



Proposed Private Members Bill to Ban Seabed Mining in New Zealand

Ideological private Member's Bill to ban seabed mining lacks scientific credibility and would deny New Zealand access to a major new \$1 billion plus sustainable export industry. This metal recovery operation will help meet the demand for strategic minerals and metals (iron, vanadium and titanium) which are required as the world transitions to a low carbon energy economy.

New Zealand has special legislation to develop resources, including minerals, in our Exclusive Economic Zone (**EEZ**) from 12Nm to 200Nm offshore under the EEZ Act 2012. The EEZ Act incorporates comprehensive environmental safeguards and international guidelines that seek to balance economic development with environmental protection.

To ban seabed mining, that has the lowest environmental, ecological and carbon footprint of alternative metal mining operations, completely contradicts the balanced and responsible approach of the EEZ Act and is short sighted.

New Zealand has one of the largest EEZs in the world (14 times the size of New Zealand's land area) and is known to host valuable deposits of iron, vanadium and titanium minerals and metals that are essential and fundamental to the development of large-scale batteries and solar and wind power infrastructure required to transition to a low carbon economy.

There is no evidence, as presented by a range of independent institutions and TTR's marine experts to the EPA, that seabed mining or TTR'S proposed operations are a threat to, or will have any adverse effect on, marine mammals including rare whales, critically endangered Hector's or Māui dolphin populations, fish or any marine life.

TTR's 3.2 billion tonne vanadium rich titanomagnetite resource located over 22km offshore in the South Taranaki Bight (**STB**) is a world class deposit capable of delivering over 300 permanent jobs; up to 1,665 in support and service industries regionally and nationwide; much-needed infrastructure investment in Taranaki/Whanganui regions; taxes, royalties and export income to the Crown, at no cost to New Zealand taxpayers, with only minimal, confined and short-term impact on the STB marine ecosystems.

The STB's vanadium rich titanomagnetite deposits have significant carbon footprint advantages over other iron sand and hard rock sources of iron ore, vanadium and titanium mined elsewhere in the world with TTR's carbon intensity per tonne of concentrate $\pm 62\text{kgCO}_2/\text{t}$, less than half our land based competitors (average $\pm 120\text{-}250\text{kgCO}_2/\text{t}$). TTR's deposits have been developed by nature to leave the titanomagnetite sand ready for direct recovery and shipping without the need for large-scale emission intensive land-based mining and processing operations and extensive transport infrastructure.

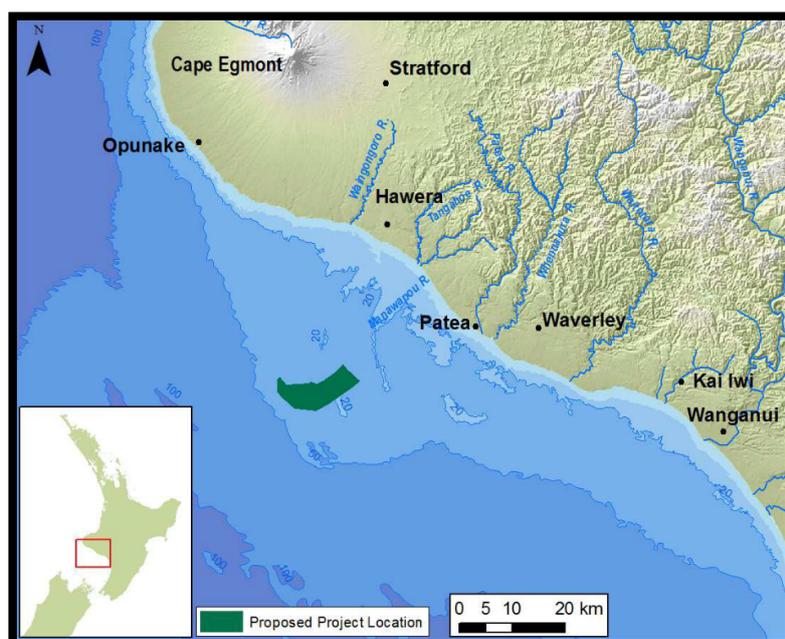
New Zealand is well placed to develop a new long-term export industry producing one of lowest carbon intensity iron ore concentrates in the world. The large known tier one world class vanadium rich titanomagnetite iron sand resources offshore along the West Coast of the North Island can be efficiently and competitively recovered utilising current low impact environmentally sustainable mineral recovery technology.

Globally, sustainable subsea mining is now being viewed as the key technology to meet the demand for high grade steel alloys and strategic metals to support the low carbon economy.

The opposition to seabed mining, and its impact, is ideological alarmist grandstanding with no factual basis, science, engineering, marine research or observational data to support it.

Alan J Eggers
Executive Chairman
11 March 2021

TTR South Taranaki Bight Mining Licence Location



About TTR

Trans-Tasman Resources Limited (TTR), a New Zealand company, was established in 2007 to explore and develop the North Island's offshore iron sand deposits. The Company is headquartered in Auckland and funded by New Zealand and international investment. Since inception TTR has spent more than \$80 million on defining the resource potential, environmental assessment of the proposed mining areas and possible impacts of the mining, mine engineering and process design, ore marketing, and the processing and shipping operations associated with the resource extraction and iron sands export operations in the South Taranaki Bight (STB).

TTR proposes to seabed mine up to 50 million tonnes (Mt) of iron rich sands per year in New Zealand's Exclusive Economic Zone, approximately 22 to 36 kilometres off the South Taranaki coast in water depths of 20 to 50 metres. The operation, when in full production, will produce 5Mt a year of vanadium rich titanomagnetite concentrate grading 0.5%V₂O₅, 8.5%TiO₂ and 57%Fe for export. 90% of the mined sands will be re-deposited on the seafloor in a controlled manner backfilling previous mined areas to enable immediate rehabilitation. The sands will be processed offshore aboard an integrated mining vessel (IMV) and transferred into cape size vessels for export.

The project will directly employ more than 300 New Zealand-based staff and operational personnel.

TTR has made a significant investment in, and commitment to, the development of its offshore STB iron sands mining project. The Company is now committed to completing the Bankable Feasibility Study to facilitate the financing, construction and commissioning of this technologically advanced, world-class marine mining operation, which will deliver substantial economic benefits to New Zealand while employing global best practice with sustainable environmental outcomes.