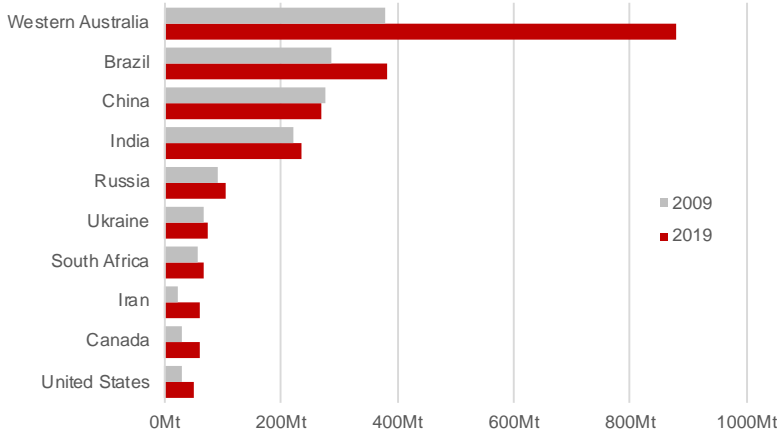




THE WORLD IRON ORE MARKET

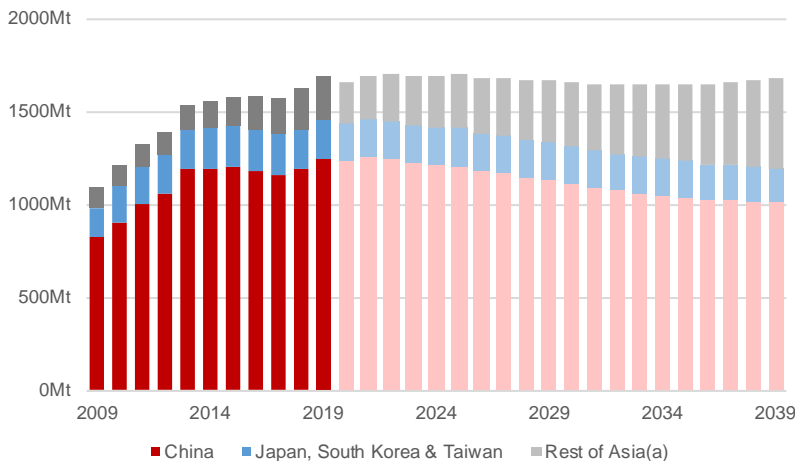
Major global iron ore¹ suppliers



¹ Mined iron ore. Source: Wood Mackenzie, Global Iron Ore Markets Long-term Outlook Data 2020 Q1.

- Western Australia accounted for two-thirds of the world's additional iron ore supply between 2009 and 2019.
- Western Australia is the largest iron ore supplier in the world, accounting for 37% of global supply in 2019, followed by Brazil (16%).
- China (12%), India (10%) and Russia (5%) are major global iron ore suppliers, but retain most of their production for domestic steel manufacturing.
- In 2019, iron ore supply from:
 - Western Australia fell 1% to 878Mt.
 - Brazil fell 14% to 384Mt.
 - China rose 13% to 271Mt.
 - India rose 15% to 235Mt.

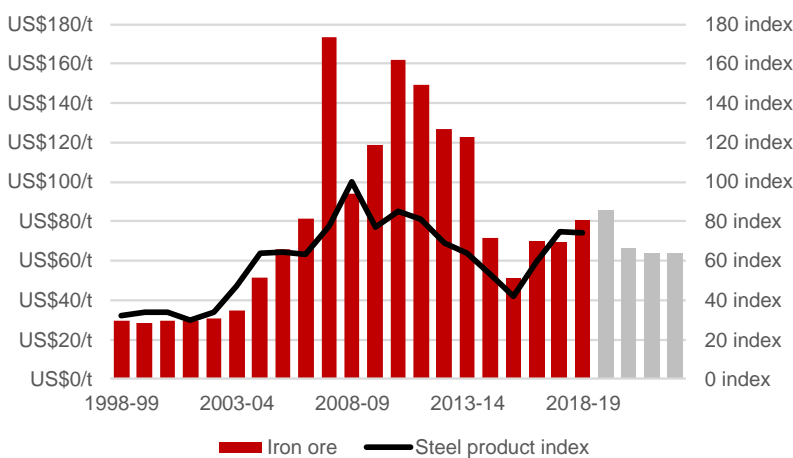
Asian iron ore¹ demand



¹ Total iron ore consumption. (a) India, Indonesia, Vietnam and other Asian countries. Source: Wood Mackenzie, Global Iron Ore Markets Long-term Outlook Data 2020 Q1.

- Asia accounted for 78% of global iron ore demand in 2019, with China (58%), India (9%), Japan (5%) and South Korea (3%) having the largest shares.
- In 2019, Asia's iron ore demand rose 4% to 1,690Mt. Within Asia, iron ore demand from:
 - China rose 5% to 1,248Mt.
 - Japan, South Korea and Taiwan combined fell 2% to 209Mt.
 - Rest of Asia rose 6% to 232Mt.
- Wood Mackenzie forecasts Asia's iron ore demand will fall by 9 million tonnes from 2019 to 2039. Lower demand in China (down 238Mt) and Japan, South Korea and Taiwan combined (down 22Mt) will be largely offset by growth in the rest of Asia (up 251Mt).

Iron ore¹ and steel product² prices (annual average)



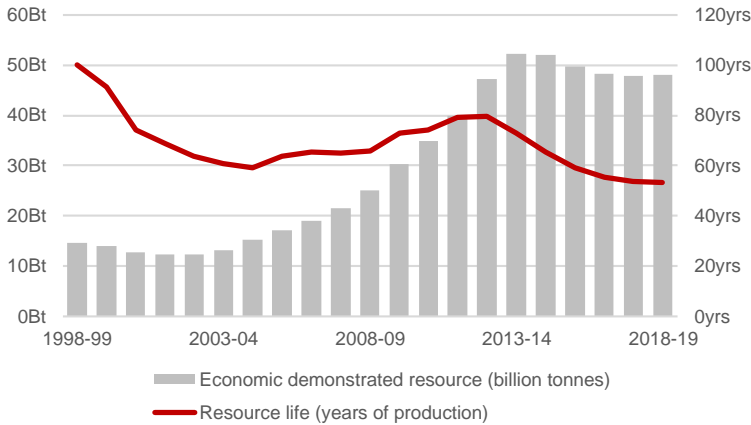
¹ China spot price in nominal US dollars, cost and freight (CFR). ² China steel product price index (2007-08 = 100.0). Source: World Bank, Commodity Markets; CEIC, China Premium Database; and ³ WA Government 2019-20 Mid-year Financial Projections Statement (December 2019).

- China's rapid increase in iron ore demand lifted the iron ore price from US\$28 a tonne in 1999-00 to US\$173 a tonne in 2007-08. The iron ore price fell to US\$52 a tonne in 2015-16 as China's demand slowed and there was excess supply in the market.
- In 2018-19, the iron ore price rose 16% to US\$81 a tonne, largely due to disruptions in iron ore supply from Brazil and Western Australia. Steel product prices fell 1% in 2018-19.
- The iron ore price is forecast to be US\$86 a tonne in 2019-20 and US\$66 a tonne in 2020-21.³
- In May 2020, the iron ore price rose 11% to US\$94 a tonne, and steel product prices rose 3%.



WESTERN AUSTRALIA'S COMPETITIVENESS

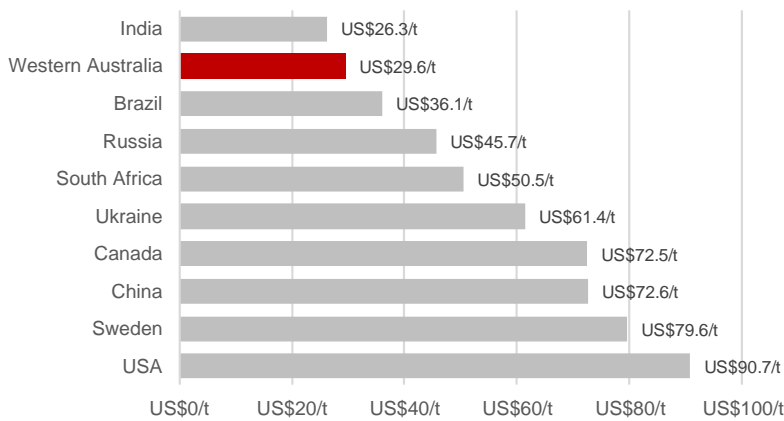
Estimated¹ iron ore resources



¹ Based on Western Australia's share of Australian iron ore production. ² US Geological Survey. ³ Compound annual growth rate. Source: ABS 5204.0 Australian System of National Accounts.

- Western Australia has large iron ore reserves, accounting for 28% of the world's crude iron ore reserves in 2019.²
- Western Australia had an estimated 48 billion tonnes of economic demonstrated iron ore resource in 2018-19, which could sustain current production for 53 years.
- Western Australia's reserves had an average iron content of 48% in 2019, in line with the world average of 48%.²
- Western Australia's iron ore production had an average iron content of 62% in 2019, above the world average of 60%.²
- Western Australia's iron ore exploration rose 16% to \$337 million in 2019, compared with an annual decline³ of 4% over the past ten years.

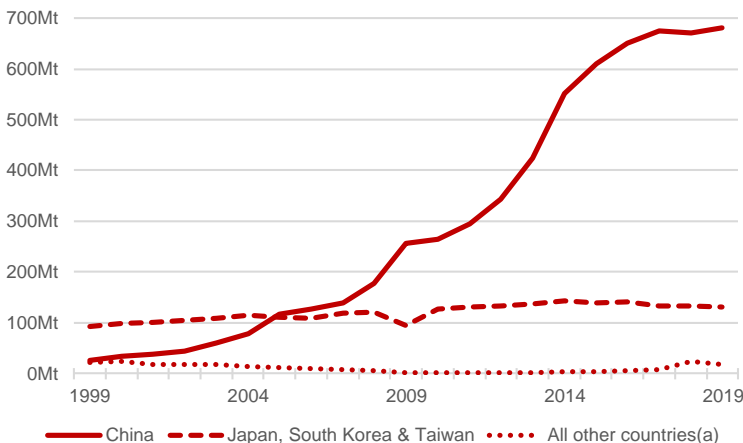
Total cash cost¹ of seaborne iron ore exports²: 2019



¹ Total cash cost per dry metric tonne in US dollars, cost and freight (CFR). ² Includes the 10 largest producers only. Source: S&P Global Market Intelligence, Mine Economics Model.

- Western Australia's iron ore miners are among the world's lowest cost seaborne iron ore exporters.
- The average total cash cost¹ of Western Australia's iron ore exports was US\$29.6 a tonne in 2019, below the world average of US\$40.9 a tonne, and below its main competitor in Brazil (US\$36.1/t).
- Western Australia's major iron ore ports are close to the largest iron ore markets in Asia, reducing shipping costs relative to some of its competitors.
- According to Wood Mackenzie, Western Australia's average iron ore freight rate to China rose 2% to US\$7.7 a wet tonne in 2019, well below Brazil's rate of US\$18.6 a wet tonne.

Major iron ore export markets



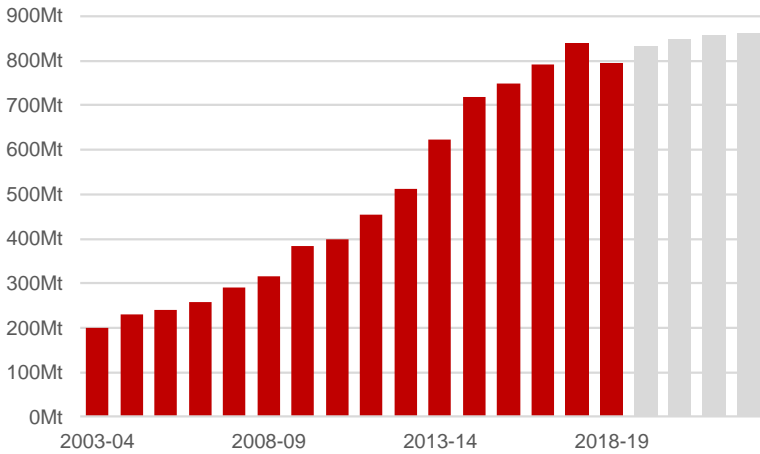
(a) Included mainly Vietnam, Indonesia, Malaysia, Singapore and Hong Kong (SAR of China) in 2019. ¹ Excludes China, Japan, South Korea and Taiwan. Source: ABS 5368.0 International Trade in Goods and Services.

- Western Australia's iron ore industry has established long-term trade relationships across Asia.
- Over 82% of Western Australia's iron ore exports went to China in 2019, with exports rising 1.5% to 681 million tonnes.
- Iron ore exports to Japan, South Korea and Taiwan combined fell 2% to 130 million tonnes in 2019.
- Iron ore exports to all other countries¹ fell 25% to 17 million tonnes in 2019.
- In 2019, Western Australia accounted for a large proportion of the iron ore imported by China (65%), Japan (49%) and South Korea (71%).



WESTERN AUSTRALIA'S SUPPLY

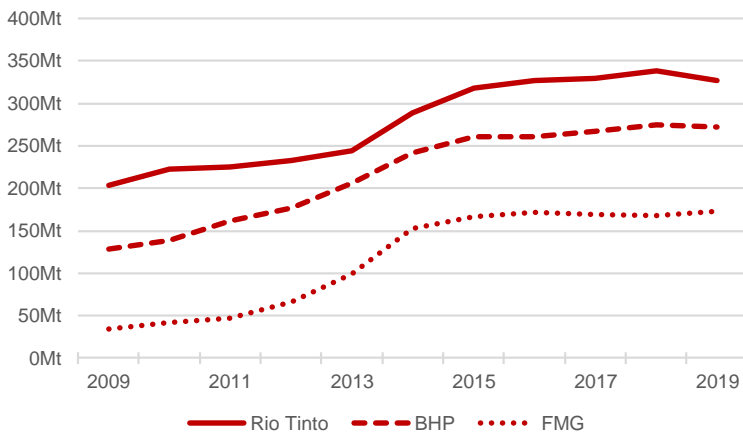
Iron ore sales volumes



¹ Compound annual growth rate.
Source: WA Department of Mines, Industry Regulation and Safety, Resource Data Files; and ² WA Government 2019-20 Mid-year Financial Projections Statement (December 2019).

- Growth in Western Australia's iron ore sales is slowing as China's demand slows and new mines reach full production.
- In 2018-19, Western Australia's iron ore sales fell 5% to 794 million tonnes, compared with annual average growth¹ of 10% over the past ten years.
- Western Australia's iron ore sales fell in 2018-19 largely due to supply disruptions caused by Tropical Cyclone Veronica, a train derailment (BHP) and fires at Mt Whaleback (BHP) and Cape Lambert A (Rio Tinto).
- Western Australia's iron ore sales are forecast² to rise to 862 million tonnes by 2022-23.
- Western Australia produced mainly iron ore fines (72%) in 2019, followed by lump (25%) and concentrate (3%).

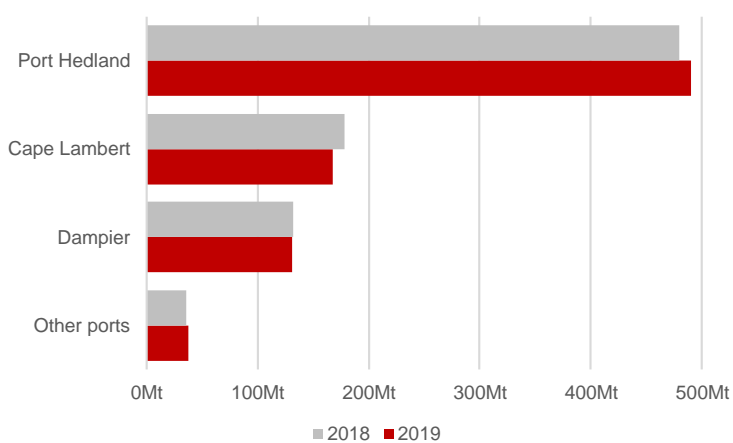
Major iron ore miners' sales^{1,2,3}



¹ Western Australian operations. ² Wet tonnes. ³ Inclusive of third party tonnes.
Source: Company production reports.

- Western Australia's major iron ore miners Rio Tinto, BHP and Fortescue Metals Group (FMG) are the largest global iron ore producers behind Vale from Brazil.
- Rio Tinto (360Mtpa) and BHP (290Mtpa) are developing new mines by 2021 to utilise additional rail and port capacity developed over recent years.
- Rio Tinto's iron ore sales fell 3% to 327Mt in 2019 and its sales guidance for 2020 is 324-334Mt.¹
- BHP's iron ore sales fell 1% to 273Mt in 2019 and its production guidance for 2019-20 is 273-286Mt.¹
- FMG's iron ore sales rose 3% to 174Mt in 2019 and its sales guidance for 2019-20 is 175-177Mt.¹

Major iron ore export ports



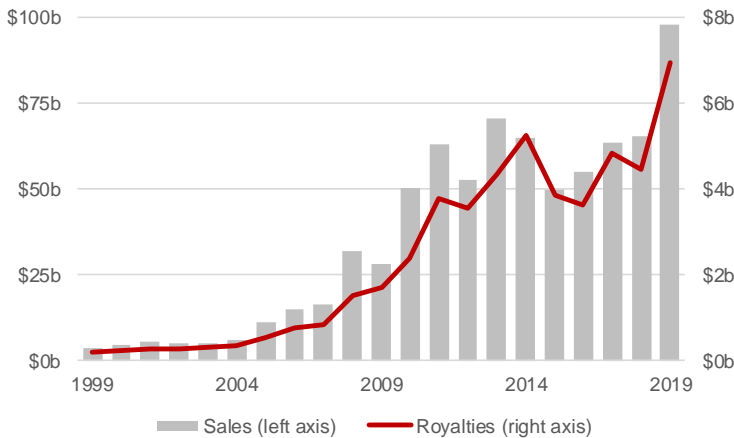
Source: ABS 5368.0 International Trade in Goods and Services.

- Port Hedland is the world's largest bulk export port, while Cape Lambert and Dampier are also major bulk export ports.
- Port Hedland (59%) exported most of Western Australia's iron ore in 2019, followed by Cape Lambert (20%), Dampier (16%) and other ports (5%).
- Port Hedland's iron ore exports rose 2% to 491Mt in 2019. Cape Lambert's iron ore exports fell 6% to 168Mt in 2019. Dampier's iron ore exports fell 1% to 131Mt in 2019.
- Rio Tinto expanded Cape Lambert and Dampier in 2015, raising annual capacity to 210Mt and 150Mt respectively. Annual shipping capacity in Port Hedland increased to 617Mt in 2019 due to investment in port dredging, marine technology and other port efficiencies.



CONTRIBUTION TO WESTERN AUSTRALIA'S ECONOMY

Value of iron ore sales and royalties



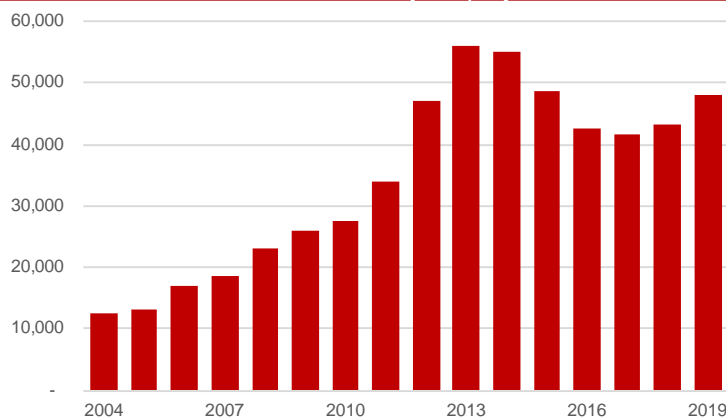
¹ Includes North West Shelf Grants. ² Compound annual growth rate.
Source: Western Australian Department of Mines, Industry Regulation and Safety, Resource Data Files.

Major iron ore projects

Operator	Mine/deposit	Capex (\$m) ¹	Mtpa	Fe (%) ²	Start-up
Major operating:					
Rio Tinto	Mt Tom Price	n.a.	40	62	1966
BHP	Newman	n.a.	100	62	1969
Rio Tinto	Robe River - Pannawonica	n.a.	35	57	1974
BHP	Yandi	n.a.	80	58	1992
Rio Tinto	Yandicoogina	n.a.	50	59	1998
Rio Tinto	Robe River - West Angelas	1,700	35	62	2002
BHP	Mining Area C	3,000	60	62	2003
Rio Tinto	Nammuldi	n.a.	60	62	2006
Rio Tinto	Hope Downs	3,400	45	61	2007
FMG	Chichester Hub	8,800	100	58	2008
Recently completed:					
FMG	Solomon Hub	9,600	70	58	2013
Gindalbie	Karara*	2,600	8-16	66	2013
CITIC Pacific	Sino Iron*	12,000	24	66	2013
BHP	Jimblebar	3,800	35-55	63	2013
Rio Tinto	Nammuldi (Expansion)	2,200	10-20	62	2014
Hancock Pros.	Roy Hill	13,700	55-60	61	2015
Rio Tinto	Silvergrass	338	10-20	62	2017
Mt Gibson	Koolan Island (Restart)	97	5	65	2019
Under construction or committed:					
FMG	Eliwana	1,700	30	60	2020
BHP	South Flank	4,700	80	62	2021
Rio Tinto	Robe Valley Mesa B, C & H	1,300	n.a.	62	2021
Rio Tinto	West Angelas Deposits C & D	800	n.a.	62	2021
Rio Tinto	Koodaideri	3,500	43-70	59	2021
Rio Tinto	Western Turner Syncline 2	1,000	30	62	2021
FMG	Iron Bridge Stage 2*	3,700	10-22	67	2022
FMG	Queens Valley (Solomon Hub)	400	n.a.	58	2022

n.a. – not available or not applicable. * Magnetite. ¹ Includes mines and rail and port infrastructure. ² Product grade if available, otherwise reserve grade for direct shipping ores. Source: S&P Global Market Intelligence; Wood Mackenzie, Global Iron Ore Markets Long-term Outlook Data; and company announcements, reports and presentations.

Direct iron ore industry employment¹



¹ Full-time equivalent (average on site).
Source: Western Australian Department of Mines, Industry Regulation and Safety, Resource Data Files.

- The iron ore industry is a large part of the Western Australian economy, accounting for 20% of the State's gross state product and 56% of its mining industry value added in 2018-19.
- Iron ore accounted for 53% of the value of Western Australia's merchandise exports and 76% of Western Australia's minerals sales in 2019.
- The value of Western Australia's iron ore sales rose 50% to \$97.7 billion in 2019, above annual growth² of 13% over the past ten years.
- Iron ore accounted for 82% of Western Australia's royalties¹ in 2019 and 18% of State government revenue in 2018-19.
- Iron ore royalties rose 56% to \$7.0 billion in 2019.

- Western Australia has over \$17 billion of major iron ore projects under construction or committed.
- Rio Tinto is developing Koodaideri by late 2021 and approved a \$44 million pre-feasibility study into Koodaideri Phase 2 in late 2018. Rio Tinto also has sustaining projects at its Robe River and Greater Tom Price operations.
- BHP is developing South Flank to replace Yandi mine production by mid-2021.
- FMG is developing Eliwana to replace Firetail mine production by late 2020. FMG is also developing Iron Bridge (Magnetite) Stage 2 by mid-2022 and Queens Valley (Solomon Hub) by 2022.

- Direct employment in Western Australia's iron ore industry rose 11% to 48,108 in 2019.
- Iron ore industry direct employment reached 56,065 in 2013, before falling for four consecutive years.
- Iron ore industry direct employment rose 6% a year over the ten years to 2019.
- Iron ore accounted for 47% of direct employment in Western Australia's minerals mining industry in 2019 (excluding exploration). Iron ore's share of total minerals mining employment has risen from 38% in 2009.