

COVER SHEET

1. Project PGF Application	For: Approval
Background & context:	Recommendation(s):
<p>Applicant Organisation:</p> <ul style="list-style-type: none"> Hiringa Energy Limited <p>Location:</p> <ul style="list-style-type: none"> Taranaki <p>Proposal:</p> <ul style="list-style-type: none"> Early stage work related to Hydrogen supply infrastructure front end engineering design, planning and cost estimation to support H2 Taranaki initiatives. <p>Funding Sought:</p> <ul style="list-style-type: none"> Total project value: \$ [redacted] - \$ [redacted] . PGF Funding: \$950,000. <p>Background:</p> <p>The purpose of the larger project is to develop hydrogen supply chain infrastructure in the Taranaki region, together with possible refuelling facilities outside the region to demonstrate a range of benefits and connect the region.</p> <p>This particular project activity covered by the funding application is to further progress front end engineering design, planning and cost estimation to support investment decisions on the establishment of this hydrogen supply infrastructure.</p> <p>This scope of work will be conducted in New Plymouth, Taranaki. Hiringa Energy will provide overall project management, engineering, HS&E and financial analysis.</p>	<p>We recommend that the SROs:</p> <ol style="list-style-type: none"> Discuss and provide feedback on the recommendation and advice given by the PDU Investment team. Note that the application is supported by the MBIE Markets Policy Team and Just Transition teams. Recommend that the SRO's approve funding of \$950,000 to assist financing the front end work related to hydrogen supply infrastructure, engineering design, planning and cost estimates.

The purpose of this briefing is to consider recommending/ declining PGF funds to the:

Alignment to PGF criteria:

Increased Economic Benefit

This project will develop critical engineering, design, HSE and consenting capability in the region for the introduction of hydrogen infrastructure for transport. This project will provide the basis for investment decisions in infrastructure that is the key enabler for the hydrogen fuel cell transport initiatives outlined in "H2 Taranaki".

This project is the first step to develop specialist capabilities and a skill base in the region in the growing international hydrogen industry. It leverages international expertise via Hiringa Energy Limited and H2H Limited, to build engineering capability in the region to support hydrogen projects. It will also build consenting, and safety management capability that is essential for the development of a new clean hydrogen transport industry in New Zealand.

The region will directly benefit from this project via:

- Direct employment opportunities via Hiringa Energy and local contractors;
- Skill and capability development; and
- Detailed engineering, consenting and financial analysis required to support final investment decisions on infrastructure projects.

Additionality

This project is the first in a series of hydrogen energy projects that provide a pathway to developing or attracting and retaining highly valuable specialist skills in the region for the benefit of NZ. It will help create a vision for the region and that it has an ongoing role in energy in the future.

This project is the first step to creating a platform for the region to participate in growing international supply chains and markets for hydrogen based low emission technologies. The project will help attract technology vendors to utilise the technical facilities and skills residing in the region. Discussions have already commenced with vendors regarding regional capability to manufacture parts of the vendor equipment, and provide maintenance and service capabilities. The region has existing capabilities that can be utilised for a number of system components.

The region will also benefit from the resulting infrastructure projects and H2 Taranaki initiative:

- Measurable benefit will be clear through the operation of the infrastructure itself as well as the job creation.
- Initiatives similar to H2 Taranaki have ultimately seen a ^{Commercial} multiplier of private/public sector investment.
- Initial hydrogen export opportunities suggest potential for export revenues > \$ ^{Commercial} per annum

Alignment with regional plans/ Stakeholder support

The Tapuae Roa, Make Way for Taranaki Energy Futures Action Plan, is endorsed by the four Taranaki Councils (TRC, NPDC, SDC, STDC), outlines the strategic priorities of the region including progressing the Energy Futures initiatives. Engagement on the scope of the Tapuae Roa action plan, including the H2 Taranaki initiative, has been ongoing with both private sector and local government

throughout this economic development strategy process. H2 Taranaki is an initiative resulting from that process.

Engagement on the scope of the Tapuae Roa action plan, including the H2 Taranaki initiative, has been ongoing with both private sector and local government. The process involved workshops and consultation with local stakeholders including industry, regional and district government, and Iwi.

Management and Governance

Hiringa team members have been accountable for all aspects of several major energy and infrastructure projects (eg integrated gas/power development projects) in New Zealand and abroad.

Privacy of natural persons is a experienced energy executive with strong organisational development skills and a track record of delivery on business integration, transition and growth. He has over 23 years of broad international experience in a range of senior leadership, management, commercial and technical roles. He has managed interdisciplinary engineering teams and delivered projects including the \$ Commercial Information Commercial Information.

Privacy of natural persons has held senior engineering, project management, business development, and construction management roles in the energy, resources and telecommunications infrastructure sectors. She has broad commercial and finance expertise including business case development, investment analysis, technology commercialisation, capital raising, and governance, and is a founding Privacy of natural persons.

Privacy of natural persons is an experienced mechanical engineer and project manager with a background in hydrogen product development and industrial water treatment. As an expert in controls systems and automation, Privacy of natural persons has designed, installed and commissioned 700 bar H2 filling stations, automated fuel-cell manufacturing equipment.

There is a clearly articulated project plan, including a risk assessment and Governance plan for the project.

The Hiringa team is also working with the following recognised partners during this stage of the project:

- Commercial Information), one of New Zeland's largest freight and logistics companies, are partners for a number of elements of the project including provision of potential refuelling station sites and joint development of the compressed hydrogen tanker solution for NZ application.
- Commercial Information a specialist hydrogen engineering company based in Australia, are project partners providing hydrogen expertise and peer review/technical assurance.
- Commercial Information , a New Plymouth company specializing in Surveying, Planning and Environmental Engineering will provide services for site selection, civil design, consent planning & consultation.
- Commercial Inform , a NZ owned engineering and services firm, will provide design engineering and safety support from their New Plymouth office.
- Commercial Information , a New Plymouth based engineering and fabrication firm will provide fabrication and construction engineering feasibility and cost estimation support.
- Commercial Information is a potential offtake supplier for hydrogen.

- The project will also involve **Commercial Information** as the agency responsible for the delivery of the “H2 Taranaki” roadmap project and the Taranaki regional economic development strategy.

Hiringa Energy and partners will be providing the \$ **Commercial In** - \$ **Commercial In** required to complete the **Commercial Information** **Commercial Information** of this project.

Risks Issues:

There are no significant risks or issues that have been identified. However, it will be important to monitor the delivery of this stage of the project and the contract entered into with Te Hiringa will ensure the ability to do this.

Eligibility points of note:

- Due diligence*:- Full due diligence has been completed.
- Conflict(s) of interest*:- Based on the information provided and due diligence no conflicts of interest have been identified.
- Illegal Activity*:- Based on the application information provided and feedback from other agencies there is no indication that the applicant or project has been involved in, or associated with illegal activity.
- Alignment with Regional development plans*:- The Project aligns with the Tapuae Roa, Make Way for Taranaki Energy Futures Action Plan.
- Commercial funding availability*:- Given the nature of the project, which is early stage feasibility, access to full commercial funding is not considered a feasible option.

Consultation undertaken or implications:

Legal	N/A	HR	N/A	Finance	N/A	MBIE policy	N/A	Other	MBIE Energy and Resources, MBIE Just Transitions and EECA
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This application is supported by MBIE Energy and Resources and Just Transition teams.

Supporting proposal:	Yes
Appendices:	Yes - Applications and supporting letters are as annexes
Sponsor(s):	N/A
Manager/Author of paper:	David van der Zouwe Investment Team