LITHIUM

INVESTMENT OPPORTUNITIES

WORLD-CLASS RESOURCE PROVINCE | SECURE INVESTMENT LOCATION
WORLD-LEADING GEOSCIENTIFIC DATA | GLOBAL MINING SERVICES INDUSTRY

Western Australia has a strategic advantage in the global demand for lithium

- The State has been the largest global lithium producer since 2016, and in 2018 generated >50% of global production from seven mining operations
- Western Australia continues to position itself as a battery minerals hub due to its proximity to key markets, shorter construction and ramp-up times and relatively low capital costs
- In 2018, production increased to 2.05 Mt sold with Mt Cattlin, Mt Marion; two projects at Pilgangoora recently commenced mining
- Tianqi Lithium's Kwinana lithium processing plant (Stage 1) was commissioned in 2019. Construction has begun at Abermarle's Kemerton lithium hydroxide processing plant. Both plants will source spodumene concentrate from the Greenbushes operation
- Covalent Lithium (Westfarmers/SQM JV) has proposed a third lithium refinery for Kwinana, to process ore from Mt Holland
- Capital expenditure in lithium mining projects that were committed or under construction at September 2019 was $2558 million

$1652 m	2 051 327 t	$1262 m	4500	$6805 m*	1st	5.0%
Sales value	Tonnes sold	Exports	Full-time employees	Investment projects	Production world ranking	Royalty rate

(2018 calendar year)

* Includes projects planned, possible, committed or under construction as of September 2019

Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**

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Top lithium projects with resources

Resources estimated according to JORC

Project	Status	Company	Ore (Mt)	Av. grade (%)	Contained Li_2O (Mt)
Greenbushes*	Operating	Talison Lithium	157.1	2.25	3.5
Wodgina†	Care and maintenance	Mineral Resources	259.2	1.17	3.0
Mt Holland	Feasibility study	Wesfarmers/SQM	189.0	1.50	2.8
Pilgangoora	Operating	Pilbara Minerals	220.5	1.26	2.8
Kathleen Valley	Feasibility study	Liontown Resources	74.9	1.36	1.0
Mt Marion	Operating	Mineral Resources / Jiangxi Ganfeng Lithium Company	71.4	1.37	1.0
Pilgangoora	Operating	Altura Mining	45.7	1.06	0.5
Bald Hill	Care and maintenance	Tawana Resources / Alliance Mineral Assets	26.5	0.97	0.3
Mt Cattlin	Operating	Galaxy Resources	16.7	1.28	0.2
Buldania	Exploration	Liontown Resources	14.9	0.97	0.1
Pioneer Dome	Exploration	Pioneer Resources	8.2	1.23	0.1
Lynas Find‡	Exploration	Pilbara Minerals	5.5	1.53	0.1

Mineralization style — pegmatite hosted

* September 2015 resource, but mined continuously since then
† Includes tailings
‡ Linked to Pilgangoora (Pilbara Minerals)
Note: Totals have been rounded

Lithium prospectivity of Western Australia

- Western Australia's lithium resources are ranked fourth globally with a maiden resource recently announced for the Buldania Project (Liontown Resources)
- Lithium is used as a component of rechargeable lithium-ion batteries – driven by the growth of electric vehicles and energy storage system markets
- Lithium minerals in Western Australia occur in pegmatites and include spodumene, lepidolite, zinnwaldite, petalite and holmquistite

For more information

Geological Survey of Western Australia www.dmirs.wa.gov.au/gswa

MINEDEX www.dmirs.wa.gov.au/minedex

GeoVIEW.WA www.dmirs.wa.gov.au/geoview

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