

PLATINUM GROUP ELEMENTS

INVESTMENT OPPORTUNITIES

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

PGE projects in Western Australia

- Deposit
- Prospect
- Occurrence
- Highway / major road
- Town



Western Australia's resource inventory of platinum group elements continues to expand

- The platinum group elements (PGE) comprise six noble and precious metallic elements – Platinum (Pt), Palladium (Pd), Ruthenium (Ru), Rhodium (Rh), Osmium (Os) and Iridium (Ir)
- PGE mineralisation is often associated with nickel, gold and base metal mineralisation

Feasibility studies

- A Scoping Study was completed for Gonneville in August 2023. A Pre-Feasibility Study (PFS) is now advancing with the focus on a higher grade starter mine. PFS completion is targeted for mid-2025
- A new Scoping Study for the Panton Project demonstrated an initial nine year mine life utilizing only 26% of the current high-grade MRE. A PFS is targeted for completion in Q4 2024

Mineral resource updates

- Significant PGE projects with resources greater than 1 Moz contained metals are: Gonneville (Chalice Mining), Parks Reef (Podium Minerals), Panton (Future Metals) and Munni Munni (Alien Metals)
- Significant mineral resource upgrades have been announced for the Gonneville (Chalice Mining), Parks Reef (Podium Minerals), and Panton (Future Metals) Projects
- Maiden mineral resources were announced for the Mt Sholl (Raiden Resources, Welcome Exploration) and Norseman (Galileo Mining) Projects
- PGEs mineral resources have been defined in several nickel and copper deposits including at the Kalgoorlie Nickel (Ardea Resources), Collurabie (Cannon Resources), Duketon (Duketon Mining), Kambalda Nickel (Lunnon Metals), Carr Boyd (Estrella Resources), Mt Edwards (Widgie Nickel), and Fisher East (Cannon Resources) Projects

Recent drilling results

- Since the discovery of PGE–Ni–Cu–Co mineralisation at Gonneville in the south west by Chalice Mining in 2020, exploration for PGEs has increased significantly across Western Australia
- Significant drilling results announced for the Norseman (Callisto deposit), Panton (Panton deposit), Eastman (Brumby prospect), Parks Reef (Central Zone deposit, Yarawindah Brook (Serradella prospect) Projects
- Large-scale targets at the Dante Project (Cronus, Hyperion and Crius prospects) have been identified with high-grade rock chip samples of PGE mineralisation and drilling results including up to 1.17 g/t PGEs

Resource Estimates for Projects containing (or with) Platinum Group Elements^

Mineral Resource Estimates reported in accordance with JORC (2012) unless otherwise stated


Project	Status	Owner	Deposit	Platinum group elements	Resources (Mt)	Av. grade (g/t)	Contained metal (Moz)	Resource date
Gonneville	Scoping	Chalice Mining	Pd-Pt-Ni-Cu-Co-Au	PGE 3E (Pd+Pt+Au)	660.0	0.79	17.0	23/04/2024
Parks Reef	Feasibility	Podium Minerals	Pt-Pd-Rh-Ir-Au	PGE 5E (Pd+Pt+Au+Rh+Ir)	183.0	1.30	7.6	3/04/2024
Panton	Feasibility	Future Metals	Pt-Pd-Au-Ni-Cu-Co	PGE 3E (Pd+Pt+Au)	92.9	1.50	4.5	26/10/2023
Munni Munni*	Exploration	Alien Metals	Pd-Pt-Au-Rh	PGE 4E (Pd+Pt+Au+Rh)	23.6	2.90	2.2	26/09/2008
Norseman	Exploration	Galileo Mining	Pd-Pt-Au-Rh	PGE 4E (Pd+Pt+Au+Rh)	17.5	1.04	0.6	26/09/2008

Mineral Resource Estimates are rounded

* Mineral Resource reported in accordance with the JORC Code (2004)

^ The table does not include any PGE resources from nickel-dominant projects i.e. Kalgoorlie Nickel, Collurabie, Duketon, Kambalda Nickel, Carr Boyd, Mt Edwards, Mt Sholl, and Fisher East projects

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

 Layered mafic-ultramafic intrusion

Applications of platinum group elements :

- Properties include: resistance to corrosion, high melting point and recyclability
- Currently PGEs are widely used in internal combustion engines as an auto catalyst to reduce harmful emissions
- Other uses include: industrial applications, jewellery and investments
- In the future, PGEs will also be used in the hydrogen industry, in both generating renewable hydrogen through its use in electrolyzers and in catalytic converters required for hydrogen fuel cells



Core samples from Gonneville project, Western Australia.
Image courtesy of Chalice Mining

For more information

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

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

GeoVIEW.WA is a free GIS-based spatial viewer

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

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