore, which increases the efficiency of steel mills and reduces emissions.
- conversely, the demand for low grade ores may be supported by steel-makers looking to blend those ores with the growing supply of high grade ores from Brazil, in order to reduce costs.

While the gap has recently narrowed, as some of the short term pressures ease, it is still larger than the historical average. There is some uncertainty about whether the larger price spread will be sustained due to longer-term structural factors.

Australia generally has high quality iron ore reserves (close to the 62 per cent benchmark). However, some Australian producers with lower grade mines may be exposed to persistently lower prices for low-grade ore.

Figure 4.3: 58 and 62 per cent iron content prices



Notes: Prices are CFR China; Right axis inverted; Difference represents the difference between the 58 per cent iron content price relative to the 62 per cent price.

Source: Bloomberg (2017) Custeel

World trade

World trade in iron ore is forecast to grow by 2.6 per cent in 2017 and by 2.9 per cent in 2018, before moderating to 0.9 per cent in 2019. At 1.59 billion tonnes, world iron ore trade in 2019 will be twice the 2009 volume.

China's iron ore import demand faces headwinds but forecast to grow

China's iron ore imports increased by 1.8 per cent year-on-year in April and May, following strong year-on-year growth in the March quarter of 12 per cent. The slowing pace of import growth — predominantly from Australia — was largely due to weather disruptions in the Pilbara, which affected mine/rail operations and iron ore shipments.

China's import demand may have also been weighed down by growing domestic iron ore production and increased scrap steel use. The government-mandated closure of illegal induction furnaces by 30 June 2017 has resulted in lower scrap prices and increased scrap use, further reducing iron ore demand. Growing scrap use is expected to ease, as stockpiles are drawn down. Further, domestic iron ore production reacted to the surge in iron ore prices as 2016 progressed. China's iron ore production (adjusted for quality) was up 22 per cent year-on-year in April and May 2017.

It is estimated that 21 per cent of China's pig iron was produced using domestic ore in March and April, in contrast to the 2016 average of 14 per cent. However, China's iron ore mines are high cost and their ore of low grade, and the displacement of domestic ore with imports is expected to resume. China's iron ore imports are forecast to grow by 0.7 per cent and 0.3 per cent in 2018 and 2019, respectively.

India's iron ore production continues to grow

India's iron ore production growth has been driven by supportive government policies, including streamlined approval processes and the easing of mining and export restrictions. Iron ore production is expected to be further supported by plans to auction eight mining blocks in the 2017–18 Indian financial year.

There remains ongoing challenges with transporting iron ore from the mines in the western States to the steel mills in the eastern coastal States. The prospect of government intervention in the iron ore market to ensure low-cost materials for its steel industry may also dampen incentives for the development of new mines. A government-appointed committee is currently developing recommendations for a domestic pricing mechanism.

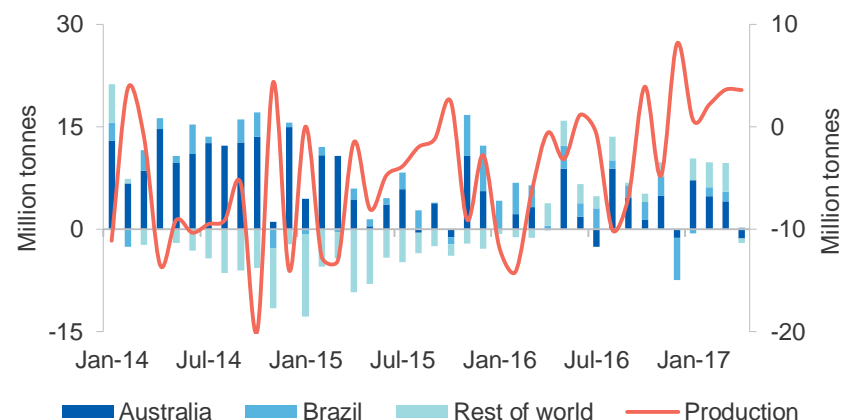
Despite growing production, India is expected to become a net importer of iron ore by 2019. Consumption from its rapidly growing steel industry is expected to outpace domestic iron ore production.

Seaborne iron ore market to remain well-supplied

The seaborne iron ore market is forecast to remain well-supplied. Increased output from low-cost, high-grade producers in Australia and Brazil is expected to displace high-cost producers. In 2019, Australia is forecast to account for 56 per cent of global seaborne trade, up from 54 per cent in 2016, while Brazil is forecast account for 26 per cent of seaborne trade, up from 24 per cent in 2016.

Iron ore exports from Brazil doubled in the first five months of 2017 compared to the same period in 2016, to 70 million tonnes. Strong export growth is forecast for the next two and a half years. Vale has reaffirmed their production target of 360–380 million tonnes in 2017, and is on track to achieve the 400 million tonne long-term target at the end of 2018, supported by the ramp up of the S11D and Itabirito projects. Anglo American's Minas Rio mine is expected to reach full capacity of 27 million tonnes by 2020.

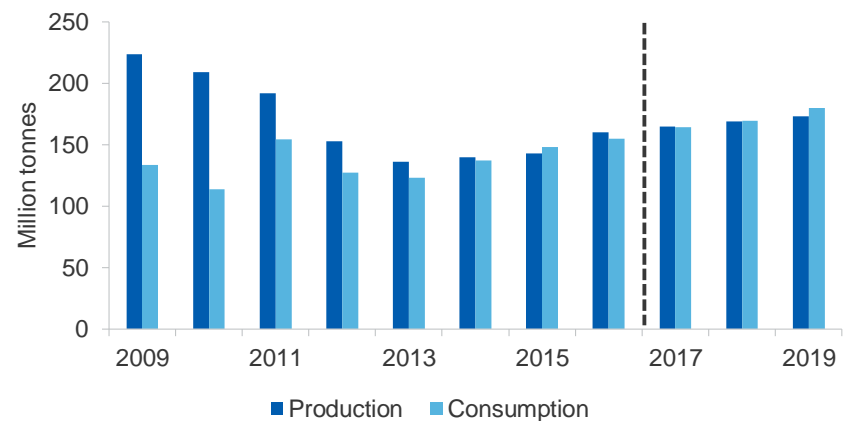
Figure 4.4: China's iron ore imports and production, YoY change



Notes: China's iron ore production has been adjusted for quality

Source: Bloomberg (2017) China Customs General Administration; Bloomberg (2017) Antaike Information Development

Figure 4.5: India's iron ore production and consumption



Notes: Consumption is apparent iron ore consumption.

Source: Bloomberg (2017) World Steel Association; Department of Industry, Innovation and Science (2017)

While the resumption of mining at Vale and BHP’s Samarco mine looks increasingly unlikely in 2017 — with ongoing debt restructuring and environmental licensing challenges — it is still expected to add 19 million tonnes to Brazil’s output by the end of 2019.

Australia

Exploration expenditure remains at historical lows

Expenditure declined by 7.3 per cent to \$54 million in the March 2017 quarter, the lowest quarterly figure since 2006. Growing global supply and expectations of low prices has discouraged exploration activity.

Australia’s iron ore export earnings revised down

Australia’s estimated export earnings for 2016–17 have been revised down to \$65 billion, but this still represents a 33 per cent increase from 2015–16. The revision is predominantly due to the earlier than expected decline in the iron ore price in the June quarter.

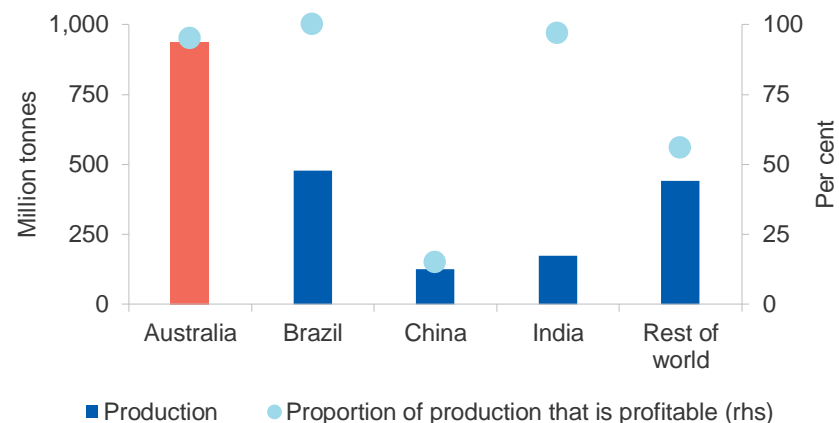
A particularly severe monsoon season in February and March affected mining and rail operations across the Pilbara. Nevertheless, 2016–17 shipment guidance from Rio Tinto and Fortescue Metals Group was unchanged at 330–340 million tonnes and 165–170 million tonnes, respectively. BHP’s production guidance narrowed to 268–272 million tonnes, from 265–275 million tonnes. Iron ore shipments from Port Hedland grew by 12 per cent year-on-year in both April and May, and hit a monthly record of 44 million tonnes in May, reflecting strong export growth in the months following the wet season.

A fire at BHP’s Mt Whaleback processing plant and a derailment on the Newman to Port Hedland line — both in June — may potentially disrupt shipments. Mining has resumed in the unaffected areas, and the rail line has restarted at limited capacity. It is unclear if exports will be affected.

Atlas Iron has deferred its Corunna Downs project, originally set to commence production in 2018. The company cited market conditions and delays in approval processes as major factors contributing to the decision. Their production guidance for 2017–18 has been maintained at 9–10 million tonnes, due to increased production at the Mt Webber mine.

Export earnings for 2017–18 have been revised down to \$58 billion, and for 2018–19 to \$55 billion. While modest output growth is expected to be assisted by ongoing productivity improvements and additions to capacity, the impact will be offset by the effects of a lower iron ore price.

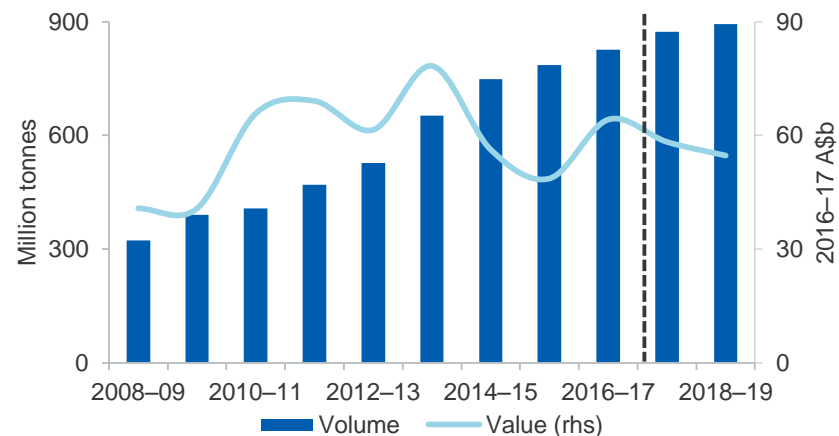
Figure 4.6: Forecast iron ore production in 2019



Notes: China’s iron ore production adjusted for quality; Based on a forecast iron ore price of US\$53 a tonne CFR China.

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

Figure 4.7: Australia’s iron ore export volumes and values



Source: ABS (2017) International Trade, Australia, Cat. No. 5465.0; Department of Industry, Innovation and Science (2017)

Table 4.1 World iron ore trade

World trade in iron ore	2016 s	2017 f	2018 f	2019 f	Annual percentage change		
					2017 f	2018 f	2019 f
Iron ore imports							
– European Union 28	140	138	138	138	-1.1	0.3	0.0
– Japan	131	133	134	136	1.4	1.0	1.8
– China	1,035	1,038	1,046	1,049	0.3	0.7	0.3
– South Korea	75	71	72	74	-5.2	1.9	2.1
– India	4	7	8	13	90.0	10.5	79.6
Iron ore exports							
– Australia	808	851	885	897	5.3	3.9	1.3
– Brazil	364	382	408	419	4.9	6.8	2.8
– India	9	8	7	7	-13.9	-9.6	0.0
– Ukraine	38	42	42	42	10.8	0.1	0.4
World trade	1,492	1,531	1,576	1,590	2.6	2.9	0.9

Notes: *s* estimate. *f* forecast.

Source: World Steel Association (2017); Department of Industry, Innovation and Science (2017)

Table 4.2 Iron ore outlook

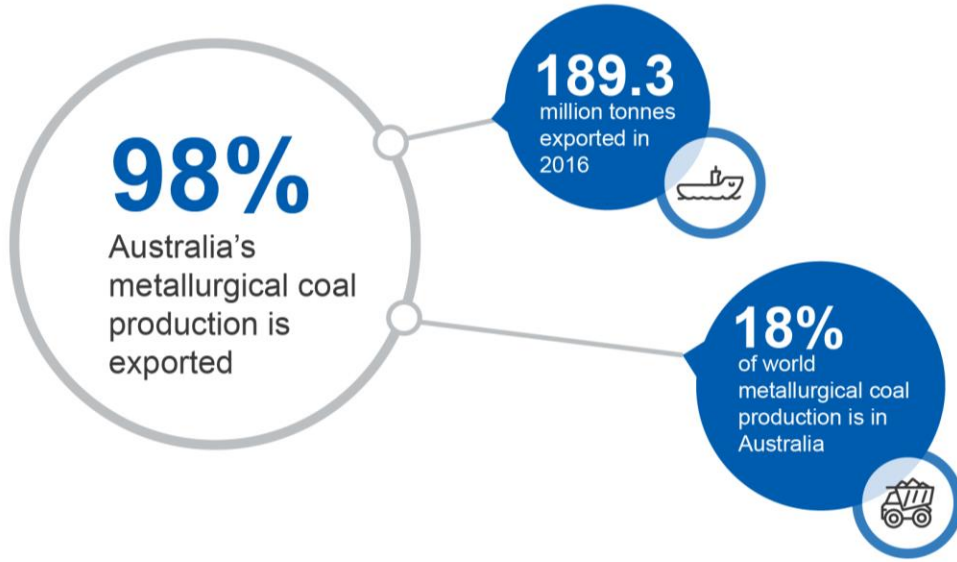
World	Unit	2016	2017 f	2018 f	2019 f	Annual percentage change		
						2017 f	2018 f	2019 f
Prices bc								
– nominal	US\$/t	52.7	62.4	49.1	49.2	18.5	-21.4	0.4
– real d	US\$/t	53.9	62.4	47.9	47.0	15.8	-23.3	-1.9
Australia	Unit	2015–16	2016–17 s	2017–18 f	2018–19 f	2016–17 s	2017–18 f	2018–19 f
Production								
Steel hs	Mt	5.05	5.35	5.26	5.26	6.1	-1.7	-0.1
Iron ore	Mt	836.1	873.5	912.1	934.6	4.5	4.4	2.5
Exports								
Steel hs	Mt	0.77	0.92	0.98	0.98	20.2	6.3	-0.1
– nominal value	A\$m	598	752	740	739	25.9	-1.6	-0.1
– real value i	A\$m	608	752	725	708	23.7	-3.7	-2.3
Iron ore	Mt	785.8	825.4	872.8	893.1	5.0	5.7	2.3
– nominal value	A\$m	47,799	64,502	59,473	57,139	34.9	-7.8	-3.9
– real value i	A\$m	48,635	64,502	58,221	54,732	32.6	-9.7	-6.0

Notes: **b** fob Australian basis **c** Spot price, 62% iron content basis. **d** In 2017 US dollars. **h** Crude steel equivalent and iron . Crude steel is defined as the first solid state of production after melting. In ABS Australian Harmonized Export Commodity Classification, crude steel equivalent includes most items from 7206 to 7307, excluding ferrous waste and scrap and ferroalloys. **i** In 2016–17 Australian dollars. **f** forecast. **s** estimate.

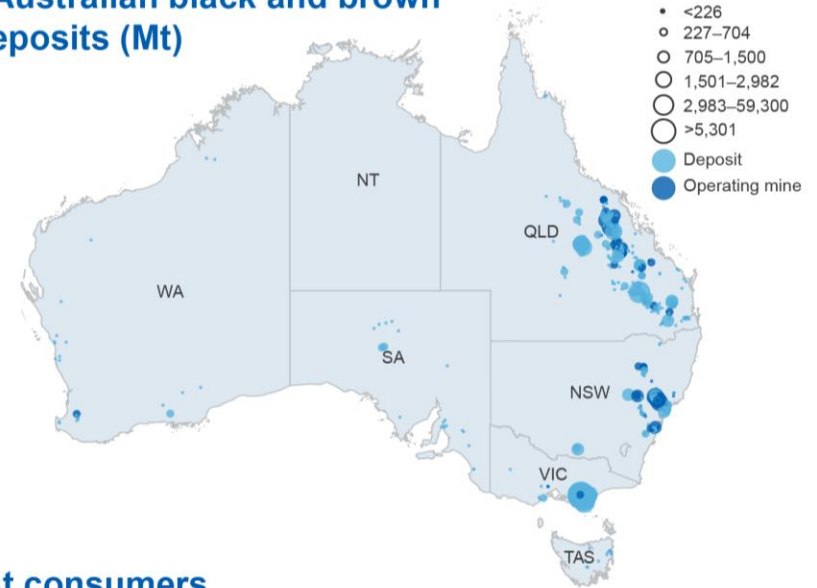
Source: ABS (2017) *International Trade in Goods and Services, Australia*, Cat. No. 5368.0; AME; Company Reports.

Metallurgical coal

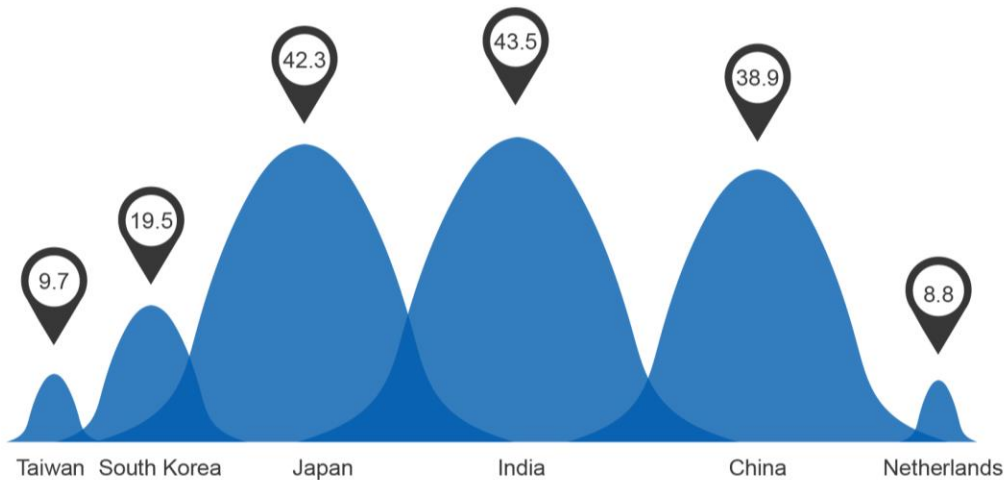
Resources and Energy Quarterly June 2017



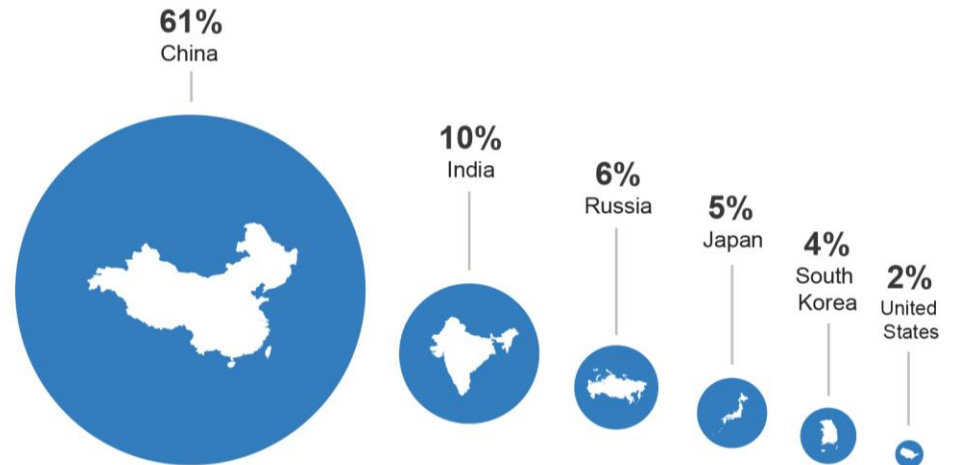
Major Australian black and brown coal deposits (Mt)



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

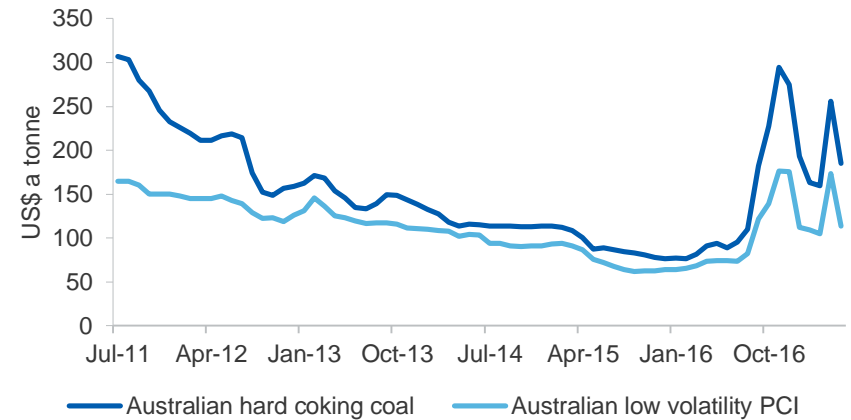
Spot prices rallied in April 2017, to average US\$261 a tonne for the month. The rally in price was largely driven by a sharp decline in exports from Queensland, caused by the fallout from Cyclone Debbie. Since the rally in April, spot prices have started to decline, with prices in the June quarter estimated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

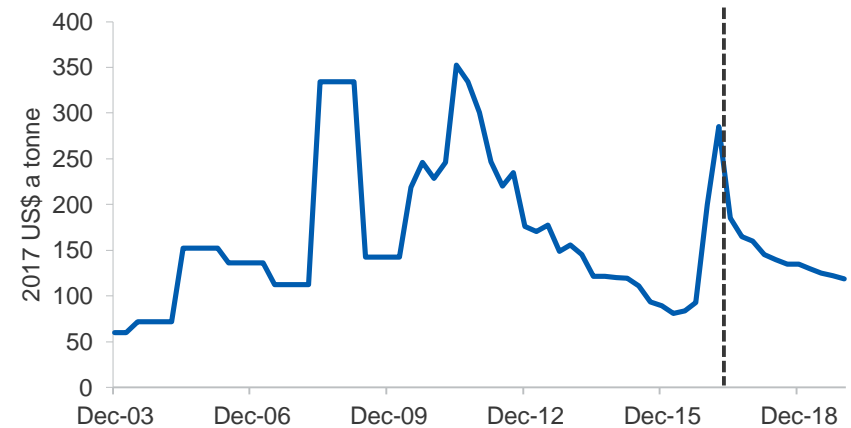
Australian benchmark prime hard metallurgical coal contract prices are forecast to average US\$191 a tonne in 2017 — a 67 per cent increase from 2016, reflecting the high March quarter contract price of US\$285 a tonne. Contract prices for the remaining two quarters are forecast to be substantially lower.

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.

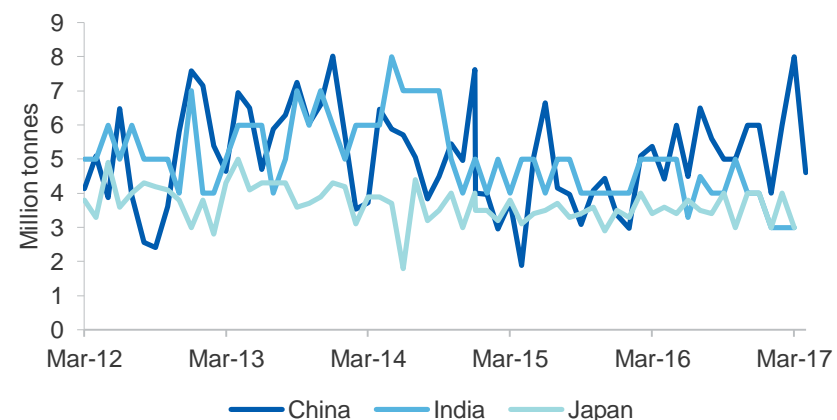
China's metallurgical coal imports to decline over the outlook period

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



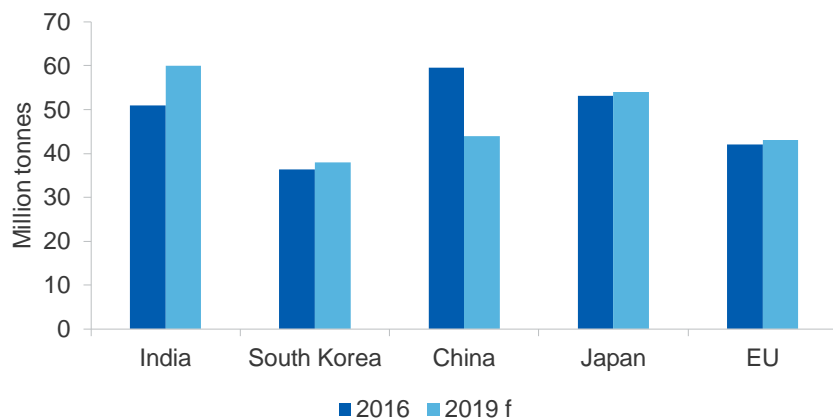
Source: IHS (2017)

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.

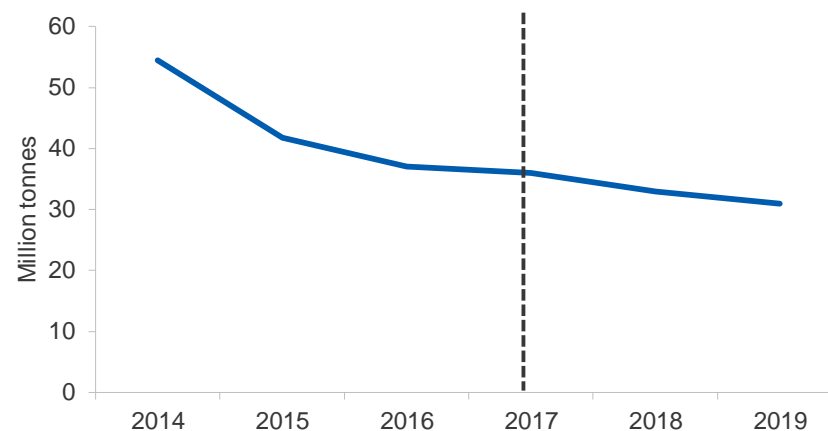
US metallurgical coal exports are forecast to decline by 8.3 per cent to 33 million tonnes in 2018, with a further decline of 6.1 per cent to 31 million tonnes in 2019. Declines will be underpinned by softer import demand from China, and by declines in the metallurgical coal price, which will deter high-cost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

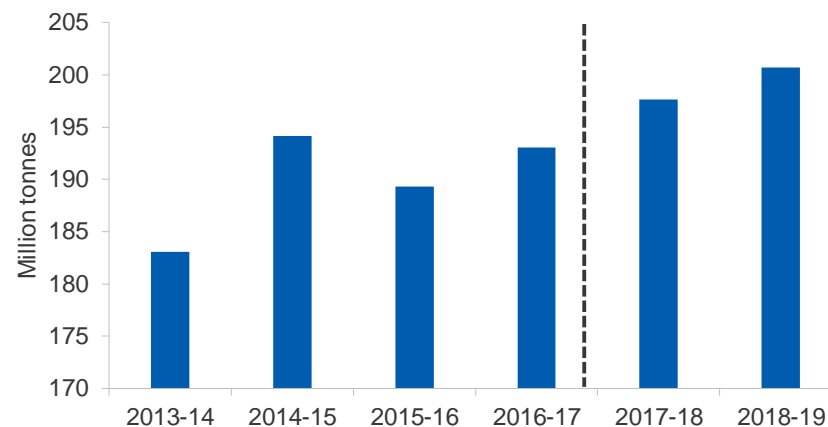
In 2017–18, production is forecast to increase by 2.4 per cent to 198 million tonnes, assisted by the start-up of operations at the Byerwen mine in Queensland. In 2018–19, production is expected to increase by a further 1.6 per cent to 201 million tonnes, as ramp-ups in production at Byerwen (3.5 million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

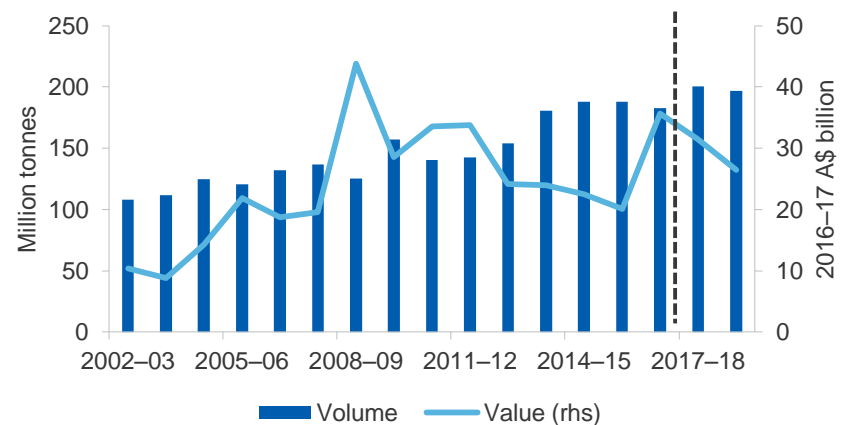
Many mines' ability to transport their output to the major metallurgical coal export terminal (Dalrymple Bay) for export were affected by the temporary closure of the Goonyella rail line, which was damaged by the floods associated with Cyclone Debbie. Affected mines included Hail Creek, South Walker 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.