

LITHIUM

INVESTMENT OPPORTUNITIES

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

Mines, deposits and prospects

- Li (with minor tantalum)
- Ta (with minor lithium)
- Highway / major road
- Town



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

- 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
- The State is the largest supplier of lithium, producing high-quality spodumene concentrate from four operating mines
- Production remained steady in 2020–21, with 1.6 Mt of lithium concentrate produced from the Greenbushes, Mt Marion, Pilgangoora and Mt Cattlin openpit mines
- Bald Hill and Wodgina remain on care and maintenance
- First lithium hydroxide has recently been produced from the Tianqi and IGO Kwinana plant as part of commissioning of Train 1
- Albemarle’s Kemerton lithium hydroxide plant is under construction
- Both the Kwinana and Kemerton plants will source spodumene from the Greenbushes mine
- Covalent Lithium (Westfarmers/SQM JV) has proposed a third lithium refinery for Kwinana, to process ore from Mt Holland
- Several other lithium projects are advancing: a definitive feasibility study recently completed for the Kathleen Valley project; a scoping study for Dome North recently commenced; and a new discovery and a maiden resource announced for the Marble Bar Lithium Project

\$938 m
Sales value



1 627 771 t
Tonnes sold



1846
Full-time employees



\$4675 m*
Investment projects



1st
Production world ranking



5.0%
Royalty rate



(2020–21 financial year)

* Includes projects planned, possible, committed or under construction as of September 2021



Lithium resources ranked by contained Li₂O (kt)

Resources estimated according to JORC 2012

Project	Status	Owner	Resources (Mt)	Av. grade Li ₂ O (%)	Contained Li ₂ O (kt)	Resource date
Greenbushes	Operating	Albemarle Corporation / Tianqi Lithium / IGO	196.8	1.90	3748	31/03/2018
Pilgangoora	Operating	Pilbara Minerals	309.0	1.14	3506	30/06/2021
Wodgina	Operating	Albemarle Corporation / Mineral Resources	259.2	1.17	3032	23/10/2018
Mt Holland	Feasibility	Sociedad Química Y Minera De Chile S.A. / Wesfarmers	189.0	1.50	2843	19/03/2018
Kathleen Valley	Feasibility	Liontown Resources	156.0	1.35	2100	31/03/2021
Mt Marion	Operating	Mineral Resources	72.9	1.37	995	01/07/2019
Bald Hill [^]	Feasibility	Alita Resources	26.5	0.97	256	30/04/2018
Buldanía	Exploration	Liontown Resources	15.0	0.97	145	08/11/2019
Pioneer Dome	Exploration	Essential Metals	11.2	1.22	136	29/09/2020
Mt Cattlin	Operating	Orocobre	11.0	1.20	132	31/03/2021
Marble Bar	Exploration	Global Lithium Resources	10.5	1.00	105	12/10/2020
TOTAL			1257.1		16 998	

Resource estimates have been rounded
All resources are associated with pegmatites
[^] Resource pre-dates production

Lithium prospectivity of Western Australia

- Western Australia's lithium resources are ranked fourth globally with Liontown Resources recently doubling the resource at the Kathleen Valley project to 157 Mt @ 1.4% Li₂O and 130 ppm Ta₂O₅
- 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



A sample of Lithium pegmatite

For more information



Geological Survey of
Western Australia

www.dmirs.wa.gov.au/gswa



www.dmirs.wa.gov.au/minedex



www.dmirs.wa.gov.au/geoview

Contact us

Sarah Sargent

Geological Survey and Resource Strategy Division

Email: minerals.investors@dmirs.wa.gov.au

Tel: +61 8 9222 3890



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

December 2021

Geological Survey of
Western Australia

