

Western Australia's principal resources projects, 2019-20

In 2019-20, Western Australia had 123 principal mining projects.

Each of the principal mining projects is export-oriented and high value. They each had mineral sales valued at more than \$5 million (or more than 2500oz of gold), or, in the case of projects on private land, for which sales are not reported, has employees of greater than 50. Projects are grouped according to main commodity sold.

The State's mining industry also comprised hundreds of quarries and small mines that largely produced the basic raw materials required for the local construction industry. This includes clays, construction materials (aggregate, gravel, rock and sand), dimension stone, gypsum, limestone, limesand and spongolite. There were 10 principal producers of these products.

There were also 13 major mineral processing operations to transform bauxite into alumina; gold dore into gold bars; nickel ore into nickel concentrate (where accepting third party fee) and nickel concentrate into nickel matte, nickel powder and nickel briquettes; rutile and synthetic rutile into titanium dioxide pigment; zircon into fused zirconia; and silica sand into silicon metal.

Western Australia's petroleum industry consisted of 22 projects that produced oil, gas and condensates from 53 fields in onshore and offshore areas of the State. These projects had 13 processing plants, predominantly for LNG exports and domestic gas sales.

The attached tables below provide details of the State's principal mining projects, principal producers of basic raw materials, principal mineral processing operations, and petroleum projects.

PRINCIPAL MINING PROJECTS		
Company	Project(s)	Comments
Base metals		
EMR Capital Pty Ltd	Golden Grove	
Metals X Ltd	Nifty	
Round Oak Minerals Pty Ltd	Jaguar	
Sandfire Resources NL	DeGrussa	
Bauxite		
Alcoa Corporation	Huntly Willowdale	Huntly and Willowdale are owned by a joint venture of Alcoa Corporation (60%) and Alumina Limited (40%)
South32 Limited	Boddington	Boddington is a joint venture of South32 Limited (86%) Sojitz Corporation (9%), and Press Metal Bintulu (5%).
Caesium		
Pioneer Resources Limited	Pioneer Dome	
Coal		
Griffin Coal Mining Company Pty Ltd	Griffin	
Yancoal Australia Limited	Premier	
Diamonds		
Rio Tinto Ltd	Argyle	
Gold		
Adaman Resources Pty Ltd	Kirkalocka	Re-opened project. Mining began in 2019 with first sales in October 2019.
AngloGold Ashanti Limited	Sunrise Dam Tropicana	

Bar Twenty Pty Ltd	Bar Twenty	Re-opened project. Sales between September and November 2019.
Beacon Minerals Limited	Jaurdi	New project. First production in September 2019.
Billabong Gold Pty Ltd	Hermes Plutonic	Billabong Gold Pty Ltd is a subsidiary of Superior Gold Inc. Mining activities concluded in May 2019, with processing activities concluding in December 2019.
Dacian Gold Limited	Mt Morgans	
Evolution Mining Limited	Mungari	
FMR Investments Pty Ltd	Gordon-Sirdar	
Gascoyne Resources Limited	Dalgaranga	
Gold Fields Limited	Agnew Granny Smith St Ives Gruyere	Gruyere is a joint venture of Gold Fields Limited (50%) and Gold Road Resources (50%). First gold was delivered in June 2020.
Habrok Pty Ltd	Battler Bullabulling North	Battler is a new project. Achieved first pour in January 2020. Bullabulling North is also a new project. Bullabulling North is a joint venture of Habrok Pty Ltd (70%) and Bulletin Resources Limited (30%). Habrok Pty Ltd acquired its share in January 2020. First pour was achieved in September 2019.
Hawthorn Resources Ltd	Trouser Legs	
Kalgoorlie Consolidated Gold Mines Pty Ltd	Super Pit / Mt Charlotte	Kalgoorlie Consolidated Gold Mines Pty Ltd is the management company for the joint venture owners. Saracen Mineral Holdings Ltd acquired Barrick Gold Corporation's 50% stake in November 2019 and Newmont Goldcorp sold its 50% stake to Northern Star Resources Ltd in January 2020.
Karora Resources Inc	Beta Hunt Higginsville	RNC Minerals Corporation changed its name to Karora Resources on 17 June 2020.
Lord Byron Mining Pty Ltd	Jasper Hills	New project. Achieved first sales in January 2020.
Matsa Resources Limited	Lake Carey	
Millennium Minerals Limited	Nullagine	Millennium Minerals Limited went into voluntary administration in November 2019. Final sales from the Nullagin project were in January 2020.
Mincor Resources NL	Widgiemooltha	Re-opened project. Gold production commenced in July 2018 and ceased on 1 August 2019. Final sales from the project were in December 2019.

Minjar Gold Pty Ltd	Southern Cross	
NBT Metals Pty Ltd	Kalpini	Horizon Minerals announced it was to acquire the Kalpini project from NBT Metals Pty Ltd in October 2020.
Newcrest Mining Limited	Telfer	
Newmont GoldCorp Corporation	Boddington	
Northern Star Resources Ltd	Jundee Kanowna Belle Kundana South Kalgoorlie	
Norton Gold Fields Ltd	Paddington	
Orminex Limited	Comet Vale	Mining activities were suspended at Comet Vale in September 2020.
Pantoro Limited	Halls Creek	The Halls Creek operation includes the Nicolsons and Wagtail mines
Ramelius Resources Ltd	Edna May Marda Mt Magnet Vivien	Marda is a new project. Ramelius Resources Ltd acquired the Marda Gold Project from Black Oak Minerals Ltd in 2018. Mining activities commenced in November 2019 with first sales in February 2020
Red 5 Limited	Darlot King of the Hills	
Regis Resources Ltd	Duketon	
Rose Dam Resources NL	Rose Dam	Re-opened project. Mining recommenced in October 2019.
Saracen Mineral Holdings Ltd	Carosue Dam Thunderbox	
Silver Lake Resources Ltd	Deflector Mt Monger	
St Barbara Mines Ltd	Gwalia	
Westgold Resources Limited	Meekatharra Cue Fortnum	
Wiluna Mining Corporation Limited	Matilda / Wiluna	Blackham Resources Limited changed its name to Wiluna Mining Corporation Limited on 18 June 2020.
Iron ore		
Atlas Iron Limited	Mt Webber	Atlas Iron Limited is a subsidiary of Hancock Prospecting Pty Ltd.
BCI Minerals Limited	Iron Valley	Operated by a subsidiary of Mineral Resources Limited.

BHP	Jimblebar / Wheelara Mining Area C Newman Yandi	Newman comprised the Mt Whaleback, Orebody 24 / 25 (Eastern Ridge), Orebody 29 / 30 / 35, and Orebody 18 mines
CITIC Pacific Mining Management Pty Ltd	Sino Iron	
Fortescue Metals Group Ltd	Chichester Solomon	Chichester comprised the Christmas Creek and Cloudbreak mines, while Solomon comprised the Firetail and Kings Valley mines.
Hancock Prospecting Pty Ltd	Roy Hill	
Karara Mining Limited	Karara	Karara Mining Limited is wholly owned by Anshan Iron and Steel Group.
Mineral Resources Limited	Carina Koolyanobbing	Sales of stockpiled materials from Carina continued in 2019-20.
Mount Gibson Iron Limited	Koolan Island Mid West	Mid West includes the Extension Hill mine. Shipments of stockpiled low-grade materials from Extension Hill commenced in early June 2019 and continued throughout 2019-20. They are expected to continue to the end of 2020.
Kimberley Metals Group Pty Ltd	Ridges	
Rio Tinto Ltd	Brockman 2 – Nammuldi – Silvergrass Brockman 4 Greater Paraburdoo Hope Downs Marandoo Mt Tom Price Robe Valley (Mesa A & Mesa J) West Angelas Yandicoogina	Greater Paraburdoo comprised the Paraburdoo, Channar and Eastern Ranges mines, Hope Downs comprised the Hopes Downs 1 and 4 mines, and Mt Tom Price included the Western Turner Syncline mine.
Lithium		
Alita Resources Limited	Bald Hill	Alita Resources Limited went into receivership in August 2019 and as a result suspended operations at Bald Hill.
Altura Mining Limited	Pilgangoora	
Galaxy Resources Limited	Mt Cattlin	

Mineral Resources Limited	Mount Marion Wodgina	Mount Marion is a joint venture of Mineral Resources Limited (50%) and Ganfeng Lithium Company (50%). Mineral Resources (40%) and Albemarle Corporation (60%) entered into the MARBL joint venture for the Wodgina project in August 2019. The project was placed into care and maintenance in November 2019.
Pilbara Minerals Limited	Pilgangoora	
Talison Lithium Australia Pty Ltd	Greenbushes Lithium	Talison Lithium Australia Pty Ltd is a joint venture of Tianqi Lithium Pty Ltd (51%) and Albemarle Corporation (49%).
Manganese		
Consolidated Minerals Pty Ltd	Woodie Woodie	
Mineral sands		
Doral Pty Ltd	Yoongarillup mine and Picton dry separation plant Keysbrook	Doral Pty Ltd acquired the Keysbrook project from MZI Resources Ltd in July 2019.
GMA Garnet Pty Ltd	Port Gregory	
Iluka Resources Limited	South West Mid West	Active operations at South West comprised the Capel dry plant, the North Capel mineral separation plant, and one of two synthetic rutile kilns at North Capel. Active operations at Mid West comprised the Cataby mine and Narngulu mineral separation plant.
Image Resources	Boonanarring	New project. Achieved first production in December 2018.
Tronox Limited	Cooljarloo mine and Chandala mineral separation plant Wonnerup mine and North Shore mineral separation plant	
Nickel		
BHP	Leinster Mt Keith	
First Quantum Minerals Ltd	Ravensthorpe	Re-opened project. Sales commenced in Match quarter 2020, having previously being suspended in October 2017.
IGO Limited	Nova	Independence Group NL changed its name to IGO Limited in January 2020.
Minara Resources Ltd	Murrin Murrin	Minara Resources Ltd is a subsidiary of Glencore Plc.

Panoramic Resources Ltd	Savannah	Operations were suspended in April 2020 as a result of the COVID-19 pandemic.
Western Areas Ltd	Forrestania	
Rare earths		
Lynas Corporation Ltd	Mt Weld	
Salt		
Dampier Salt Ltd	Dampier Lake MacLeod Port Hedland	Dampier Salt Ltd is a joint venture of Rio Tinto (68%), Marubeni Corporation (22%) and Sojitz Corporation (10%).
Onslow Salt Pty Ltd	Onslow	
Shark Bay Salt Pty Ltd	Shark Bay	
WA Salt Koolyanobbing Pty Ltd	Lake Deborah	
Silica sand		
Hanson Australia Pty Ltd	Gnangara	
Simcoa Operations Pty Ltd	Moora	
T T Sand Pty Ltd	Mindijup	
Talc		
Imerys Talc Australia Pty Ltd	Three Springs	
Tantalum		
Global Advanced Metals Pty Ltd	Greenbushes Tantalum	

Basic Raw Materials	
Company	Location(s)
Adelaide Brighton Ltd	Cockburn, Dongara, Lancelin, Nowergup, Parkeston, Woodman Point
BGC Pty Ltd	Chidlow, Perth Metro, Port Hedland
Boral Limited	Ashburton, Kalgoorlie, Kununurra, Mt Regal, Onslow, Orange Grove, Perth North, Pilbara (Tabba Tabba), Port Hedland
Hanson Australia Pty Ltd	Ashburton, Bunbury, Byford, Ellenbrook, Learmonth, Mt Barker, Mt Regal, North of Perth, Port Hedland, Red Hill, South of Perth
Holcim (Australia) Pty Ltd	Albany, Baldivis, Bunbury, Esperance, Geraldton, Gosnells, Jandabup, Kalgoorlie-Boulder, Karratha, Newman, Port Hedland
Kimberley Quarry Pty Ltd	Broome, Geraldton
MLG Oz Pty Ltd	Coolgardie (Canegrass, Eight Mile, Jonah Bore), Tarmoola
Mobile Concreting Solutions Pty Ltd	Indee, Tom Price
WA Limestone Pty Ltd	Byford, North Metro, Onslow, Port Hedland, Perth Metro, Roebourne, South Metro
Westdeen Holdings Pty Ltd	Cowcowing, Dongara, Jurien Bay, Lancelin

PRINCIPAL MINERAL PROCESSING OPERATIONS	
Company	Project
Alumina	
Alcoa Corporation	Kwinana alumina refinery Pinjarra alumina refinery Wagerup alumina refinery
South32 Limited	Worsley alumina refinery
Gold	
Gold Corporation	Perth Mint
Nickel	
BHP	Kalgoorlie nickel smelter Kambalda nickel concentrator Kwinana nickel refinery
Minara Resources Ltd	Murrin Murrin nickel refinery
Mineral sands	
Tronox Limited	Bunbury pigment plant Kwinana pigment plant
Doral Pty Ltd	Rockingham fused zirconia plant
Silica sand	
Simcoa Operations Pty Ltd	Kemerton silicon smelter

PRINCIPAL PETROLEUM PROJECTS						
Operator	Project(s)	Processing plant(s)	Operating field(s)	Type	Area	Comments
Beach Energy	Beharra Springs	Beharra Springs Gas Facility	Redback, Redback South	Gas	Onshore	
BHP	Macedon	Macedon Domestic Gas Plant	Macedon	Gas and condensate	Offshore	
	Pyrenees		Crosby, Moondyne, Ravensworth, Stickle	Oil	Offshore	
Buru Energy	Ungani	Ungani Production Facility	Ungani	Oil	Onshore	
Chevron Corporation	Barrow Island	Gorgon LNG	Barrow Island	Oil,	Onshore	Woodside Petroleum operates the Brunello field within the Wheatstone LNG project
	Gorgon		Jansz-Io, Gorgon	Gas and condensate	Offshore	
	Wheatstone		Iago, Wheatstone, Brunello	Gas and condensate	Offshore	
ENI	Blacktip		Blacktip	Gas and condensate	Offshore	
Exxon Mobil	Athena		Athena	Gas and condensate	Offshore	
INPEX Corporation	Ichyths		Ichthys	Condensate	Offshore	
Jadestone Energy	Stag		Stag	Oil	Offshore	
Mitsui & Co	Waitsia	Xyris Production Facility	Waitsia	Gas	Onshore	
RMCA Group	Jingemia	Jingemia Production Facility		Oil	Onshore	
Santos	Reindeer	Devil Creek Processing Plant	Reindeer	Gas	Offshore	Van Gogh was renamed from Ningaloo Vision.
	Van Gogh		Coniston, Novara, Van Gogh	Oil	Offshore	
	Varanus Island	Varanus Island Processing Facility	Bambra, Halyard, John Brookes, Lee, Spar	Oil, gas and condensate	Offshore	
Shell	Prelude	Prelude FLNG	Prelude	Gas	Offshore	
Triangle Energy (Global) Limited	Cliff Head	Arrowsmith Stabilisation Plant	Cliff Head	Oil	Offshore	
Vermillion	Wandoo		Wandoo	Oil	Offshore	

Woodside Petroleum	Enfield	Karratha Gas Plant	Vincent, Cimatti and Laverda	Oil and gas	Offshore	Production from Greater Enfield project areas including the Cimatti and Laverda fields commenced on 26 August 2019.
	North West Shelf		Angel, Cossack, Dockrell, Goodwyn, Hermes, Keast, Lady Nora, Lambert, North Rankin, Pemberton, Persephone, Perseus, Rankin, Sculptor, Searipple, Tidepole, Wanaea	Oil, gas, and condensate	Offshore	
	Pluto	Pluto LNG	Pluto, Xena	Gas	Offshore	