THE WEST COAST
REGIONAL COUNCIL

388 Main South Rd, Paroa
P.O. Box 66, Greymouth 7840
The West Coast, New Zealand
Telephone (03) 768 0466
Toll free 0508 800 118
Facsimile (03) 768 7133
Email info@wcrc.govt.nz
www.wcrc.govt.nz

3 March 2022

Future Pathways Policy Team
Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140

Dear Sir/Madam

Submission on Te Ara Paerangi Future Pathways Green Paper 2021

Thank you for the opportunity to provide comment on the "Te Ara Paerangi Future Pathways Green Paper 2021".

Please find the West Coast Regional Council's (WCRC or the Council) feedback attached.

We welcome the opportunity to respond to this consultation.

Due to our high workload, we have not had time to fully consider the full content of the Green Paper, therefore our comments focus on the priorities and funding matters that are important to the West Coast. This submission also responds to some of the key questions posed in the paper.

Our contact details for service are**:**

Lillie Sadler
Planning Team Leader
West Coast Regional Council
PO Box 66
Greymouth 7840

Privacy - 9(2)(a)

We would be grateful for acknowledgement of receipt of our submission.

Yours faithfully

Heather Mabin
Chief Executive Officer

West Coast Regional Council Feedback on Te Ara Paerangi Future Pathways Green Paper

List of Feedback

Feedback 1

The West Coast Regional Council (WCRC) supports Feature 6: *"Related, a system responsive to national research priorities, usually focused on generating unique value for the economy from advanced technology, or addressing large-scale long-term problems, such as the challenges presented by climate change, or intergenerational disadvantage"*[1].

Feedback 2

WCRC believes that:

a) Any future RSI priorities and funding should prioritise regions like the West Coast that have, and continue to, experience major job losses, and actual reductions in support industry's jobs and services, and in economic and social services for communities, compared to other regions; and
b) Ensure there are linkages between RSI priorities and funding, and the implementation of Government's environmental policy and regulation.

Feedback 3

WCRC requests that RSI funding be allocated to address the following issues on the West Coast (and potentially in other regions):

a) Feasibility/viability/practicality of biomass and hydrogen as alternative fuels for the West Coast.
b) Investigate smaller bio-fuel refinery options for the West Coast as a pilot project. For example, establishing a plant adjacent to Westland Milk Products to take wood waste from nearby forestry areas to fuel the milk tanker fleet.
c) Identifying suitable and available areas on the West Coast to grow energy crops. This could be in conjunction with forestry land. It is estimated that 50,000ha of land is required.[2] Investigate if any stewardship land would be suitable for this purpose.
d) Investigate the viability of small-scale 'run of the river' hydro electricity generation schemes on public conservation land and elsewhere, for micro and small-scale hydro electricity generation for self-sufficient local supply and potential sale outside the region. The West

[1] Te Ara Paerangi Future Pathways Green Paper 2021. MBIE. Print: ISBN 978-1-99-100875-6 Online: ISBN 978-1-99-100874-9. October 2021

[2] West Coast Regional Council's Resource Management Committee workshop on the draft submission on the Government's Emissions Reduction Plan Discussion Document, 19 November 2021.

Coast has an abundant water supply and slope resources required for these low-impact and low footprint activities.

e) Providing incentives for indigenous forest on private land to be used to offset farm emissions. Currently the only economic incentives are to clear the indigenous forest and plant pines.
f) Finding economic value and incentives for the retention and/or development of wetlands on private land, for example their role as a carbon sink. This could include being counted in the Emissions Trading Scheme, and/or any other emissions accounting systems.
g) A fairer accounting system for greenhouse gas emissions and reductions. This includes those emitted from the transport sector.
h) Using national parks as carbon sinks.
i) Developing regional emissions accounting systems.

Introduction

The West Coast Regional Council (the WCRC or Council) appreciates the opportunity to provide feedback on the "Te Ara Paerangi Future Pathways Green Paper 2021".

As background, the Council recently submitted on the Government's discussion document on an emissions reduction plan (ERP) to reduce greenhouse gas emissions and minimise climate change impacts. This is an important issue for the West Coast and our submission on the ERP discussion document identified a number of actions to include in the upcoming ERP, to help our Region adapt to, and move forward, into a low emissions future.

WCRC therefore strongly supports that research, science and innovation (RSI) priorities and funding for the short to medium term are focussed on helping regions and communities to make a 'just' transition to a low emissions economy and society.

The issues and actions that the Council identified in our submission on the ERP are included in this submission as priorities for RSI funding. These, and the need for RSI priorities and funding to focus on the economic, social and cultural impacts of central government environmental policy and regulation, are key points in our feedback.

Our feedback also responds to some of the key questions in the Green Paper.

About the Submitter

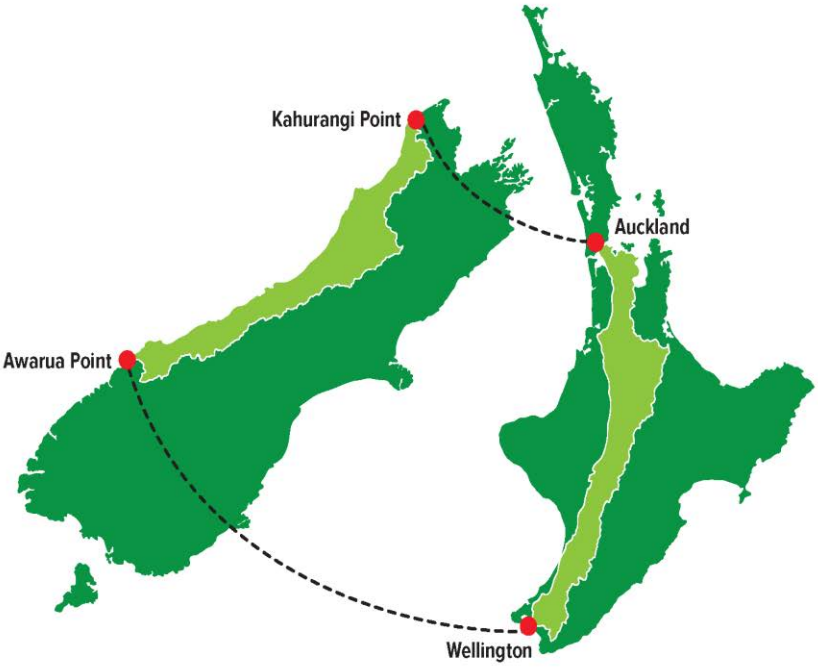
The WCRC is the local authority for a region covering a vast area with a sparse population. Extending from Kahurangi Point in the north to Awarua Point in the south, this is the approximate distance from Wellington to Auckland (see diagram on Page 2 of this submission). The West Coast is predominantly rural.

The Conservation Estate comprises 84.17% of the West Coast land area, with an additional 1.55% administered by Land Information New Zealand (LINZ). This leaves 14.28% of land available for private ownership. The land in the Conservation estate and Crown ownership is not rateable by local authorities. Due to the WCRC's low rating base, the Council has few resources to undertake our own RSI to assist with future changes in managing natural resources, to provide for an appropriate level of protection of the natural environment, and for the wellbeing of our communities.

WCRC works closely with the regions' three territorial authorities (the Buller, Grey and Westland District Councils). Outside of the main towns of Westport, Greymouth, Reefton and Hokitika, the region's relatively low population of approximately 32,600 is spread across smaller settlements and rural communities. It is important that central government priorities and funding for research, science and innovation into the future are relevant to our unique region, and beneficial to the social, economic, and cultural well-being of all West Coast communities and the natural environment.

Te Rūnanga o Ngāti Waewae and Te Rūnanga o Makaawhio (Poutini Ngāi Tahu – PNT) are mana whenua of Te Tai o Poutini (the West Coast). Our Mana Whakahono ā Rohe (Resource Management Act - Iwi Participation Arrangement) captures the intent of the Council and Poutini Ngāi Tahu to progress our relationship in accordance with the Treaty of Waitangi partnership between iwi and the Crown.

Map of New Zealand to highlight 600km length of West Coast Region compared to distance between Auckland and Wellington



General Comments

The WCRC strongly supports the need for research, science and innovation (RSI) priorities and funding for managing the impacts of climate change (Pg 24, para 4).

Council also strongly supports accelerating the development of New Zealand's research system to support it to stand alongside the best in the world; a system that creates transformative change and supports grand challenges. In particular:

Feedback 1

WCRC supports Feature 6: *"Related, a system responsive to national research priorities, usually focused on generating unique value for the economy from advanced technology, or addressing large-scale long-term problems, such as the challenges presented by climate change, or intergenerational disadvantage"*[3](This footnote is the same as Footnote 1).

[3] Te Ara Paerangi Future Pathways Green Paper 2021. MBIE. Print: ISBN 978-1-99-100875-6 Online: ISBN 978-1-99-100874-9. October 2021

The current and future focus of government law and policy on climate change mitigation and adaptation will mean major social and economic changes for the West Coast, and the need for a "just transition" to a new way of living. The West Coast Region is in the process of having fossil fuel-related industries phased out by the Government's climate change emissions reduction direction.

Any future RSI priorities and funding should prioritise regions that have, and continue to, experience major job losses, reduced support industry jobs and services, and reduced economic and social services for communities. The West Coast needs significant investment in research and innovation to help transition to a robust, low-emissions local economy. Government's support of the West Coast in moving away from the extractive sector had a strong focus on tourism with significant funding from the Provincial Growth Fund directed to projects that would increase, and prolong, visits to the region. The effects of the Covid-19 global pandemic and the subsequent closure of New Zealand's borders resulted in an almost overnight cessation of the tourism industry. This has had a significant impact on a number of our communities, particularly those in Westland. Support of future industry must be spread across sectors to reduce the reliance and susceptibility to events such as these.

Section 2 of the Green Paper discusses how the Treaty obligations can be honoured in RSI, and how Māori aspirations for RSI can be given life. The WCRC supports future RSI priorities and funding for Māori needs and aspirations (Pg 24, para 4).

The funding section of the Green Paper appears to focus on models and systems for funding Crown Research Institutes (CRI's). Council considers that there should be better linkages between RSI priorities and funding, and the implementation of Government's environmental policy and regulation. In Example 1 below, in the government's recent discussion document on an emissions reduction plan (ERP), it proposes that New Zealand move to a circular economy with new business models to meet mitigation targets. However, there is no mention of how this might be implemented in regions like the West Coast, where significant social and economic change is needed to make the Region sustainable in a low emissions future. The recommendation quoted below is from the Council's submission on the draft ERP discussion document, with suggestions for actions to sustain the West Coast Region, which would entail RSI:

"The WCRC requests that the Government, through the emissions reduction plan, provides for:

a) *Economic strategy development for the West Coast;*
b) *Research and development for innovative business models and 'sandboxing' in low risk areas, subject to local government approval;*
c) *A climate change levy or tariff, so that larger emitters such as international shipping and aviation industry, for example, pay for extensive reforestation across the DOC estate, or peatland and wetland restoration;*
d) *A benefit or incentive for landowners, including private landowners, to maintain wetlands and forests, including pre-1990 forests; and for retaining native forest on private land, which could be used to offset farm emissions."*

Example 1: Emissions Reduction Plan

Example 2 below outlines the social and economic impacts of the Government's upcoming national policy requirements to protect indigenous biodiversity, and the glaring need for RSI in this area to ensure that this national policy can be implemented on the West Coast while also maintaining communities' economic, social and cultural wellbeing.

In WCRC comment on the Draft National Policy Statement for Indigenous Biodiversity (NPSIB):
The Draft NPSIB seeks to protect indigenous biodiversity on private land, including by protecting areas of indigenous forest with significant ecological values, referred to as Significant Natural Areas (SNA's).

An initial assessment of SNAs on private land in the West Coast has identified numerous potential SNAs. The economic and social consequences of protecting SNA's is likely to be significant for the Region, in terms of loss of potential productive value, income for landowners and succession planning. This will impact immediate job opportunities and future generations, through the economic consequence of loss of potential productive land. Landowners will be unable to realise the economic value of potentially productive land. Succession planning will impact older parents who were hoping to pass on land to their children and grandchildren.

The Council supports in principle the protection of indigenous biodiversity and habitats, including wetlands and forest. The West Coast and other regions could greatly benefit if RSI priorities and funding focus on finding new economic value for SNAs on private land. Alternative, innovative ways of protecting biodiversity and habitat where they are identified on private land would even more so be of benefit throughout New Zealand.

Example 2: Significant Natural Area's

Feedback 2

a) Any future RSI priorities and funding should prioritise regions like the West Coast that have, and continue to, experience major job losses, and actual reductions in support industry jobs and services, and in economic and social services for communities, compared to other regions; and

b) Ensure there are linkages between RSI priorities and funding, and the implementation of Government's environmental policy and regulation.

Specific RSI issues for West Coast

The following are specific RSI topics that are issues for the West Coast. WCRC would like to see further RSI funding allocated to help address these issues.

Energy Supply

The Government is aiming for a revised figure of 50% renewable energy by 2030, and currently retains the coal-powered Huntly electricity generation station as a backup. 6000MG of electricity is needed to meet electricity needs,[4] this is the equivalent of six Huntly generation stations. More research and investigation is needed to give us assurances that there will be a sufficient, resilient and reliable source of energy. Fuelling our domestic suppliers and manufacturers of food should be a top priority, and these factories will need a lot of electricity to power them.

South Island dairy factories currently need coal to operate. There are five main factories (2 in Canterbury, 2 in Nelson and 1 on the West Coast). A big chunk of dairy product manufacturing in the South Island is reliant on up to 1 Million tons of coal. If production ceases on the West Coast, there will be a serious impact on the West Coast economy.

Example 3: Coal power for food production

Alternative biofuels

WCRC is concerned that the South Island, and the West Coast, are being left out/behind in the national supply chain of hydrogen. Scion are working on biofuels but have at this time, excluded the South Island. Instead of constructing a 50 million litre per year biofuel refinery, smaller refineries should be investigated for the West Coast. This could be undertaken as a pilot project as many of the challenges faced in successfully establishing a biofuel refinery on the West Coast would inform how to establish refineries at other more accessible locations around New Zealand. Alternative use of biomass production on marginal land for biofuel is another area that the WCRC believes requires research and investigation.

Hydro electricity generation

Electricity is relatively more expensive on the West Coast because of the losses in transmitting power through the National Grid across the Southern Alps. Importing electricity also makes small

[4] West Coast Regional Council's Resource Management Committee workshop on the draft submission on the government's emissions reduction plan discussion document, 19 November 2021.

communities vulnerable, due to their location at the end of the supply line. In a magnitude 8 Alpine Fault earthquake, Transpower would fix the main lines but not the smaller sub-lines, resulting in West Coast communities left without power for months. On the West Coast, there are numerous areas on Department of Conservation (DoC) administered land with abundant freshwater on sloping land which are suitable for small-scale 'run of the river' hydro electricity generation schemes that could support our communities' wellbeing and resilience. Further investigation is needed on where such electricity generation would be viable.

Fairer emissions accounting

There is a need to establish fairer emissions accounting. An example of this inequity are the Australian tomatoes which are air-freighted to New Zealand without paying a carbon tax, however a local tomato grower on the West Coast using coal to heat their glasshouse, has to pay a carbon tax. The lack of a tax or levy on carbon emissions produced by the transport industry, are another example, of inequity in emissions accounting.

Counting West Coast forests and wetlands as carbon sinks

A large proportion of the Conservation Estate on the West Coast is indigenous forest which functions as a carbon sink. There is also a considerable proportion of indigenous forest on private land, as well as wetlands across both public and private land. None of this land is currently accounted for in the national Emissions Trading Scheme.

Research should be undertaken to identify options for increasing the economic value of wetlands; this would provide additional benefit for landowners with wetlands in other regions who are equally impacted by the national direction. There is a higher proportion of indigenous forests and wetlands on the West Coast compared to other regions. These natural resources need an economic value as an incentive for private landowners to protect and retain them on their land. This is critically important as private land with wetlands, in particular, and indigenous vegetation is losing property value and income due to the national freshwater direction to protect natural wetlands from further loss, and restrict land and water use which may adversely affect them.

Conversely, research is required to examine the effect of maturity of the native forests, is there a net negative effect from the cessation in milling on regeneration. Additionally, the peak for native forestry being a carbon sink.

WCRC submission Recommendation 2 to the Government's draft emissions reduction plan discussion document is that:

"Consistent with sustainable management, and an equitable, inclusive, and well-planned climate transition, is that energy sources, such as cheap biomass, affordable hydro-electric power generation and potentially using degraded areas of the DOC estate for energy farms, should be developed on the West Coast as a matter of priority[5]."

Example 4: Climate transition energy

Feedback 3

RSI funding should be allocated to address the following issues on the West Coast (and potentially in other regions):

a) Feasibility/viability/practicality of biomass and hydrogen as alternative fuels for the West Coast.
b) Investigate smaller bio-fuel refinery options for the West Coast as a pilot project. For example, establishing a plant adjacent to Westland Milk Products to take wood waste from nearby forestry areas to fuel the milk tanker fleet.
c) Identifying suitable and available areas on the West Coast to grow energy crops. This could be in conjunction with forestry land. It is estimated 50,000ha of land is required.[5] (This footnote is the same as Footnote 2). Investigate if any stewardship land would be suitable for this.
d) Investigate the viability of small-scale 'run of the river' hydro electricity generation schemes on public conservation land and elsewhere, for micro and small-scale hydro electricity generation for self-sufficient local supply and potential sale outside the region. West Coast has an abundant water supply and slope resources required for these low-impact and low footprint activities.
e) Incentives for indigenous forest on private land to be used to offset farm emissions. Currently the only economic incentives are to clear it and plant pines.
f) Finding economic value and incentives for wetlands on private land, including as carbon sinks. This could include being counted in the Emissions Trading Scheme, and/or any other emissions accounting systems.
g) A fairer accounting system for greenhouse gas emissions and reductions, including from the transport sector.
h) Using national parks as carbon sinks.
i) Developing regional emissions accounting systems.

[5] West Coast Regional Council's Resource Management Committee workshop on the draft submission on the Government's Emissions Reduction Plan Discussion Document, 19 November 2021.

Key Questions from Green Paper

KEY QUESTION 1: What principles could be used to determine the scope and focus of research Priorities?

Any future research, science and innovation (RSI) priorities and funding should prioritise regions that have, and continue to, experience major job losses, reduced support industry jobs and services, and reduced economic and social services for communities.

KEY QUESTION 2:

A) What principles should guide a national research Priority-setting process?

B) How can this process best give effect to Te Tiriti?

A) National research priority setting should follow the policy and legislative reforms and the impact that will have on communities. Research should support comprehensive plans for implementation of policy and regulatory requirements including just transitions for communities.

KEY QUESTION 3: How should the strategy for each research Priority be set and how do we operationalise and implement them?

The strategy for each research priority should follow the outcomes sought for communities. Each strategy should support comprehensive plans for implementation of policy and regulatory requirements including just transitions for communities.

KEY QUESTION 8: Do you think a base grant funding model will improve stability and resilience for research organisations, and how should we go about designing and implementing such a funding model?

A modicum of base grant funding is useful to ensure the continuity of programmes that require long term support. It may also help stabilise workloads and resourcing within parts of Crown Research Institutes (CRIs), helping them stabilise recruitment, structure, and capacity.

WCRC considers that base grant funding for RSI priorities should follow the implementation of Government's environmental policy and regulation and how these affect communities.

KEY QUESTIONS 9-13:

The following comments on Key Questions 9-13 exclude Question 12 as Council has no comment on how to design Tiriti-enabled institutions.

Government and community input is valuable for ensuring CRIs provide a useful service to public clients, including councils. The purpose of a profit-driven business model is to increase efficiency.

The risk is that the prioritisation of profits can alter the core values and function of the institution. Value for money can decrease. Larger organisations may have larger overheads, decreasing their affordability for clients. Alternatively poor affordability might result from a particular corporate structure. There seems to be more use of smaller consultancies, with highly skilled personnel, for advice in specific technical areas. This might in part be a response to reduced value from some CRI's. These consultancies are not to be confused with the majority of smaller consultancies that deliver mediocre quality. In defence of CRI's affordability, the cost of a quality job is always greater. They need to continue fulfilling their role as bastions of quality, integrity, and technical excellence. They are traditionally the only ones who provide this.

A profit driven model doesn't necessarily foster collaboration or data sharing. Issues can arise where potential value of intellectual property reduces availability of information that could be used more widely for research and innovation. Effective collaboration relies on good will, demonstrated by the sharing of information.

Investment in capacity will be biased towards areas that generate profit, but this may not necessarily align with all long-term strategic needs at a national, regional or local level.

KEY QUESTION 14: How should we include workforce considerations in the design of research Priorities?

Science programmes are not limited to CRI's. Many local authorities run science programmes to meet legislative requirements and support their communities. Workforce considerations should include partnerships between CRI's and local authorities to better support knowledge sharing, people and capabilities. Scholarships and increased resourcing are required to stimulate growth in capacity for priority research sectors. There needs to be multiple incentives to attract the best young talent into these sectors or they will go elsewhere.

This ends our feedback.