

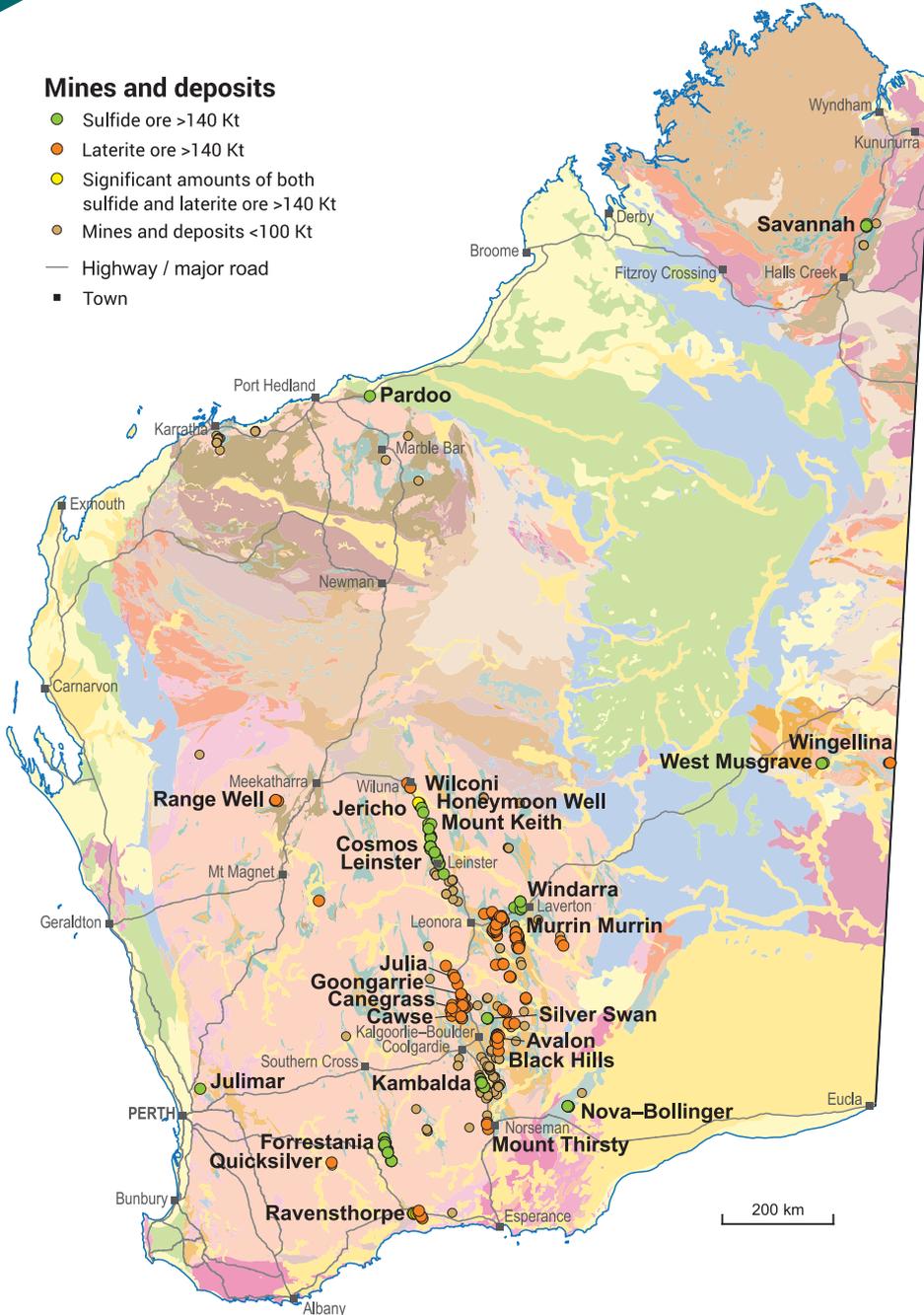
NICKEL-COBALT

INVESTMENT OPPORTUNITIES

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

Mines and deposits

- Sulfide ore >140 Kt
- Laterite ore >140 Kt
- Significant amounts of both sulfide and laterite ore >140 Kt
- Mines and deposits <100 Kt
- Highway / major road
- Town



Western Australia hosts world-class nickel deposits

- Western Australia is ranked among the top global producers of nickel and cobalt
- In 2021–22, nickel sales reached \$4.9 billion from eight operations located in the Eastern Goldfields, Albany Fraser and Kimberley regions
- Sales value of cobalt reached \$522 million in 2021–22, produced as a byproduct from the Murrin Murrin, Nova Bollinger and Ravensthorpe operating nickel mines
- Western Australia began producing battery-grade nickel sulfate from BHP Kwinana refinery in 2021, which will ramp up to 100 000 tonnes each year

New mining and exploration activity

- The new Shoemaker-Levy mine at the Ravensthorpe project began operating
- Construction continues at the Odyssey Underground Mine at the Cosmos Project
- Nickel maiden Mineral Resource Estimates were announced for the Sabre deposit (Fisher East project; Cannon Resources), the T5 deposit (Carr Boyd; Estrella Resources), the Cogleia North and South deposits (Cogleia Project; Panther Metals) and the Baker deposit (Kambalda Nickel Project; Lunnon Metals)
- Recent Mineral Resource Estimates updates were announced for the Wilconi (Wiluna Mining, A-Cap Resources), Cosmos (IGO), Julimar (Chalice Mining), Panton (Future Metals), Silver Swan – Black Swan (Poseidon), Kambalda (Mincor Resources), Mt Edwards (Widgie Nickel) and Fisher East (Cannon Resources)
- Exploration continues across the State, with new discoveries announced for Emu Lake (Ardea Resources), Gillet North (Widgie Nickel) and Callisto North (Galileo Mining)

\$4946 m
Sales value



147 190 t
Tonnes sold



8213
Full-time employees



\$3600 m*
Investment projects



5th
Production world ranking



(2021–22 financial year; for nickel only)

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



Nickel projects with resources >140 Kt contained nickel

Resources estimated according to JORC 2012

Project	Status	Owner	Resources (Mt)	Av. grade (% Ni)	Contained Ni (kt)	Av. grade (% Co)	Contained Co (t)	Resource date
Kalgoorlie Nickel Project	Feasibility	Ardea Resources	830.0	0.71	5 906	0.05	383 225	16/06/2021
Mt Keith	Operating	BHP Group	643.7	0.58	3 730			30/06/2021
Range Well	Exploration	EV Metals	353.0	0.65	2 302	0.04	145 490	01/10/2021
Murrin Murrin	Operating	Glencore Plc	200.9	1.01	2 027	0.08	164 876	31/12/2020
Leinster	Operating	BHP Group	194.8	1.04	2 024			30/06/2021
Wingellina	Feasibility	Nico Resources	215.8	0.91	1 952	0.07	151 086	30/06/2016
Ravensthorpe	Operating	First Quantum / Pohang Iron and Steel Co.	310.8	0.55	1 717	0.03	87 328	31/12/2021
Avalon [^]	Exploration	Wingstar Investments	169.8	0.83	1 403			31/12/2012
Cawse [^]	Exploration	Wingstar Investments	176.5	0.69	1 220			31/12/2013
Honeymoon Well	Exploration	BHP Group (Nickel West)	176.8	0.69	1 218			30/06/2021
West Musgrave	Feasibility	Oz Minerals	389.1	0.30	1 170	0.01	45 304	23/09/2022
NiWest	Pre-feasibility	GME Resources	85.3	1.03	880	0.07	55 445	30/06/2019
Wilconi	Exploration	Wiluna Mining / A-Cap Resources	91.0	0.73	666	0.05	46 790	18/03/2022
Cosmos	Under development	IGO	67.0	0.99	661			30/08/2022
Julimar	Exploration	Chalice Mining	348.0	0.16	561	0.02	55 850	08/07/2022
Coglia	Exploration	Panther Metals	70.6	0.64	449	0.05	32 136	27/06/2022
Jericho	Exploration	BHP Group (Nickel West)	74.0	0.55	407			30/06/2021
Forrestania Nickel [#]	Exploration	IGO / Great Western Exploration	17.9	1.61	287			30/06/2021
Range Well Chromium [^]	Exploration	EV Metals	63.5	0.38	241	0.04	25 400	24/09/2013
Panton	Feasibility	Future Metals	128.9	0.18	235	0.02	19 891	21/06/2022
Savannah	Operating	Panoramic Resources	13.5	1.56	210	0.10	13 328	22/07/2021
Canegrass [^]	Exploration	Gardner, Robert Charles	29.6	0.71	209	0.06	17 760	27/11/2007
Silver Swan – Black Swan	Feasibility	Poseidon Nickel	29.9	0.69	206	0.02	5 191	04/07/2022
Kambalda	Operating	Mincor Resources	5.2	3.80	199	0.08	482	25/07/2022
Julia [^]	Exploration	Wingstar Investments	25.9	0.74	193			31/10/2011
Black Hills [^]	Exploration	Zetek Resources / Western Resources	30.0	0.64	192	0.03	9 000	18/09/2006
Carlingup–Nindilbillup [*]	Exploration	Nickelsearch	29.7	0.59	174	0.03	4 316	23/08/2021
Quicksilver	Exploration	Golden Mile Resources	26.3	0.65	170	0.04	11 354	19/11/2018
Nova–Bollinger	Operating	IGO	11.2	1.52	169	0.05	5 604	31/12/2021
Mt Edwards	Exploration	Widgie Nickel	10.7	1.58	169	0.05	1 387	09/03/2022
Pardoo	Exploration	Caeneus Minerals	50.0	0.30	152	0.03	15 000	31/03/2010
Windarra	Feasibility	Poseidon Nickel	9.7	1.53	148			16/07/2014

Resource estimates have been rounded

[#]Project includes Western Areas T5 Lounge Lizard Disseminated Zone and T5 Flying Fox Disseminated Zone

^{*} RAV series deposits – komatiite-hosted nickel sulfide deposit while John Ellis – Laterite hosted

^{*}Resource estimates are not JORC 2012 compliant

Spatial and resource estimates data sourced from WA Mines and Mineral Deposit database (MINEDEX)

 Sulfide

 Laterite

 Laterite + sulfide

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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