

FREE HIGH QUALITY DATA

We support the minerals industry with up-to-date, extensive exploration datasets. These are free to industry, available from our online exploration database and in the New Zealand Minerals Data Pack.

The Data Pack includes the results of >140,000 geochemical samples. These have been digitised from existing exploration reports, along with a host of other geological and geophysical data.

The Data is formatted as ArcGIS shapefiles and there are links to open file reports on NZP&M's Online Exploration Database (data.nzpam.govt.nz)

We will complete acquisition of some 30,000km² of low-level aeromagnetics over Marlborough,

Southland and Otago between 2015 and 2017. The data gathered will be added to the existing high quality, freely available geophysical data covering much of our most prospective acreage (figure 2).

Additional geoscience exploration data can be found at nzpam.govt.nz

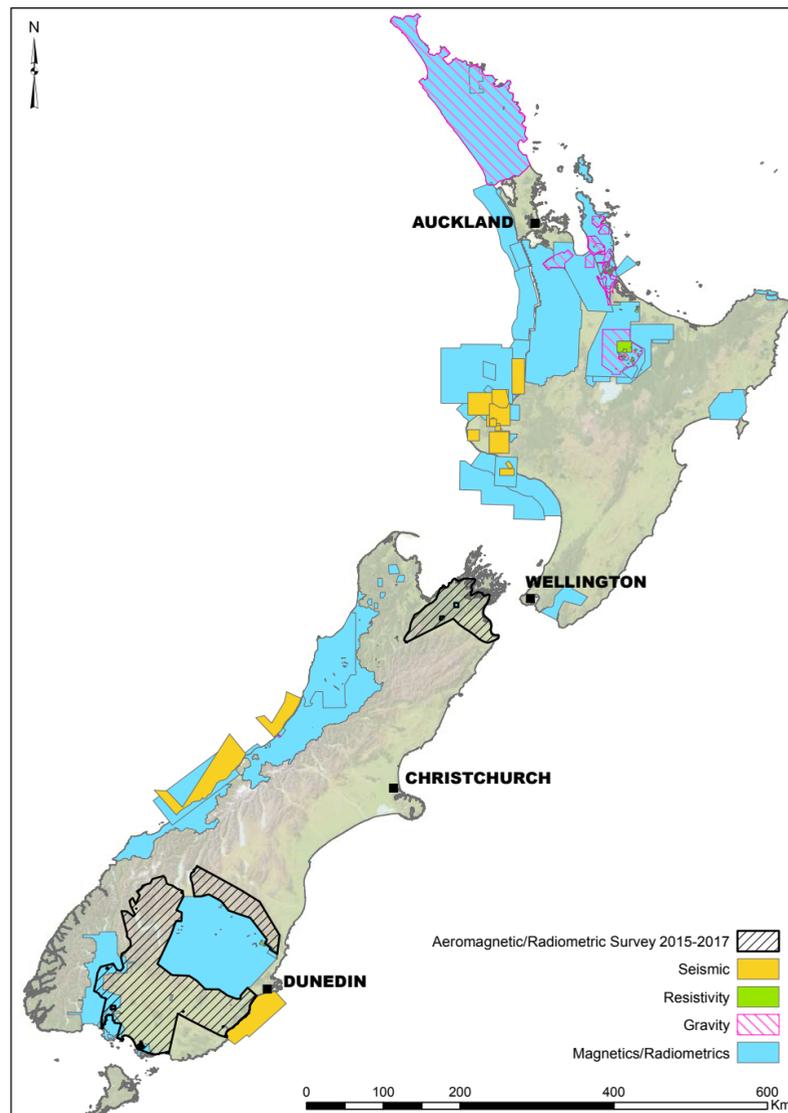
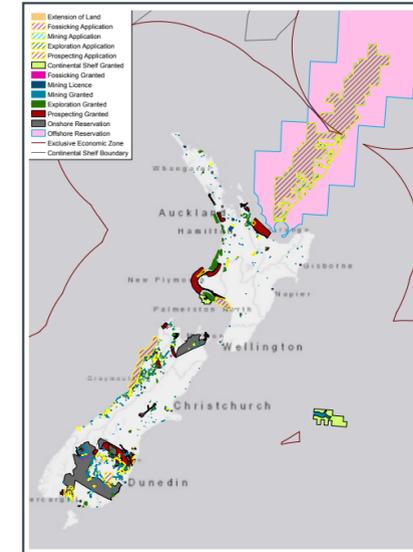


Figure 2: Geophysical survey coverage map

PERMIT WEB MAP



With the layers for:

- > NZ exclusive economic zone, 12 nautical mile limit, continental shelf
- > Territorial authorities, regional councils
- > Minerals permit applications
- > Active mineral permits
- > Newly available acreage (NAA) status
- > Reserved areas

NEW ZEALAND PETROLEUM & MINERALS (NZP&M)

We are the government agency that leads and actively manages New Zealand's petroleum and minerals portfolio.

Our goal is to use our wider understanding of the energy and resources sector to increase national and regional prosperity via petroleum and minerals exploration and production.

The energy and resources environment in New Zealand is transparent and balanced. Our rigorous process provides clarity, certainty and confidence. We welcome participants with a responsible approach.

NZP&M provides help with entry into the New Zealand market. With our strong technical ability in regulating the industry, we can help navigate the environment.

Through petroleum Block Offers, mineral tenders and access to comprehensive data, we provide prospects with the opportunities and information they need to explore in New Zealand.

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ONLINE PERMITTING SYSTEM

- > The new Online Permitting System allows for applications to be submitted online.
- > Permit holders can view obligations, permit status, and compliance history online.

Online permitting system:
permits.nzpam.govt.nz/aca/

WHY INVEST IN NEW ZEALAND?

- Low Country Risk**
- Multiple Minerals Options**
- Free Data**
- Low Acreage Acquisition Cost**
- Minimum Work Programme Commitments**
- Favourable Economics**
- Stable & Predictable Regime**
- Active Farm In/Out Market**

- > **New Zealand Rankings – Ease of doing business:**
 - 1st in starting a business (World Bank Doing Business report 2015)
 - 1st in protecting investors (World Bank Doing Business report 2015)
 - 2nd in lack of corruption (Transparency International Corruption Index 2014)
- > **Cost of doing business**
Comparatively low developed-country business costs
- > **Simple tax system**
28 per cent corporate income tax & no capital gains tax



New Zealand Mineral Resources



A UNIQUE OPPORTUNITY

New Zealand's geological history has created a prospective environment with exciting opportunities for explorers.

Epithermal and Orogenic gold mineralisation occurs throughout the North and South Islands. Production dates back over 150 years in the Hauraki, West Coast and Otago goldfields.

The West Coast contains coalfields with extensive high-grade coking coal deposits. The Nelson,

Marlborough and West Coast regions feature platinum group metals. New Zealand's coastline offers 800km of large scale iron and mineral sand deposits.

Combined with how easy we make it to do business, these opportunities make New Zealand an exciting place to invest.

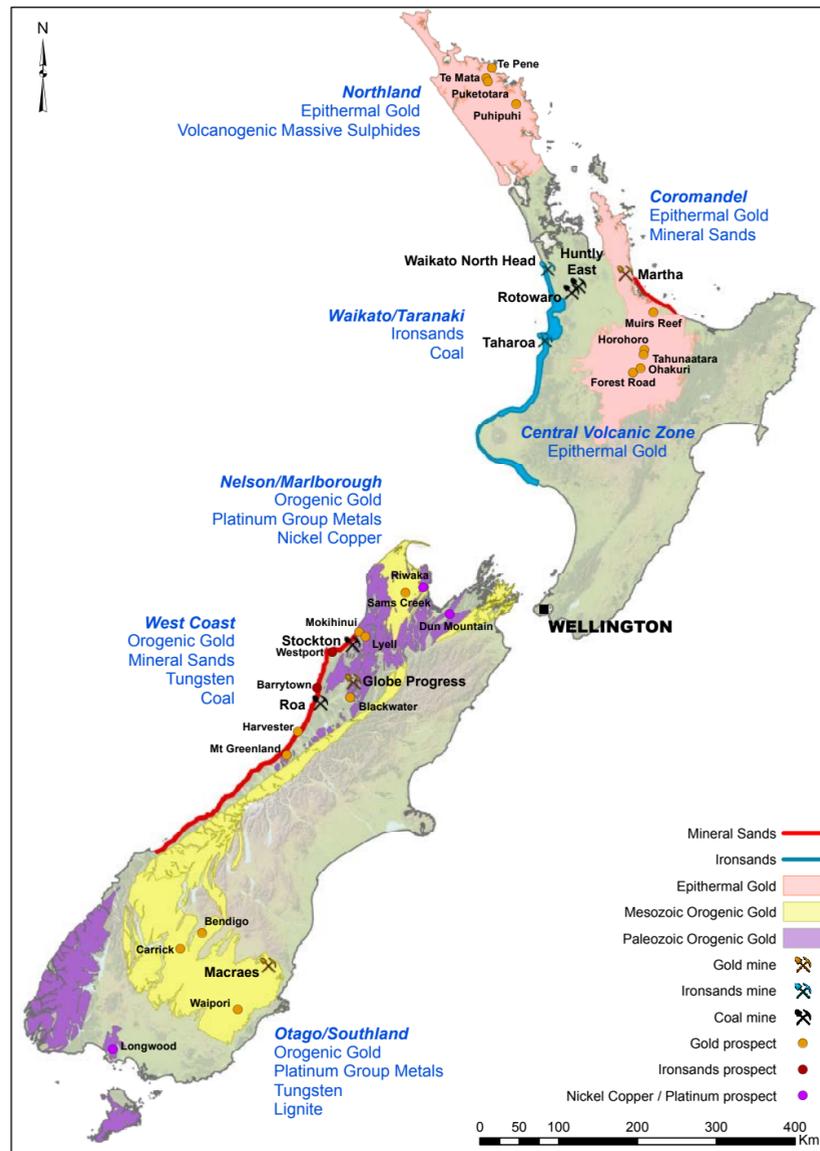


Figure 1: Major mines and mineral occurrence map

EPITHERMAL GOLD – NORTH ISLAND

The North Island's epithermal regions - in Northland, Coromandel, and its Central Volcanic Zone (or Taupo Volcanic Zone) remain under-explored.

Discoveries in the Hauraki field (located around the Coromandel Peninsula) include more than 50 known epithermal gold-silver deposits. The total historical production of the area is around 350t Au (11Moz) and 1,650t Ag (53Moz). The Martha Mine at Waihi (figure 1) is the largest known deposit. This mine has historical production of 175t Au (5.6Moz) and 1,195t Ag (38.4Moz), while modern production stands at 63t Au (2Moz). These epithermal systems were associated with volcanism that was active during the Miocene and Pliocene (Christie et al, 2007).

Contiguous with the South-Eastern margin of the Hauraki goldfields is the Central Volcanic Zone. This is a 17,500km² rifted volcanic arc (~350 km long) dominated by silicic volcanism, with calderas and rift basins infilling with more than 15,000km² of tephra, ignimbrites, and lavas (Barker & Christie, 2013).

The Central Volcanic Zone is an active volcanic centre, initiating around 2 million years ago. Structurally its formation is in response to the subduction of the Pacific plate beneath the North Island of New Zealand. Arrays of North/North-East-striking sub-parallel normal faults accommodate the North West/South East extension across the Central Volcanic Zone. Numerous geothermal systems and epithermal occurrences are associated with the major faults extending from caldera structures. Mineralisation is found in surface sinters, subsurface quartz veins, quartz infilling cavities and silicified hydrothermal breccias and is disseminated in wallrock.

The Central Volcanic Zone has known fossil epithermal deposits, including Ohakuri, a 15km² low-grade gold deposit (126 Mt at 0.38 g/t Au and 8.5 g/t Ag for 1.5Moz Au). Other known deposits occur at Matahina Basin, Horohoro, Tahunaatara, Wharepapa, Umukuri and Forest Road prospects, and at Muirs Reef which has historical production of 43,000oz Au, and a historical resource of 390,000oz Au (figure 1).

The Northland region is prospective for epithermal gold and copper as volcanic hosted massive sulphides associated with allochthonous basaltic units. These are clearly discernible on the new regional magnetic data (available in the New Zealand Minerals Data Pack and from nzpam.govt.nz). Most exploration work in

the region has focused on the Puhipuhi deposit, a classic mercury antimony bearing sinter and eruption breccia hosted in greywacke. Exploration drilling at this location intersected 5.3 g/t Au and 18.5 g/t Ag at 10m depth. Other areas of interest for gold mineralisation are the silicified breccias and argillic alteration at Te Pene, Te Mata and Puketotara (figure 1).

OROGENIC GOLD QUARTZ VEINS IN META SEDIMENTS – SOUTH ISLAND

In the South Island, turbidite-hosted Orogenic gold mineralisation is found in deposits of Ordovician and Mesozoic rocks.

There are Mesozoic schist quartz lode gold deposits in the Haast Schist of Otago, Marlborough and the Southern Alps. Making up 2.6% of New Zealand's total pre-1980 gold production, the deposit at Macraes Flat in northern Otago has since become the country's largest currently known gold deposit. It has produced over 124t (4Moz) Au since 1990 (figure 1). A 186t (6Moz) Au resource is currently being worked at the Macraes Flat Gold Mine, operated by Oceana Gold (New Zealand) Limited.



Gold mineralisation in core

Prospective lodes in Paleozoic formations on the West Coast, consist of high-grade quartz veins formed in steeply dipping shear and fault structures. The most important deposits are in the Reefton area, where over 67 t of gold from 84 mines was produced between 1870 and 1951 (Christie and Brathwaite, 2003). The Globe Progress mine to the east of Reefton produced 23 t of gold between 1879 – 1920, before further exploration during the 1980's delineated an additional resource of 14.5Mt at 1.5 g/t Au. Oceana Gold (New Zealand) Limited operates the mine.

Early mining at Golden Blocks in Northwest Nelson and at Mokihinui, Lyell, Reefton and Mt Greenland on the West Coast accounts for about 8% of New Zealand's historical gold production. However, exploration by modern techniques is light and this acreage is underexplored. These deposits exhibit many similarities to the Bendigo - Ballarat fields in Victoria, Australia (Christie and Brathwaite, 2003).

Intrusive related gold deposits (along with other base metals such as copper) are present within this region with notable occurrences at the Sams Creek deposit in North West Nelson, which hosts a 20Mt (1Moz) Au deposit. (figure 1)

There are additional opportunities for exploration in extensive placer gold deposits in the West Coast and Otago. In Nelson and Southland resources remain largely untested and provide an exciting exploration opportunity.

Offshore placer deposits have been identified in the Hauraki and West Coast regions. The Harvester prospect is a 67 km² area, 8–14 km offshore from Hokitika, in water depths of 70–100m, with surface gravel less than 1m thick. Assay results returned an average grade of 189 mg/m³ (M2514; Lew and Corner, 1990).

METALLIC MINERAL OPPORTUNITIES

New Zealand is also prospective for other metallic minerals, including Platinum Group Metals. Returned assay results show 3.0 g/t Platinum and 3.3 g/t Palladium in olivine gabbros rock float from Southland's Longwood deposit. (figure 1)

In the Nelson and Marlborough regions the underexplored, layered mafic intrusions of the Rotorua, Riwaka and Cobb Igneous Complexes, and the Dun Mountain Ophiolite Belt also have potential for Chrome and Platinum Group Metals mineralisation.

Elsewhere in New Zealand, prospectivity for Antimony, Lead, Lithium, Molybdenum, Magnesium, Nickel, Titanium, Zinc and Zirconium, has led to varying degrees of production over the past 150 years.

MINERAL SANDS

Along 480km of the North Island's West Coast there is an extensive titanomagnetite ironsand resource. These occur onshore in Quaternary beach and dune deposits, and as marine deposits. Currently commercial extraction is under way from beach placer deposits at the Waikato North Head and Taharoa mines (figure 1).

In the South Island there are significant deposits of Ilmenite-rich black sands. Economic concentrations of gold occur at localised intervals along 320km of the West Coast. The largest ilmenite deposits are at Barrytown (6.9 Mt of ilmenite) and near Westport (5.5 Mt of ilmenite). The black sands contain 5–15% ilmenite.

Ilmenite beach sand deposits are also present on the east coast of the Coromandel Peninsula.

The alluvial and nearshore deposits also contain significant high grade garnet (5Mt), magnetite, zircon, uranotorite and monazite. These garnets provide opportunities for the abrasive and titanium industries. Westport Ilmenite has been successfully treated, producing a high purity synthetic rutile.

COAL

New Zealand has extensive coal resources - primarily in the Waikato and Taranaki regions of the North Island, and the West Coast, Otago, Canterbury and Southland regions of the South Island. Estimates suggest national in-ground coal resources exceed 15 billion tonnes.

There are large, high-grade bituminous-subbituminous thermal and coking coal deposits in the Waikato and West Coast regions. 92% of all production comes from these deposits, with the remainder from our significant Lignite deposits.

There are 22 coal mines operating in New Zealand. The largest mines are the opencast Rotowaro mine in the Waikato, and the Stockton mine on the West Coast (figure 1). Coal production in 2014 was 4 million tonnes. 1.7 million tonnes of this was exported.

References available at nzpam.govt.nz

THE CORE STORE

The 2300m² National Core Store in Featherston houses NZP&M's collected petroleum, minerals and coal core, cuttings and samples. It has fit-for-purpose viewing facilities.