

# **Mineral resource potential of New Zealand**

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2 October 2009



NZ Minerals Industry Association

# The value of our mineral potential is not being recognised

- **NZ's gold** resource potential estimated at **\$45 billion**
- **Other metallic** resource potential estimated at about **\$100 billion**
- **Coal** potential of more than **\$100 billion** for **South Island lignite alone**
- Large **unexplored petroleum** basins



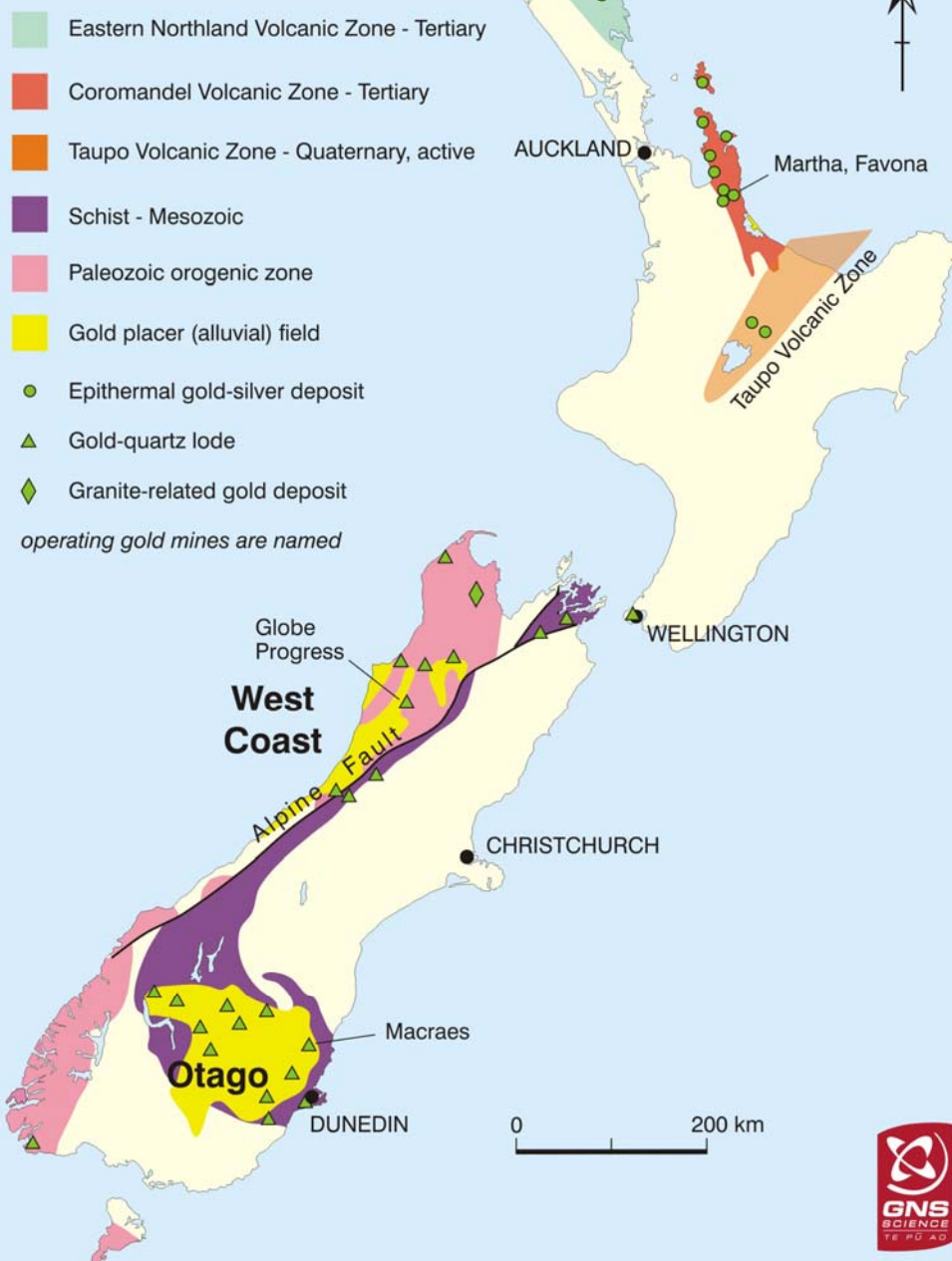
# Gold

- Gold potential is distributed throughout NZ
- Four main types of deposit are recognised
- The value of gold produced in NZ in the last 20 years is worth about \$6 billion at current prices



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## Gold



# Metals

- New Zealand has produced a wide range of metals
- Only ironsand is being worked at present
- Potential is widely distributed throughout NZ
- Most of the potential resources are Crown owned and located on Crown land
- An estimated 70% of NZ's hard rock mineral potential is located on DoC-administered Crown land



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## Metallic Minerals

### Mineral occurrences



0 200 km



# Coal

- Past government investigations have greatly increased the size of NZ's known coal resources
- The main potential is in the Waikato, Westland, Otago and Southland regions
- The Southland lignite resource is NZ's largest known energy resource.
- It is world class – equivalent to 20 times the energy content of the Maui gas field, before its development



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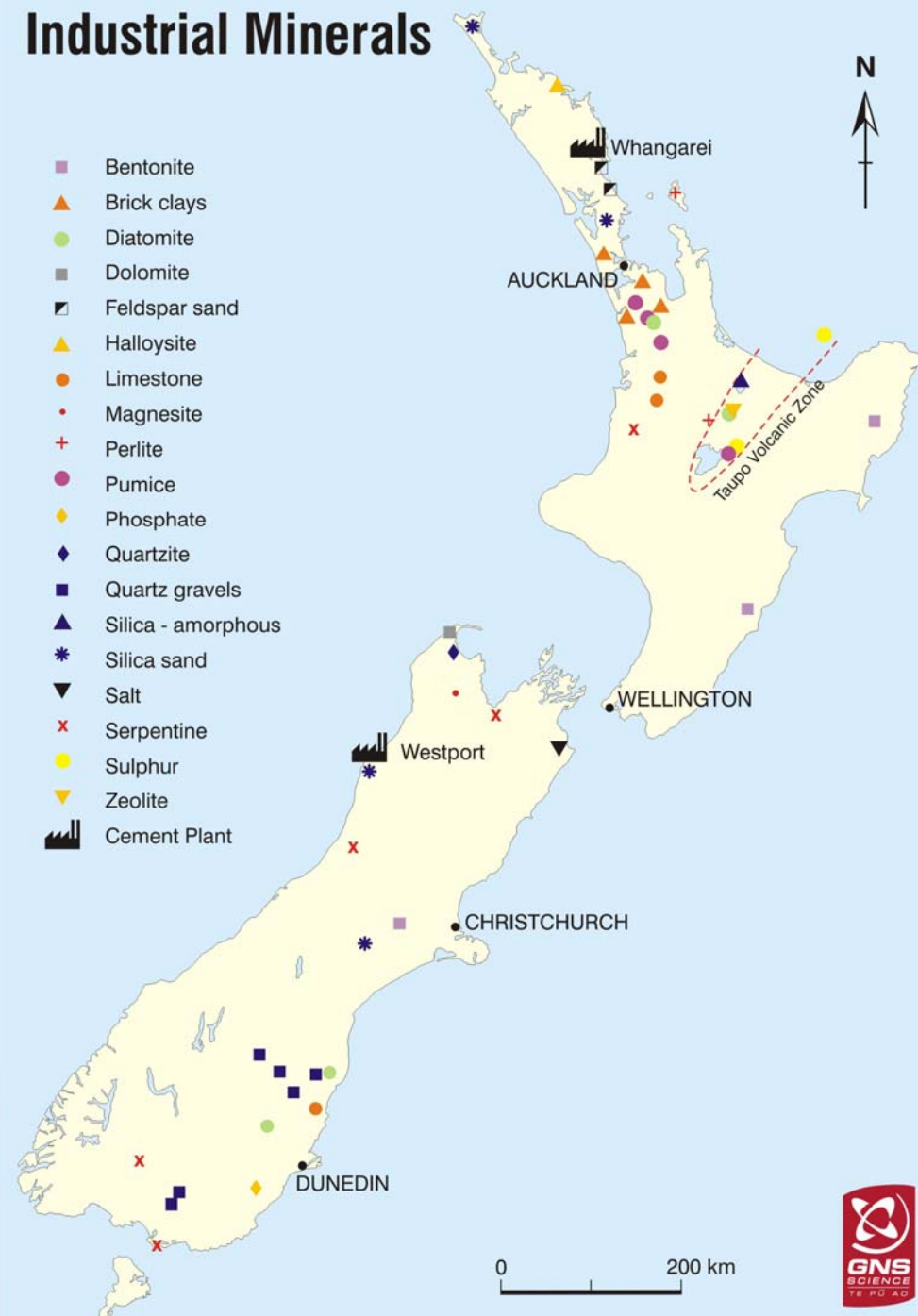
# Industrial minerals

- NZ has produced about 20 different industrial minerals
- Cement with a value of more than \$300 million per year is being produced at Whangarei and Westport
- China clay from Matauri Bay, Northland is exported to 23 countries
- Potential to expand the range and value of what we produce



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## Industrial Minerals





# Aggregate

- Aggregate accounts for most of NZ's mine production
- It is used mainly for making roads and concrete
- Each New Zealander creates demand for 10 tonnes of aggregate per year
- More than 4,000 tonnes of aggregate are needed to build a kilometre of road



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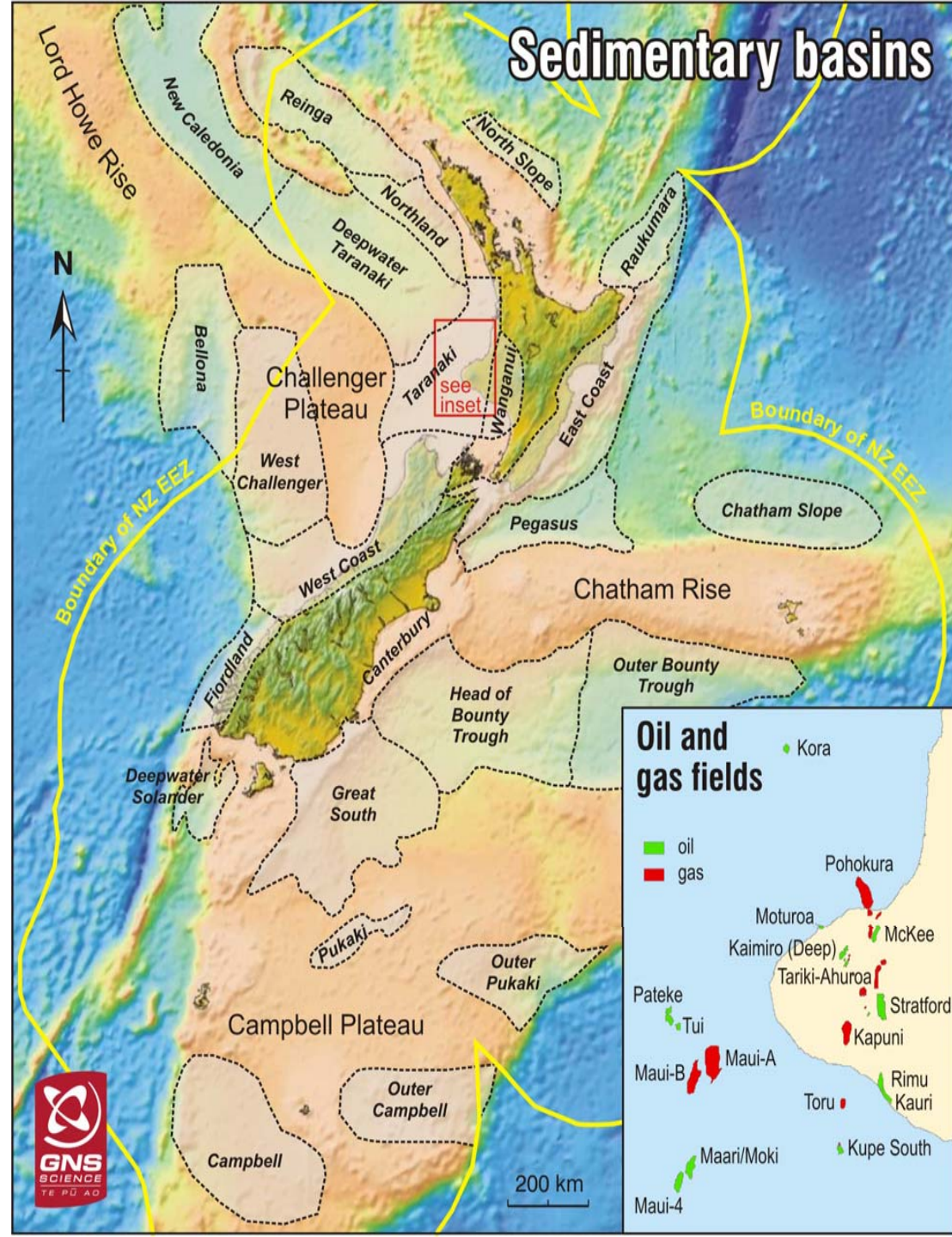


# Oil and gas

- Only the Taranaki field has produced hydrocarbons and been investigated in detail
- Oil price rises are making NZ's deep basins much more attractive exploration targets



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# Mining as a land use

<b>Sector</b>	<b>Land area (sq km)</b>	<b>Export value (\$million per year)</b>	<b>Export value (\$/ha per year)</b>
Production forestry	18,000	3,300	1,833
Dairy	20,000	7,000	3,500
Horticulture, viticulture	1,100	2,200	20,000
Mining	40	700	175,000



# What needs to change

- Fragmented government administration and management
- A complex, uncertain regime for mineral ownership
- Major deficiencies in the access regime that is created under the Crown Minerals Act
- Energy policies that create uncertainty and discriminate against coal and gas, undermining the confidence of investors
- Overall an uncompetitive environment for investment in comparison with similar countries.



# What needs to change 2

- The 2008 annual survey of mining companies by the Canadian Fraser Institute ranks NZ at 44<sup>th</sup> out of 68 states and provinces as a place to invest in exploration
- NZ ranks behind all of the Australian states and Canadian provinces
- The potential value of NZ's resources needs to be recognised in the way they are managed.
- This recognition needs to extend beyond employment, output and exports to include opportunities for innovation, research and development, the export of services, the support of infrastructure in rural NZ, security of energy supply and increases in community wealth.

