

LITHIUM

INVESTMENT OPPORTUNITIES

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

Mines, deposits and prospects

- Mine, operating or under development
- Deposit
- Prospect
- 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 endowment of mineral resources, access to skilled workers and proximity to key markets
- The State is the largest supplier of lithium, producing high-quality spodumene concentrate from six mining operations
- Over 2 Mt of lithium concentrate were produced in 2021–22 from open pits at the Pilgangoora, Greenbushes, Mt Marion, Mt Cattlin, Bald Hill and Wodgina mines
- Commercial lithium hydroxide production from Train 1 at the Tianqi Lithium / IGO joint venture's (JV) Kwinana Lithium Hydroxide Refinery was announced in late 2022
- First production from Albemarle's Kemerton Lithium Hydroxide Plant was delivered in July 2022
- Construction of Covalent Lithium's (Wesfarmers/SQM JV) Kwinana Lithium Hydroxide Plant has begun with first production anticipated in late 2024
- Two new lithium mines are under construction at the Kathleen Valley and Mt Holland projects
- New JORC 2012 compliant Mineral Resource Estimates have been announced for the Marble Bar, Manna, Mt Ida and Niobe projects, and exploration activity producing significant results continues across many lithium prospects including Manindi (Metals Australia), Pioneer Dome (Essential Metals), Mt Alexander (St George Mining), Mt Edwards (Widgie Nickel), Split Rocks (Zenith Minerals) and Lake Johnston (Charger Metals, Lithium Australia)

\$6795 m
Sales value



2 045 127 t
Tonnes sold



3545[^]
Full-time employees



\$5496 m*
Investment projects



1st
Production world ranking



5.0%
Royalty rate



(2021–22 financial year)

* Includes projects planned, possible, committed or under construction as of September 2022

[^] Total of tin, tantalum and lithium

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



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Geological Survey of
 Western Australia



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 / Tianqi Lithium / IGO	360.2	1.54	5 554	31/08/2021
Pilgangoora	Operating	Pilbara Minerals	305.0	1.18	3 599	30/06/2022
Wodgina	Operating	Albemarle / Mineral Resources	259.2	1.17	3 032	30/06/2022
Mt Holland	Under development	Sociedad Química Y Minera De Chile S.A. / Wesfarmers	189.0	1.50	2 843	19/03/2018
Kathleen Valley	Under development	Liontown Resources	156.0	1.35	2 100	31/03/2021
Mt Marion	Operating	Ganfeng Lithium Company / Mineral Resources	51.4	1.45	744	30/06/2022
Manna	Exploration	Global Lithium Resources	32.7	1.00	328	15/12/2022
Bald Hill*	Operating	Lithco No. 2 Pty Ltd	26.5	0.97	256	30/04/2018
Marble Bar Lithium Project (MBLP)	Exploration	Global Lithium Resources	18.0	1.00	180	15/12/2022
Mt Cattlin	Operating	Allkem	13.3	1.21	161	25/08/2022
Mt Ida Lithium	Exploration	Red Dirt Metals	12.7	1.15	147	19/10/2022
Buldania	Exploration	Liontown Resources	15.0	0.97	145	08/11/2019
Dome North	Exploration	Essential Metals	11.1	1.15	128	20/12/2022
Niobe	Exploration	Aldoro Resources	4.6	0.07	3	12/10/2022

Resource estimates have been rounded

All Mineral Resources are pegmatite-hosted mineralization

* Mineral Resource pre-dates production

Spatial and resource estimates data sourced from

WA Mines and Mineral Deposit database (MINEDEX)

TOTAL 1454.8 19 220

Lithium prospectivity of Western Australia

- Western Australia is ranked fourth globally in terms of lithium resources, with a recent significant increase to Global Lithium Resources Manna deposit, now containing 32 Mt at 1% Li₂O
- Lithium is used as a component of rechargeable lithium-ion batteries – driven by the growth of electric vehicles and energy storage system markets
- In Western Australia, lithium minerals include spodumene, lepidolite, zinnwaldite, petalite and holmquistite and are found in hard-rock pegmatites



A sample of Lithium pegmatite

For more information

MINEDEX is a spatial and textual database of mining and exploration activity

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

GeoVIEW.WA is a free GIS-based spatial viewer

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

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The DMIRS MINEDEX, Statistics, and Geoscience and Titles Information teams have contributed to the production of this flyer



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