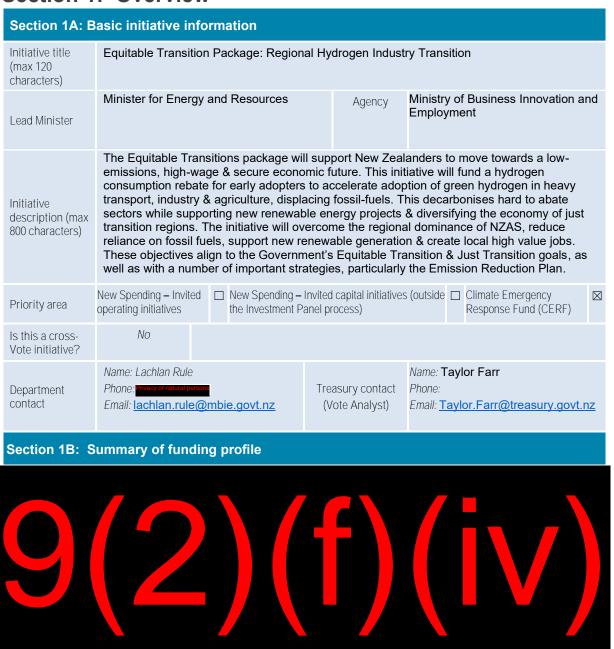
Budget 2023 Submission for Invited New Spending Priorities and CERF Initiatives

Please ensure the minimum required information is provided for each question. The minimum required information is set out in italics in each of the answer boxes. Additional guidance is available in the Budget 2023 Guidance. Please read the guidance before filling out this template. Additional supplementary documents (e.g. relevant reports and Cabinet papers) may also be attached along with this submission.

Section 1: Overview



Section 2: Alignment

Section 2A: Problem definition

The answer to each question must not exceed 2-3 paragraphs

Describe the problem the initiative is trying to solve by outlining its root cause(s) and consequence(s), and explain why the problem needs to be solved now. The problem should be framed in terms of current and/or future outcome(s) for New Zealanders.

New Zealand Aluminium Smelter (NZAS) has an outsized influence in the lower South Island's economy, including effects on the labour market, supply chains, and electricity system.

Recent closure delays and

negotiations over further operating extensions highlight the economic and social challenges posed by ongoing uncertainty over NZAS's future. Taranaki faces similar challenges in its transitions away from a reliance on oil and gas.

This initiative, developed in partnership with mana whenua through the clean energy work stream of the Southland just transition work plan, will fund a clean hydrogen consumption rebate aimed at industrial consumers. Projects supported through the initiative will be required to source electricity from renewable energy projects, contributing to the development of these. In delivering this goal, the initiative will:

Deliver regional Just transitions

Contribute to Aotearoa/New Zealand's equitable transition

 Create new low-carbon and high-wage jobs.

- Develop new green industry.
- Diversify the regional economy.
- Build economic resilience.
- Support regional innovation.
- Address the outsized influence of NZAS in Southland's economy.
- Deliver concrete social and economic outcomes for Māori.

- Decarbonise hard to abate sectors such as heavy industry and heavy transport.
- Support a strong renewable energy investment environment.
- Develop innovative ways to partner with Māori.

There is a strong case for CERF investment. An analysis of policy options has determined that non-spending initiatives are unlikely to be succeed in resolving the issues identified.

, and the uptake of hydrogen are not

regulatory, and the cost of non-spending policies, such as tax measures, would be high. Spending is the most appropriate lever. Furthermore, these outcomes cannot be realised through existing spending. The just transition process was designed to support further investment following the community led process. (2)(1)(1)(1)

The project will be delivered in the form of a rebate that will unlock private sector investment. Thus, the risk of crowding out investment is limited. It is likely that the Crown would crowd in greater investment. However, given the existing monetary barriers to the uptake of hydrogen this is unlikely to be achieved through non-monetary measures. Due to the lead times involved in developing hydrogen infrastructure (eg. placement of orders for electrolysers and truck conversions), and the ongoing uncertainty to the Southland economy, delaying this initiative would create further uncertainty, and delay further opportunities to seed diversification and promote first movers adoption of hydrogen. Furthermore, earlier support for first mover

What is the problem that this initiative is trying to solve and why does it need to be solved now?

adoption of hydrogen will accelerate the decarbonisation task in industrial hard to abate sectors, contributing to the overall reduction of New Zealand's carbon budget.

Describe the existing arrangements for the asset or service, including (where applicable):

- How services are currently organised and provided;
- The associated throughput, turnover, and existing cost; and
- Current asset or service availability, utilisation, and condition.

Departments should be able to demonstrate why the existing arrangements (if there are any) are insufficient to address the problem outlined above.

In July 2020, the Government committed to a just transition for Southland following the announced closure of NZAS. Officials have been working with the region since July 2021. To complete this work just transitions were allocated baseline funding of \$13.900 million over four years (\$3.900 million departmental and \$10.000 million non-departmental). Roughly \$5.000 million of non-departmental spending has been spent or committed through the delivery of the just transition processes in Southland and Taranaki. The initiative is an outcome of our community engagement and policy work. As such there is no funding, provision of support, or assets dedicated to the project.

In order to meet its goals for the Region and Nation, the Regional Hydrogen Industry Transition project will need to encourage sufficient demand to incentive hydrogen production development, while also encouraging new renewable generation. (2(2)(i)(iv)

Hydrogen has a steep economies of scale curve with high upfront costs, and market players are unlikely to invest sufficiently. Moreover, such a limited investment would not shift the demand for hydrogen. Therefore, this initiative and it's crucial outcomes cannot be meaningfully delivered under existing arrangements and without funding from Budget.

The opportunity cost to spending is high. Inaction will mean failing to address the economic issues posed by NZAS's influence. It will leave the region's labour market and economy exposed to fluctuations and commercial decision. Government would miss an opportunity to increase competition in wholesale electricity markets, in a way that could have corresponding impacts on generation development and prices. On a policy level, comitting funds sends a clear signal to industry that government will operationalise a policy. Firms require lead time for projects. Free and frank opinions

What key partners/stakeholders/customers (including iwi and Māori) have been engaged to understand the problem and develop the initiative? How have you worked with them and how has their input affected the understanding of the problem? You may wish to reference here the key principles of He Ara Waiora

This policy option has been developed through a regionally led process involving iwi, community, and regional stakeholders in Southland. MBIE have also worked with the hydrogen industry. These stakeholders include:

- Ngāi Tahu and Te iwi o Taranaki MBIE will work with iwi to design the benefit sharing components of the Regional Hydrogen Industry Transition project. Representatives of Ngāi Tahu have already been closely involved in its development. Our engagement has informed the contracting mechanism which enables the principles of
 - o Kotahitanga: the innovative contracting mechanism which has been co designed with iwi will recognise Māori as mana whenua.
 - Te ira tangata: the contracting mechanism has the ability to both enable Māori and pacific commercial aspirations for green hydrogen, provide economic benefits and meet their relevant cultural needs.
- Electricity generators/retailers Generators and retailers will play a key role in facilitating new generation.

- The Southland just transitions Enduring Oversight Group (EOG) The EOG is the governance body of the Southland just transition and can support the project to meet its wider transition goals.
- Hydrogen technology firms Negotiations
 will support the timely delivery of required equipment adnd the project.
- Potential counterparties Negotiations

Has the initiative been developed in collaboration with any other relevant agencies? If so, explain

The Ministry of Transport (MoT) has been engaged in the development of this initiative to identify alignment between this proposed initiative, and MoT's policy development work relating to Road User Charging and a potential new Clean Truck Discount. MoT has indicated that there is a high degree of complementarity between this proposed initiative and MoT initiatives. The Regional Hydrogen Industry Transition (RHIT) will target operating fuel input costs, whereas MoTs focus will be in vehicle acquisition and capital costs. The RHIT will support the consumption of hydrogen as a fuel and accelerate the deployment or recharging infrastructure. This approach will optimise the effectiveness of both programs, ensuring that the transition to cleaner transport is supported with a focus on both infrastructure and operating cost.

Describe the **department's** needs in terms of the improvements and/or changes that are required to address the problem. Outline specifically what will be changed or improved relative to existing arrangements.

The project aims to incentivise the development of an energy intensive industry in Southland, in the form of a hydrogen sector, Free and frank opinions

What needs to improve and/or change to address the problem? to incentivise development of new renewable electricity generation. In order to achieve this, the consumer price of hydrogen needs to be more competitive relative to fossil fuels.

MBIE's primary need to deliver on these goals is funding support through the Budget 2023. This would provide funding for the delivery and administration of a consumer rebate, which would incentivise uptake and ensure commercial discipline. MBIE also needs minor additional FTE to support the development of the project and ensure policy success. Furthermore, Just Transitions Team does not have sufficient internal capability to design and negotiate specialised energy contracts of this nature. To ensure the subsidy is delivered effectively, delivering on intended objectives, we would need to contract expert consultants and other government capability on a cost recovery basis.

Section 2B: Alignment

The answer to each question must not exceed 1-2 paragraphs. If the initiative has more than one intended outcome, select one of the rows below and click the \pm button that appears at the bottom right to duplicate this section.

Describe how the initiative aligns with the **Wellbeing Objectives**, and where relevant, delivery of the Government's economic plan to build a high-wage, low-emissions, secure economy.

The relevant CERF criteria this initiative meets are:

Alignment to the Wellbeing Objectives and the economic plan (Just Transition)

- Is included in an Emissions Reduction Plan, or directly supports emissions reductions (domestically or internationally),
- Addresses the distributional impacts of climate change or the climate policy response

This initiative directly applies to ERP's Chapter 3-Equitable Transition and aligns with three of the five of the Government's approaches to supporting New Zealanders through the transition, these include:

- 1. seize the opportunities of the transition
- 2. support proactive transition planning
 - enable an affordable and inclusive transition

Establishing a green hydrogen industry in Southland responds to a priority identified by the region as part of the Southland Just Transitions Work Plan. and was a prioritised project selected by regional leaders. Agriculture, industry and heavy transport are high emission, hard-to-abate sectors, as committed to under the ERP. This investment provides a means to

decarbonise those sectors by incentivising the uptake of green hydrogen, while displacing fossil fuels

One of the distributional impacts of the transition to a low-emissions economy is the potential for increased energy costs. The intervention would create an alternative source of electricity demand which will increase confidence in wholesale electricity markets. Negotiations

Furthermore, NZ Aluminium Smelters' market power results in cross-subsidisation of its electricity supply by smaller business and residential consumers of up to \$200 per household per annum. This initiative will also have regional impacts through supporting the economic diversity and stability of Southland.

This initiative aligns well with the **Just Transition** Wellbeing Objective by supporting the emergence of new low emissions industries and jobs in Just Transition regions, helping to diversify the economy and build resilience. This aligns with the economic plan by supporting **economic security** through supporting the emergence of a new green hydrogen industry and building economic resilience.

For CERF initiatives, succinctly outline the relevant CERF eligibility criterion.

The Regional Hydrogen Industry Transition meets the CERF requirements.

Alignment to the Wellbeing Objectives and the economic plan (Equitable Transition outcomes) Agriculture, industry and heavy transport are high emission, hard-to-abate sectors, as committed to under the ERP. Our investment provides a means to decarbonise those sectors by incentivising the uptake of green hydrogen, while displacing fossil fuels. These are low carbon, high wage industries, which align with the government's economic plan and wellbeing objectives. The hydrogen industry is a promising opportunity to support the ERP, and CERF requirements, as it could support improved wholesale competition on both the supply and demand side of the electricity market.

The intervention would create an alternative source of electricity demand which will increase confidence in wholesale electricity markets. Negotiations

Furthermore, NZAS' market power results in cross-subsidisation of its electricity supply by smaller business and residential consumers of up to \$200 per household per annum.

Specific implications regarding **the Crown's** obligations

under the

Treaty of

Waitangi

Briefly describe any specific implications, including any relevant Treaty Settlement commitments. Guidance on applying the Treaty to policy work can be found here and here.

Although there are no specific Treaty Settlement commitments, this project has been codesigned with Ngāi Tahu and, as such, upholds the Crown's Tiriti o Waitangi partnership responsibilities. The Regional Hydrogen Industry Transition creates a future-focussed partnerships that respond to the needs and interests of Māori, as well as the Crown, and delivers improved outcomes for both.

The Regional Hydrogen Industry Transition supports Ngāi Tahu's ambitions to play an active role in the clean energy transition. It provides a significant opportunity for Māori business and reflects te ao Māori principles such as kaitiakitanga and tino rangatiratanga. The project's innovative contracting mechanism will require counterparties to work with iwi to deliver social and economic benefits. It will have regional and national benefits for Māori. This mechanism will provide a blueprint for similar programmes in future. This mechanism creates ongoing opportunities for mana whenua and gives effect to the Tiriti relationship.

Section 3: Value

Section 3A: Benefits and outcomes

The answer to each question must not exceed 1-2 paragraphs. If the initiative has more than one intended outcome, select one of the rows below and click the + button that appears at the bottom right to duplicate this section.

What is the initiative intended to achieve in terms of the identifiable and measurable social, economic and/or environmental benefits? What is the specific impact or difference that this initiative will achieve? Provide a brief

description of the key benefits that will arise through this initiative, with reference to the wellbeing domain(s) from the Living Standards Framework that each benefit relates to. You may also wish to reference the key principles of He Ara Waiora. The Wellbeing Impacts Template can be attached to support your answer. For CERF initiatives, refer to section 3.5 of the Budget 2023 Guidance. The Regional Hydrogen Industry Transition project will benefit just transition regions, by creating good, low-carbon jobs, and building regional economic resilience. It would meet primarily the income consumption and wealth wellbeing domain, as well as the knowledge and skills domain. NZAS's market dominance in Southland has created a regional dependence, and a lack of industrial diversification. Currently Southland is over reliant on NZAS for Jobs and Work. There are over 800 FTE workers directly employed at NZAS, as well as significant What outcome(s) supporting industries such as engineering, catering, and cleaning. If NZAS downsizes or would the initiative closes, approximately 2000 workers will be affected. The initiative will address achieve? uncertainty and build resilience in the region by providing workers and supporting industries an alternative economic base. Officials estimate this initiative would generate \$54.259 million - \$73.409 million in hourly earnings uplift benefits over a 10-year period and close to 3000 job years. By reducing uncertainty we expect subjective wellbeing in the region to increase. Explain how the initiative's intended outcomes will be measured after the initiative is implemented. Implementation would be supported by a monitoring, reporting and auditing framework administered by Kānoa - Regional Economic Development & Investment Unit. Indicators which will be monitored will include carbon abatement and hydrogen generation; job creation and economic activity indicators; and partnership and training opportunities with iwi and community. If the initiative has any of the following distributional and/or system impacts, tick the relevant impact(s) and answer additional questions in Section 5 of this template, where applicable: Distributional/system \boxtimes \boxtimes impacts Māori Pacific Child Poverty Women and **Environment** Regulatory Peoples Girls Systems Indicate if the key benefits will be realised in the short term (<5 years), medium term (5-10 years), long term (>10 years) or inter-generationally. Indicate whether, and why, benefits vary across different timeframes. This can also be done through the Wellbeing Impacts Template (hyperlinked above). Employment and hourly earnings benefits will be realised in the short term and are expected to carry through and beyond the initiatives intended life span. Additional one-off impacts associated with the with the design and construction of hydrogen infrastructure **Timeframes** can also be expected in the short term. This initiative aims to bring forward emission reduction actions that are likely to be taken in the 2030s. Reducing emissions in the near-term has an outsized impact on meeting emissions reduction commitments of the medium-to-long term (as one tonne of abatement in year one has the same impact as ten tonnes in year ten). Provide evidence (data/other information) and assumptions to support the existence and timeframes of the identified benefits, including any gaps or uncertainties. It is optional to attach the Investment Logic Map. This can also be done through the Wellbeing Impacts Template (hyperlinked above). To reach these figures we used the: McKinsey report: The New Zealand Hydrogen Opportunity Evidence and Insight Economics: Economic Impact Assessment of Proposed Green Hydrogen assumptions Development Deloitte report: Southland H2 Project We then used the following assumptions to calculate benefits: A 25% optimism bias. An 8.5 divisor for the McKinsey report (given the electrolyser capacity) & a 6 divisor (given the respective electrolyser capacity in the each report).

	Job and wage ratios outlined in the reports can be extrapolated.											
	A variable rebate provides sufficient certainty.											
What outcome(s) would the initiative achieve?	What is the initiative intended to achieve in terms of the identifiable and measurable social, economic and/or environmental benefits? What is the specific impact or difference that this initiative will achieve? Provide a brief description of the key benefits that will arise through this initiative, with reference to the wellbeing domain(s) from the Living Standards Framework that each benefit relates to. You may also wish to reference the key principles of He Ara Waiora . The Wellbeing Impacts Template can be attached to support your answer. For CERF initiatives, refer to section 3.5 of the Budget 2023 Guidance.											
	The Regional Hydrogen Industry Transition project will support Aotearoa/New Zealand's equitable transition, by incentivising investment in renewable generation and establishing a model for decarbonising hard-to-abate industries nationwide. Free and frank opinions											
	alternative so demand. Nego		d for electricity		tion would create vholesale markets							
	By supporting the uptake of green hydrogen as an alternative fuel or feedstock, this market will displace fossil fuels in hard-to-abate sectors such as heavy industry and heavy transport. Officials estimate that this initiative would deliver \$54.259 million - \$73.409 million in decarbonisation benefits through an emissions reduction of up to 725,386 tonnes of CO2 over a 10-year period.											
	Explain how the initiative's intended outcomes will be measured after the initiative is implemented. Implementation would be supported by a monitoring, reporting and auditing framework administered by Kānoa - Regional Economic Development & Investment Unit – MBIE's industry investment arm.											
	If the initiative has any of the following distributional and/or system impacts, tick the relevant impact(s) and answer additional questions in Section 5 of this template, where applicable:											
Distributional/system impacts					\boxtimes							
Impuoto	Māori	Pacific Peoples	Child Poverty	Women and Girls	Environment	Regulatory Systems						
Timeframes	Officials expe	ect that Distribu	tional impacts	to begin in 2024	/25.							
	Provide evidence (data/other information) and assumptions to support the existence and timeframes of the identified benefits, including any gaps or uncertainties. It is optional to attach the Investment Logic Map as here. This can also be done through the Wellbeing Impacts Template (hyperlinked above).											
	To reach these figures we used the:											
	McKinsey report: The New Zealand Hydrogen Opportunity											
Evidence and assumptions	Insight E Develope		nomic Impact .	Assessment of F	Proposed Green H	lydrogen						
		report: Southla		o calculate benef	fits:							
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	 Job and 	wage ratios ou	tlined in the re _l	ports can be ext	rapolated.							

A variable rebate provides sufficient certainty.

Section 3B: Expenditure profile and cost breakdown

The answer to each question must not exceed 1-2 paragraphs

What assumptions, if any, have been used to prepare the costings for this initiative? E.g. for new FTE, salary assumptions, role/seniority, associated overheads. See section 3.3 of the Budget 2023 Guidance on common assumptions.

The following assumptions have been made:

The MBIE ERM Budget Bid Position costing model was used to determine the cost of the additional FTE. These include a Senior Policy Advisor, Project Manager and Team Leader. Average annual salary for these positions is \$0.192m including overheads.

Modelling commissioned by Castalia informed the total quantum of funding for the rebate.
 It is likely that the rebate will scale linearly.

The existing cost and spending pressures

- o The amount of load that could reduce the market power of NZAS
- The load that would not disrupt national energy and hydrogen markets
- o The benefits described above
- The risks / disbenefits described above.
- ... From an analysis of

Formula and assumptions

underlying

costings

- o the German €36M P/A allocation for a hydrogen
- A tentative \$2.000 million per MW indicative price informed by the UK government.

The cap was decided on a balance of competing factors...

- Officials assumed \$0.100 million P/A would be appropriate to support team and private sector engagement. We intend to conduct a number of pre-tender industry engagement workshops and benefits design workshops with iwi. The team also intends to travel to Southland and Taranaki to support alignment with the project and the Just Transition process.
- Based on market soundings officials assume that \$2.000 million P/A would be appropriate
 budget for legal contracting support and specialist energy consultants to support due
 diligence and contracting negotiations. MBIE does not have all the capabilities required
 for the project so would need to go to market for Legal, Energy market, Probity and Deal
 advisory services.

Provide a breakdown of total initiative expenditure by individual expense category. Total operating and capital expenses in this section must match the totals in Section 1B: Summary of funding profile. To duplicate these rows for additional rows, select the applicable row below and click the button that appears at the bottom right.

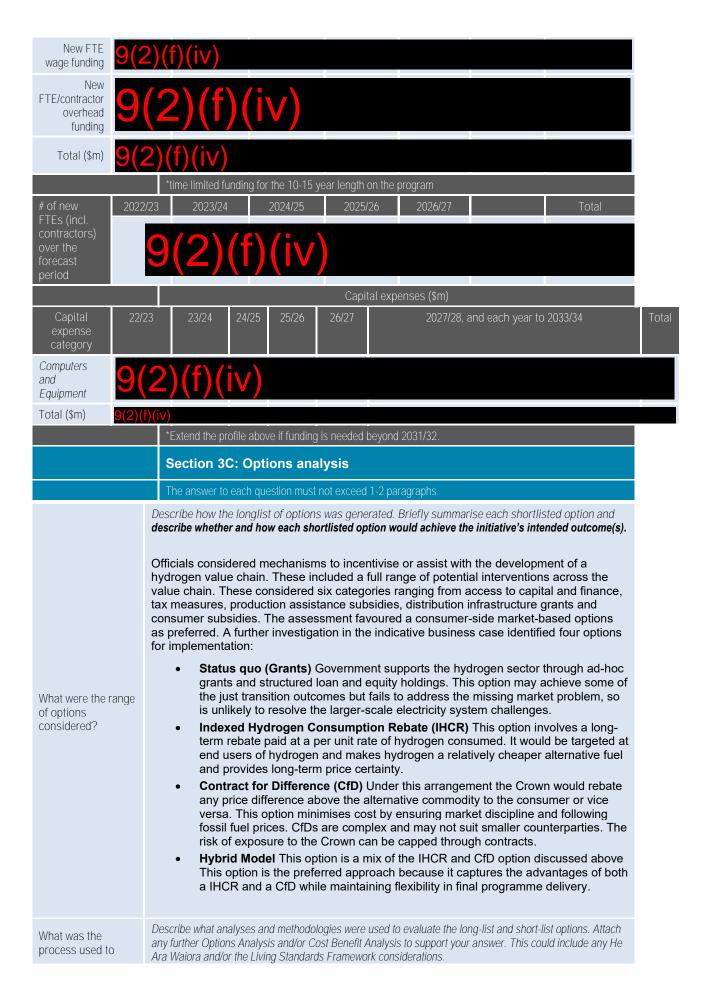
Operating expenses (\$m)

Operating expenses (\$m)

Rebate 9(2)(f)(iv)

Kanoa Project Support 9(2)(f)(iv)

External consultants (Law firms, commercial advisory engagement 9(2)(f)(iv)



select the preferred option?

The list of options was developed through the following staged process:

- Stakeholder engagement The project team's options analysis was informed by extensive stakeholder engagement, the purpose of which was to understand the interventions available and the points along the value chain at which they could be applied.
- Workshopping and refining The JTP team, working closely with colleagues across central government, identified seventeen possible interventions along the hydrogen value chain. These interventions were broken down into the five dimensions of choice. An analysis was conducted to understand the commercial implications of identified interventions on the broader sector. Further options analysis is attached.
- 3 Indicative Business Case Through the IBC process, an options analysis process was used to identify and refine a shortlist of potential approaches. This included a detailed Options Analysis, Living Standards Framework (LSF) assessment and cost-benefit analysis CBA.

Detail the monetary and non-monetary costs and benefits to the agency, broader public sector, New Zealand society and environment that were included in the options analysis, and how they were quantified, including from a Te Ao Māori perspective.

Through the development of the Economic Case in the IBC the team conducted a range of assessments and analyses on the shortlisted options, including a detailed Options Analysis, LSF assessment and CBA. The IBC is attached as a supporting document to this template.

Describe how engagement/consultation with partners/stakeholders/customers, including iwi and Māori, informed the identification and quantification of costs and benefits.

Crown/lwi engagement around Southland's clean energy future was the genesis of this project. The Murihiku Regeneration Collective, representing Te Runanga o Ngāi Tahu (TRoNT), were funded through Southland's just transition process to lead the clean energy workstream. A central recommendation of this workstream was the delivery of new energy intensive industries and new renewable generation in the region with the benefits of renewable energy generation to remain in the region. Murihiki Regeneration Collective, on behalf of Te Runanga o Ngāi Tahu has investigated options for energy intensive industries, identifying hydrogen production at the large and smaller scales as preferred options. The proposed initiative will enable realisation of these regional and iwi objectives.

Describe the climate impacts analysis used to support the options analysis, and the selection of the preferred option. Attach the Climate Implications of Policy Assessment (if relevant) and any other supporting evidence.

This initiative will support end-users to switch from fossil fuels to green hydrogen as a fuel or feedstock, in turn reducing emissions. The exact quantum of abatement as a result of the initiative will vary depending on the fossil fuel displaced, and in which form (i.e. diesel vs grey hydrogen vs fossil gas). The initiative will also support the uptake of renewable energy in the region. Q(2)(f)(iv)

No Climate Impacts of Policy assessment has been done on the proposal as it has not yet gone to Cabinet.

Describe how the preferred option represents best public value.

The Regional Hydrogen Industry Transition project can build the economic resilience of just transition regions by creating new jobs and industries. The project will also enable decarbonisation of hard to abate sectors and grow renewable generation in New Zealand.

These benefits can be unlocked by catalysing the nascent hydrogen industry. The Regional Hydrogen Industry Transition projects aims to drive development across the value chain, while maintaining commercial discipline, by growing end-user demand. Increased demand for hydrogen, and certainty for producers and offtakers, incentivises greater private sector investment. The Crown's investment would crowd in investment by acting as a catalyst for further investment into a hydrogen ecosystem in just transition regions. A range of co-benefits have been also identified in partnership with iwi. The selection process for rebate recipients will require delivery and reporting against these community, iwi, whānau and environmental benefits.

The Regional Hydrogen Industry Transition project's value for money is further highlighted opportunity cost. The cost of abatement in heavy transport and industry is high; a carbon price many times the current level would be required to deliver widespread mitigation in these sectors.

The project will adopt government procurement principles in selecting eligible rebate recipients. This will maintain competition, fairness, probity, and transparency in the process, maximising public value.

What sensitivity analysis was undertaken and how did it influence the choice of preferred option?

There is significant uncertainty over the exact future role of hydrogen in the economy and energy system. The status quo approach of subsidising capital expenditure leaves the Crown exposed to mistakes made in the location, use and scale of hydrogen infrastructure. By its very nature, a rebate on the consumption of hydrogen minimises the Crown's exposure to downside risk, as the rebate simply isn't paid in the event a market fails to materialise.

Modelling procured to underpin this initiative applied a Monte Carlo approach to determining the total predicted output of the mechanism. The output of this process is a series of frequency distributions, based on different inputs and assumptions. These outputs will inform the detailed contract design process to maximise value for money.

Counter-factual question

Explain the implications if funding is deferred or not approved. If there are options (e.g. choosing to reduce either output or quality of an existing service if funding is not approved), detail these here. Explain how the department would address the pressure or problem if the funding is not approved.

Deferral of funding will result in:

- 1 Delaying the uptake of hydrogen as a clean transport fuel and fertiliser feedstock, delaying carbon abatement in the sector and increasing the abatement task;
- 2 Prolong electricity and labour market uncertainty in Southland, deferring economic diversification and development in the region. These issues will persist, and a solution will eventually need to be found. In the interim, ongoing uncertainty will result in social and economic cost.

In this instance, new strategies will need to be developed to accelerate abatement in these hard to abate sectors and promote economic resilience in Southland. These alternative initiatives will involve unknown financial costs to Government.

Section 3D: Scaled option

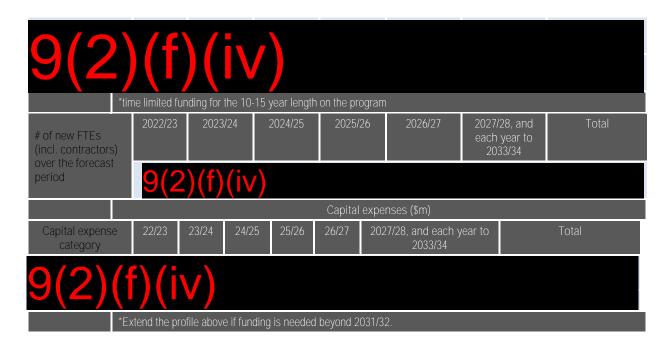
The answer to each question must not exceed 1-2 paragraphs

Provide a concise overview of the scaled down option to fund this initiative (the funding level below which it would be better to defer the initiative than fund it).

Scaling option overview

Given the nature of the proposed mechanism, the benefits associated with the intervention are likely linear down to a certain scale (noting there may be marginal efficiencies, and therefore benefit, with scale). Many administrative and delivery costs associated with the intervention are largely fixed, as the mechanisms and processes associated with delivery will have to be established and maintained regardless of scale. The scale at which the intervention is no longer worth delivering

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		9(2)(f)(iv)					
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		9(2)(g)(i)					
		If the initiative viable), succi	e cannot feasi inctly explain v	bly achieve its ob why (e.g. if the ini	jectives without fu tiative is to purcha	ull funding (i.e. scali ase a discrete asset	ng option is not at a set price).
		N/A					
		Explain the topreferred opt		assumptions for t	he scaled option	if they are differen	nt from those for the
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Pro sele	vide a breakc ecting a row a	down of what than the	he scaled dow e + button th	vn option would p at appears at the	urchase. Add add bottom right.	litional rows to the ta	able as needed by
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Operating expense category	2022/23	2023/24	2024/25	2025/26	2026/27 *	2027/28, and each year to 2033/34	Total
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Section 4: Delivery

Section 4A: Procurement and workforce requirements

The answer to each question must not exceed 2-3 paragraphs

Describe the key resources (workforce, goods, assets, services) that need to be sourced, including any ancillary services. The answer should align with the initiative description and the problem definition in Section 1A and Section 2A respectively. It is optional to attach the Procurement Plan for the initiative.

What is the initiative purchasing/funding?

The initiative will deliver a consumer subsidy, in the form of a consumption rebate, to end users of clean hydrogen in transport and industrial applications. Budget funding will cover the cost of payment of the subsidy, and administration and establishment of the fund, and delivering a competitive selection process to vet and select eligible recipients of the rebate. In addition, budget funding will enable specialist legal and market advice to provide contract negotiation support and due diligence.

Describe the market you are looking to procure the above key resources from. Support your answer with evidence of any market testing that has been completed, and any engagement that has been undertaken with the relevant supply markets.

The Just Transition Partnerships team has undertaken market research and informal market engagement since mid-2021. This has occurred through peak bodies (Hydrogen Council), regional development bodies (Great South and Venture Taranaki), and major energy generators (Great Southern Hydrogen initiative).

Investigations have identified sufficient market interest to support a transition to hydrogen in the transport and fertilizer production sectors to support an emerging sector. Potential consumers include:

Is there a market that can meet these needs?

Large trucking interests

Large trucking interests
 Negotiations

- Negotiations and other local governments (sewerage treatment, public busses and municipal waste trucks)
- Other transport companies (marine, heavy land transport and sustainable aviation fuels developers regolations).

What is the capacity and capability of the market to provide these resources and how has this been tested?

The Just Transitions Partnership Team have identified and interviewed potential hydrogen producers (Negotiations

). Producers indicate that the single largest barrier to demand for domestically produced green hydrogen is the price gap between hydrogen and alternative fossil fuel commodities (diesel, natural gas and urea).

Commercial Information

The government's intervention will reduce consumption costs to first movers, enabling them to convert equipment and plant, in turn driving scale for hydrogen production and reduce hydrogen costs in the longer term.

For new FTEs and/or contractors, outline occupation and skills area and indicate the market capacity to fill these roles.

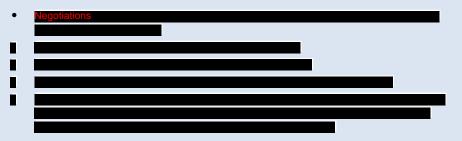
We anticipate the skills required of the FTEs are as follows:

- One FTE to lead the project team
- One FTE with procurement and commercial policy expertise
- One FTE with project management expertise

We anticipate the labour market will be capable of meeting the programme needs. The JTP team has run a number of recruitment rounds in recent years and has successfully hired and retained skilled staff.

What potential suppliers have been identified for the initiative, are they interested in participating in the procurement, and do they have the capacity and capability to meet these needs?

The following suppliers have indicated that an appropriately priced end-user consumption subsidy would be an effective mechanism for driving consumption of domestic hydrogen potential hydrogen producers have been identified.



What other competitors are there for similar workforce, goods, and services around the same time as this initiative? Have opportunities to collaborate or strategies to deconflict competing timelines been explored?

The initiative aims to support early adopters of hydrogen consumption in transport, agriculture and other emerging sectors (such as marine transport). The rebate is intended to achieve scale and reduce costs of transitioning to the cleaner fuel. In this case, competitors do not undermine the rationale for the initiative.

There is possibility for global competition for delivery of electrolysers and hydrogen refuelling / storage infrastructure within similar timeframes. Hydrogen development globally will face electrolyser supply chain challenges in coming years. This is expected to be met with increasing supply as demand increases. Provision of consumption subsidies will incentivise and strengthen the business case for hydrogen industry development in New Zealand in the context of a competitive global market.

Notably, a consortium of Woodside & Mitsui is investigating hydrogen production in Southland for export purposes. It is possible that opportunities exist to leverage the skills and supply chain opportunities presented by the export facility to support domestic projects enabled through the RHIT. Alternatively, the consortium may wish to use the RHIT to establish a local presence through supplying hydrogen to domestic hydrogen projects, which would open up supply chains for the wider industry.

We are aware of work being undertaken at the same time to develop hydrogen-based synthetic aviation fuels (SAFs). It is not expected that this work will be sufficiently advanced to bid for a hydrogen consumption rebate within the project timeframe.

Does the proposed approach align with Government Procurements Rules? If not, on what basis is the initiative exempted?

The proposed approach for awarding rebate recipient contracts will be based on public sector principles of fairness, competitiveness, transparency and ensure defensibility in order to deliver value for money in accordance with Government Procurement Rules. The MBIE Procurement Projects Team has been involved in developing the procurement approach and will continue to form part of the project team, including representation on

Section 4B: Risks, constraints, and dependencies

the Project Board.

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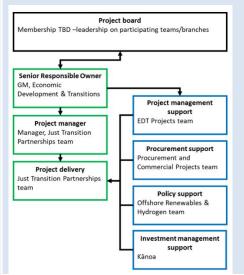
Describe the main risks associated with this initiative and the proposed mitigations to address these. Focus on the 20% of risks which are likely to provide 80% of the initiative's risk values. It is optional to attach the Risk Register for the initiative.

	RISK REGISTEL TOLLITE HIMATIVE.	
	Risk Categories	Mitigation measures
	Designing and executing a robust and defendable competitive process for selecting eligible rebate recipients. Inadequate market response Probity and process risk Inadequate evaluation criteria Appeals to selection process	 Working with MBIE Procurement to ensure a well-designed and robust selection process Clear advance signalling to the market will ensure potential counterparties have time to develop project proposals. Running a relatively lengthy EOI process will ensure potential counterparties have sufficient time to respond and participate. Work with and related central government teams/agencies (MBIE Energy and Resource Markets, New Zealand Trade and Enterprise) will help to identify and approach potential counterparties. Process probity will ensure best-practice is followed,
What are the main risks?	Hydrogen project delivery risks supply chain, timeframes, costs, quality of project delivery delayed hydrogen production delivery date Legal, Contracting and Specialist Advice Poor contract design exposes Crown to undue costs Energy market advice results in unexpected costs of rebate	 Undertake appropriate due diligence on prospective rebate recipients Contractually limit Crown's exposure to ongoing costs, The Hydrogen Roadmap will identify and address hydrogen sector specific barriers. Procuring high-quality commercial and legal advisors Working closely with MBIE Legal, Procurement, Kānoa and Energy and Resource Markets Teams to ensure quality advice; Build on experience from other similar industry support programs
	Additional unnecessary administration Counterparty risk – rebate recipients:	Rigorous evaluation criteria, selection process and due diligence
	Credit worthinessInsolvency	Cost containment measures in contracts Rigorous contract design
	Reputational	

	Programme administration and delivery risk • Engaging widely across government on programme design will support alignment across policy areas. • Build on experience from other similar industry support programs • Ensure benefits sharing expectations effectively communicated in selection documents • Ensuring benefit sharing requirements are quantifiable and clear will provide counterparties with certainty on requirements. • Develop monitoring and reporting regime with opportunities for remedial action • Developing bid assessment criteria which allow sufficient flexibility in how counterparties meet benefit sharing requirements will support a range of approaches. • Undertake due diligence through selection process to mitigate against non-delivery of benefits. • Developing benefit sharing mechanisms with iwi.							
What are the key constraints?	Describe any key constraints that have been and/or could be placed on the initiative. The following constraints have been identified: • \$(2)(g)(i)							
What are the key dependencies?	Describe any key dependencies that are outside the scope of the initiative and may determine the initiative's success. The successful delivery of a Regional Hydrogen Industry Transition is dependent on the following factors: Hydrogen projects supported through the mechanism are able gain development consents Existence of consented renewable energy projects to supply electricity to hydrogen production Hydrogen developers are able to import the equipment/capital goods required to deliver projects							
Section 4C: Gove	rnance and timeframes							
The answer to each ques	ion must not exceed 1-2 paragraphs.							
What are the governance	What is the governance structure, including decision making and any advisory groups? It is optional to attach the Governance Diagram showing the governance structure.							

arrangements for this initiative?

An initial inception phase will be led by the Economic Development and Transitions Branch, working closely with the Procurement Branch, the implement a procurement process. Following selection of eligible rebate recipients, the operational aspects of payments administration, monitoring, reporting and verification will transfer to Kānoa. The



Project will then be led by a Project Board with Senior representation from relevant parts of MBIE - Economic Development and Transitions, Energy and Resource Markets, Kānoa, and Procurement.

A phased delivery approach will ensure Project preparedness before commencing each subsequent phase. The Project Board will be able to review the planned approach prior to commencement of each subsequent phase. Each phase will be informed by the outcomes of previous phase and an appropriate approach planned and developed. This approach will require an iterative and cross-organisational Project management methodology.

Explain how the governance structure provides for input from partners/stakeholders/customers, including iwi and Māori?

The just transition process is community led. Southlanders identified clean energy and hydrogen, as key to diversifying and decarbonising the region. We will continue to work through the just transitions regional leaders group to ensure the community can engage meaningfully. Wider stakeholders will be engaged directly by Just Transitions between June and August in the market sounding step of the project plan. Officials would set up workshops to determine the policy settings which would achieve our objective of incentivising a regional hydrogen industry.

Just transitions will develop the benefit sharing mechanism with iwi Māori. The mechanism must reflect a range of benefits which are meaningful for Māori and can be transposed to different iwi. Officials will continue to hold workshops and co-design the policy. This will inform advice to ministers about the mechanism and support project delivery.

Start

Mar-23

Apr-23

May-23

Jun-23

End

Apr-23

Jun-23

May-23

Aug-23

Updater to **Ministers**

No

Nο

No

	process established
	Procurement of commercial services process
	Public announcement of funding provided through Budget23
neframes and	Market engagement to inform tender design

Key Milestone

Project management structures and

Tim moi



Section 4D: Demonstrating performance

The answer to each question must not exceed 1-2 paragraphs

Does this meet the threshold of a significant initiative? Is it part of an existing strategy / work programme / initiative with existing reporting, and if so what is it called?

We believe this proposal meets the criteria of a significant initiative because of its scale and the level of likely public and Parliamentary interest in its outcomes.

Though this initiative is an outcome of work funded through the Supporting Just Transitions (M25) (A17) appropriation, given the changed scope and nature of the initiative, we expect a new appropriation would be established.

Outline the type (or types) of evaluation planned and their timeframe(s). Indicate what funding is proposed to be allocated for evaluation.

The initiative will be administered by MBIE' Economic Development and Transitions branch, in collaboration with Kānoa, Energy and Resource Markets, and Commercial and Procurement Projects. The monitoring and evaluation criteria will established in collaboration with these business areas as part of further detailed development of the initiative. 9(2)(6)(6)

Describe the performance information that would be included in the Estimates if this initiative was funded, or if the performance information in the Estimates is not expected to change then describe the reasons for that decision.

A new appropriation would be established for this initiative. We propose the purpose of the appropriation would be: This initiative would support hydrogen uptake for early-mover industrial consumers to bring forward hydrogen's viability, accelerate decarbonisation in hard to abate sectors and resolve strategic energy market challenges in Southland.

We propose the following performance assessment criteria:

- Support the emergence of a right-sized hydrogen sector in just transition regions
- Support the delivery of regional just transitions through economic diversification and decarbonisation
- Contribute to Aotearoa/New Zealand's equitable transition by driving decarbonisation of hard-to-abate sectors

Section 5: Initiatives with Distributional/System Impacts

Section 5A: Māori initiatives The answer to each question must not exceed 2-3 paragraphs Direct impact See below. \boxtimes Indirect impact The innovative contracting mechanism which Targeted and tailored impact \boxtimes has been co-designed with iwi will recognise Disproportionate positive impact Māori as mana whenua. Other The project has developed a range of iwi, What kind of impact community, economic development and would the initiative have on Māori? environmental benefits that will be realised through the initiative. selection process for rebate recipients will

						Government benefit Government Gov	rnment from the projects to seful tool orting action projects. The projects it is not to the projects anism to the projects anism to the projects it is not to the projects anism to the projects and t	equently o Māori r it is not ve particif new ser The Regirect will endirectly educes to coess to	uses needs alway ipatio ctors onal I mploy enable the le	consultation to while consultation to while consultation to while consultation in the and economic hydrogen Industria benefit sharing in in the ambitions.	ation try ng	
	С	List any assumpt	ions you	ı have mad	e in con	sidering	impacts for	Māori/iwi/l	napū/w	hanau.		
		Kotahitanga	T	ikanga ⊠	WI	hanaun _.	gatanga I	Manaak □	_	Tiakitang ⊠	а	
How does the initiative align with any of the means of He Ara Waiora?	ap dir Tik red ma	ectly with mana what canga: The process cognition of the Cro ana whenua to both	ered alo nenua to s to dev own's re n protec	ngside the o resolve shelop this in sponsibiliti t and deriv	interver nared ch tervention es to wo e a living	ntion, we nallenge on, and ork in pa g from t	the planner the planner irtnership wheir rohe.	blished a r d outputs, l r ith iwi, and	nodel f nas be I of the	or the Crown worki en developed in iwi's responsibility	as	
		Tiakitanga: One of the key benefits of this initiative is emission reduction in hard-to-abate sectors. Climate mitigation is essential to preserving and protecting the natural world.									nate	
How will the initiative contribute to the ends of He Ara Waiora?		Te Taiao ⊠	Te Taiao One of the key benefits of this initiative is emission reduction in hard-to-abate sectors. Climate mitigation is essential to preserving and protecting the natural world.									
	have a responsibi Crown resources					a, the iwi and rūnaka we have worked with to develop this initiative bility to preserve and grow the mana of their people. We are putting s behind this outcome through co-developing the benefit sharing fect to iwi economic and social ambitions.						
Section 5B: Pacifi	c in	itiatives										
The answer to each quest	ion n	nust not exceed 2-	3 parag	ranhs								
1	А	Direct impact	9			N/A						
		Indirect impact										
What kind of impact would the initiative	В	Targeted and tai	lored im	pact		N/A						
have on Pacific		Disproportionate										
people?		Other		1								
	С	List any assumpt	ions vou	ı have mad	e in con	siderina	impacts for	Pacific co	mmunii	ties.		
How would the initiative contribute to the focus areas of the All-of-Government Pacific Wellbeing	La Cu	laga Potu: Itural Values and nciples		Fale For Partnersl Governal	io: nip and		Vaka Mo Performa Improven	ana: nce and		Te Kupega: Capability		
Strategy?												
How would the initiative contribute to the outcomes for		oal 1: Thriving cific languages,		Goal 2: Prospero	us		Goal 3: F and healt Pacific fa	hy		Goal 4: Confident, resilient, and		

Pacific communities articulated in the Pacific Wellbeing	cultures, and identities				Pacific communi	ties			thriving Pacific young people				
Outcomes Framework?	N/.	A											
Section 5C: Child	po	vert	ty initiativ	/es									
The answer to each quest	ion r	nust	not exceed 2	-3 para	agraphs.								
	А	Dir	ect impact			□ N/A							
What kind of impact		Inc	lirect impact										
would the initiative	В	Та	rgeted and ta	ilored	impact		N/A						
have on reducing child poverty?		Dis	sproportionate	e posit	ive impact								
		Otl	her										
Does the initiative align with the Child and Youth Wellbeing Strategy?	Υ.	/N	N/A										
Section 5D: Initiat	ive	s w	ith impac	ts o	n women	and	girls						
The answer to each quest	ion r	nust	not exceed 2	-3 para	agraphs.								
	Māori			Pacific			Asian		Culturally and linguistically diverse				
Which group(a) of	Older persons			Younger persons			Migrants		Refugees				
Which group(s) of women and girls would be impacted by the initiative? Select all	LGBTQIA+			Rural perso and communitie			Students		Disabled people and those with disabilities				
that apply.	Business owners				Employees			Specific industries or sectors		Other			
	N/A												
How many women and girls would be affected by this initiative?	N/.	A											
Qualitative impacts: Refer			iidance for ex	ample	S.								
What is the initiative expected to achieve that will help to improve outcomes for women and girls, including for wāhine Māori and kōtiro?	N/.												
What direct and indirect impacts on women and girls is the initiative expected to have, including on wāhine Māori and kōtiro?	N/.	A											
Are there any anticipated negative impacts of the initiative on women and girls, including on	N/.	Α											

wāhine Māori and kōtiro?												
Describe how the initiative contributes to the wellbeing objectives and improves outcomes for women and girls.	N//	A										
Section 5E: Initia	tives	s with environ	men	tal impa	icts							
The answer to each que	stion n	nust not exceed 2-3	parag	raphs.								
	Cle	ean Transport		Energy Efficiency and Renewable Energy			Living and Natural Resources and Land Use		Terrestrial Aquatic Biodiversi			
Does the initiative align to a category within the <u>Green Bond Framework?</u>		mate Change aptation		Sustainable Water and Wastewater Management			Pollution Prevention and Control		Green Bui	ldings		
	(Se	Please advise whether the initiative meets the category specific criteria for the Green Bonds Programme (see section 4.5 of the Budget 2023 Guidance). The initiative does meet the Green Bonds criteria for the three categories selected - Clean Transport; Living and Natural Resources and Land Use.										
	А	A Direct impacts					the nature and size of		nvironmentai	impact:	s by	
		Indirect impacts				type (both positive and negative). 9(2)(g)(i)						
Does the initiative have significant direct	В	Avert long-term tip	ooints		By reducing emissions, the initiative will contribute to global decarbonisation efforts, in turn reducing the severity of							
have significant direct or indirect environmental impacts (positive or negative) beyond any climate change implications caught by CERF?	5	Advance long-term tipping-points				associated impacts and reducing the likelihood of tipping points being reached. Though New Zealand's emissions are a small portion of global emissions, we can support international efforts by demonstrating the achievability of ambitious targets. This initiative aims to bring forward emission reduction actions that are likely to be taken in the 2030s. Reducing emissions in the near-term has an outsized impact on meeting emissions reduction commitments (as one tonne of abatement in year one has the same impact as ten tonnes in year ten).) e of	
	С	List any assumption Guidance).	ons you	ı have mad	e in cons	sidering	these impacts (see se	ection 4	1.5 of the Bu	ıdget 20	023	
Section 5F: Regu	ılato	ry systems in	itiati	ves								
The answer to each que	stion n	nust not exceed 2-3	parag	raphs.								
Which regulatory system(s) does the initiative relate to?		he name(s) of the re ate Change.	egulator	ry system(s,). For ex	ample,	Consumer and Comm	ercial;	Courts and	Tribunal	S;	
Which category does the initiative primarily relate to?	refor mani	A major government				s	Enabling economactivity and/or easing compliance burdens		□ Other			

Which stage of the policy or legislative process is the proposal at?

If Cabinet decisions on the policy have been made, provide the relevant Cabinet Minute.