McGuinness Institute title:
[ENV-21-SUB-0020]
Establishment of a Plastics
Innovation Fund

In Confidence

Office of the Minister for the Environment

Cabinet Environment, Energy and Climate Committee

Establishment of a Plastics Innovation Fund

Proposal

This paper seeks agreement to establish a four-year, \$50 million Plastics Innovation Fund as committed to in the Labour Party manifesto.

Relation to Government priorities

Taking action on plastics is a step towards building a low emissions, low waste economy and contributes to the Government's objective to transition to a clean, green and carbon neutral New Zealand.

Executive Summary

- In December 2019, the office of the Prime Minister's Chief Science Advisor released a report, *Rethinking Plastics in Aotearoa New Zealand (Rethinking Plastics)*. The report recommended a broad range of actions to tackle New Zealand's plastic waste problem and to reimagine the way we make, use and dispose of plastics.
- The Government's response includes a commitment to establish a \$50 million Plastics Innovation Fund, as recommended by *Rethinking Plastics*.

Plastics Innovation Fund

I intend to use my powers under the Waste Minimisation Act 2008 (the Act) to establish a Plastics Innovation Fund (the fund). The primary objective will be to minimise plastic waste, and secondarily to create jobs while supporting our manufacturing and primary industries to uphold our clean, green reputation.

Financial arrangements

Waste levy revenue will be used for the fund, with indicative phasing as in Table 1. This phasing reflects projected waste levy revenue and other Waste Minimisation Fund (WMF) priorities.

Table 1

Year	2021/22	2022/23	2023/24	2024/25
Proposed project funding allocation (\$m)	3.000	7.000	20.000	20.000

7 The costs of administering and monitoring the fund will be met from waste levy revenue in accordance with the Act.

Announcements and implementation

I propose to announce the fund in June 2021 at the same time as announcements on policy decisions to phase-out hard-to-recycle and single-use plastic items. I anticipate that the fund will open for expressions of interest in November 2021.

Background

There is growing public concern about plastic waste in New Zealand

- Plastic is a durable, flexible, inexpensive and lightweight material that is suitable for a wide range of applications, including food storage. However, public concern over the harmful effects of plastic waste on our environment is increasing.
- Only a small proportion of New Zealand's plastic is recycled. Most of our plastics are made from virgin fossil resins with high carbon emissions. Our onshore plastic reprocessing capability is limited, as are offshore markets for low-value mixed-plastics, leading to high volumes of plastic being landfilled.
- Plastic pollution affects our environment. The wasteful use of resources and build-up of plastic waste in our ecosystems damages them and our clean green image, with growing economic costs.

The Government responded to the Rethinking Plastics report in August 2020

- Rethinking Plastics recommends that we change our relationship with plastic, treating it as a valuable resource rather than as cheap and disposable. The report emphasises the need to innovate to "reimagine plastics" and recommends that to attract research and innovation, a specific innovation fund should be set up, dedicated to plastics.
- In August 2020, Cabinet agreed to act on most of the recommendations in Rethinking Plastics and establish actions relating to research and innovation, data and insights, education, procurement, international connections, and support for business and communities [SWC-29-MIN-126].

14 Cabinet has also agreed to consider phasing out certain hard-to-recycle and single-use plastics [ENV-20-MIN-0027].

Plastics Innovation Fund

- The 2020 Labour Party manifesto committed to implementing a \$50 million Plastics Innovation Fund. I intend to use my powers under the Act to establish the fund.
- Section 38 of the Act provides that the Minister for the Environment may "approve funding of any project to promote or achieve waste minimisation on terms or conditions as he/she thinks fit". It also provides that the Minister for the Environment may notify criteria by issuing a Gazette Notice.
- 17 Since 2008, the majority of funding allocations have been made via the WMF. A Gazette Notice sets out the WMF eligibility and assessment criteria, and annual investment signals direct applicants to the Government's focus areas.
- I intend to update the current Gazette Notice, to include a specific Plastics Innovation Fund section, setting out the parameters of the fund. My thinking in developing the objectives, scope and criteria for the fund is set out below.

Objectives of the fund

- I propose that the fund facilitates the development and adoption of solutions to support New Zealand's transition to the more sustainable use of plastics. This effort will not only reduce the harmful effects of plastics escaping into our environment, but our wasteful use of resources and reliance on fossil fuels.
- Aligned with the Government's refreshed industry strategy [DEV -20-MIN-0110], this fund will support our manufacturing and primary industries to meet the increasing sustainability expectations of our export markets¹, be more productive and create more jobs.
- With this in mind, I propose that the primary objective of the fund should be to support projects that promote or achieve plastic waste minimisation (as required under the Act). The projects will also support secondary goals of:
 - 21.1 job creation and the transformation of our industries, including the manufacturing and primary industries;
 - 21.2 strengthening New Zealand's clean, green international reputation.

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¹ I note that Industry Transformation Plans for Advanced Manufacturing, Food and Beverage Manufacturing and Forestry and Wood Processing are under development, with sustainability an emerging theme.

Scope

- Rethinking Plastics recommends that innovation is needed across the entire plastics lifecycle and the "6Rs". Innovation will require a diverse range of approaches, long-term research, and short-term adoption of existing innovation, new ways of thinking and behaviour change.
- In line with this advice, I propose a broad scope for the fund, to develop and adopt more sustainable solutions across the plastics lifecycle and waste hierarchy. As I expect solutions from many disciplines and sectors, the fund will be open to a range of applicants such as research institutions, businesses, sector, iwi/Māori and community groups.
- This flexible approach will ensure we do not exclude impactful new ideas and will allow the direction of the fund to adjust to align with a refreshed waste strategy, which will be finalised during the course of this term.

Alignment with plastics priorities

- As part of the Government's response to *Rethinking Plastics*, the Ministry for the Environment is developing broader plastics research and innovation priorities³. Three priorities are emerging:
 - 25.1 Less plastic use reverse exponential growth in plastic use;
 - 25.2 More circular ensure plastics cycle within our economy;
 - 25.3 Better minimise harm to human and ecosystem health.
- To ensure the fund responds to New Zealand problems and meets the Government's objectives. I propose that these priorities guide investment under the fund. I will confirm the priorities in time for fund announcements.
- I expect that priorities in the first year will include innovation to ease the transition away from hard-to-recycle and single-use plastic items, aligning with the proposed plastic phase-outs. I may also frame priorities as "challenges", seeking solutions for a specific problem that needs solving.
- The fund will focus on user-led research, commercialisation, scale-up and adoption to be complementary to other Government funds. Where funding may overlap, relevant agencies will be consulted⁴.

Criteria for the fund

29 Eligibility and assessment criteria for the fund are set out in Appendix One, including how climate impacts and the secondary objectives will be assessed.

² Rethink, replace, refuse, reduce, reuse, recycle as set out on page 23 of *Rethinking Plastics*, December 2019.

³ Broader, in that they will cover the full range of research, innovation and technology issues that need to be solved including monitoring of environmental and human health impacts, which will not be the fund's focus.

⁴ E.g, potential overlap with the Ministry for Primary Industries' Sustainable Food and Fibre Futures fund.

Applications to the Plastics Innovation Fund will need to meet these criteria, included in an updated Gazette Notice, rather than the existing WMF criteria.

Funding mechanism

- Funding will be by way of a grant following a contestable process. Applicants will usually need to have secured part-funding for the project. Both capital and operational funding will be available and can span multiple years.
- The manifesto indicated that the fund would offer loans. Current settings do not allow the Ministry for the Environment to execute loans directly⁵. Processes for offering loans are being explored and I will receive advice on the potential to use loans for the Plastics Innovation Fund from 2022/23 onwards.

Decision-making

- Under the Act, I have the power to approve project funding allocations using waste levy revenue. I will delegate my decision-making power for funding allocations under \$1 million to the Secretary for the Environment, consistent with the delegations for the WMF.
- When assessing applications, the Ministry for the Environment will seek expert advice on the merits of applications received, including, when relevant, from other government agencies⁶.

Funding

- The fund will be supported from waste levy revenue. Table 2 sets out forecast revenue available for allocation to waste minimisation projects from 2021.
- Projected funding available for allocation to the fund in outyears is uncertain. The review of the Waste Minimisation Act may adjust how levy revenue is allocated and invested, while the Act also requires levy revenue to provide for other functions before it is allocated to waste minimisation projects.
- In addition, allocation of waste levy revenue to the fund has to consider the strategic outcomes set for the WMF in 2021, which are to; reduce construction and demolition waste, and achieve beneficial outcomes for organic waste.

⁵ As set out in the Public Finance Act.

⁶ In particular, but not limited to, the Ministry of Business, Innovation and Employment, the Ministry for Primary Industries, and Te Puni Kōkiri.

⁷ Cabinet made changes to the waste disposal levy in April 2021 (CAB-20-MIN-0112). The first increase to the levy rate for municipal landfills takes place in July 2021. The Waste Minimisation Act 2008 outlines how levy funds must be allocated (including 50 percent of funds being allocated to territorial authorities, and the remainder, aside from administrative costs, being allocated to waste minimisation projects). Projected revenue figures are estimates only, as actual levy revenue depends on quantities of waste disposed of to landfill.

Considering the above factors, I propose the following indicative allocations to a four-year Plastics Innovation Fund as per Table 2 below:

Table 2

Year	2021/22	2022/23	2023/24	2024/25
Forecast waste levy revenue (\$m)	13.200	26.600	69.100	99.100
Indicative Plastics Innovation Fund allocation (\$m)	3.000	7.000	20.000	20.000
Plastics Innovation Fund allocation (forecast revenue %)	23%	26%	29%	20%

I consider this indicative funding profile to be appropriate as larger funding amounts are available in 2023 and 2024, by which time; levy revenue is expected to increase substantially, and regulatory action on plastics will be finalised and coming into effect (driving a higher level of innovation).

Implementation

The fund will be open for expressions of interest by November 2021. I have also provided advice to Cabinet on the phase-out of certain hard-to-recycle plastics and single-use plastic items. I expect significant public interest in these decisions and the momentum this Government has built on plastics.

Financial Implications

- 41 No new funding is being sought in this paper. Grants, administration and monitoring costs will be met from waste levy revenue. Projected waste levy revenue is already included within the Ministry for the Environment's baseline.
- To implement the fund, project funding will be allocated from the existing Contestable Waste Minimisation Fund category within the Waste Minimisation multi-category appropriation (M29), see Table 3 below. Funds allocated to the Plastics Innovation Fund would otherwise have been available to the WMF.

Table 3

Year	2021/22	2022/23	2023/24	2024/25	Total
Indicative allocation (\$m)	3.000	7.000	20.000	20.000	50.000

The costs of administering and monitoring the fund will be met from waste levy revenue in accordance with the Act and will be drawn from the existing Waste Minimisation Administration category within the Waste Minimisation multi-category appropriation (M29), see Table 4 below.

Table 4

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Year	2021/22	2022/23	2023/24	2024/25	Total
Indicative administration and monitoring costs (\$m)	1.000	0.600	0.600	0.800	3.00

Legislative Implications

There are no legislative implications arising from this paper.

Impact Analysis

Climate Implications of Policy Assessment

- The Climate Implications of Policy Assessment (CIPA) team confirms that the CIPA requirements do not apply to this proposal as the likely emissions impact is indirect and unable to be accurately determined.
- Indirect emissions reductions are likely through New Zealand's transition to a low waste economy. Reusing and recycling plastic can lead to significant reductions by eliminating emissions from virgin plastic production.

Population Implications

47 I have assessed population impacts as set out below

Population group	How the proposal may affect this group
Māori	Rethinking Plastics recommends that te ao Māori frameworks and perspectives are considered when acting on plastics. The Plastics Innovation Fund will include matauranga Māori approaches as part of its scope and iwi/Māori groups will be encouraged to apply.

Human Rights

The proposals in this paper are consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

- The Ministry of Foreign Affairs and Trade, Ministry of Business, Innovation and Employment, Ministry of Primary Industries, Ministry of Education, Department of Internal Affairs and Department of Conservation have been consulted on this Cabinet paper, and their comments (if any) incorporated.
- Te Puni Kōkiri has been provided with an opportunity to provide feedback. The Department of the Prime Minister and Cabinet has been informed.

Communications

I am proposing that the announcement of the Plastics Innovation Fund be aligned with announcements of policy decisions on the phase-out of certain hard-to-recycle and single-use plastics.

Proactive Release

Subject to Cabinet decisions, and appropriate redactions, I propose to proactively release this Cabinet paper following the announcement of the Plastics Innovation Fund, currently planned for June 2021.

Recommendations

The Minister for the Environment recommends that the Committee:

- 1 **agree** to establish a \$50 million Plastics Innovation Fund.
- 2 **note** that the Minister for the Environment will use his powers under the Waste Minimisation Act 2008 to establish the fund, with these key elements:
 - 2.1 *Objectives*: the primary objective of the Plastics Innovation Fund is to promote or achieve plastic waste minimisation, and secondarily to:
 - 2.1.1 create jobs and support the transformation of our industries, including the manufacturing and primary sectors;
 - 2.1.2 maintain our international clean green reputation.
 - 2.2 Scope: funding will be available to a wide range of applicants for innovative projects that aim to reimagine how we make, use and dispose of plastics. Investment will be guided by plastics research and innovation priorities approved by the Minister for the Environment.
 - 2.3 Funding Mechanism: funding will be by way of grant, following a contestable process. Loans will not be offered in the first year of the fund but may be considered from 2022/23.
 - 2.4 *Decision-making*: the Minister for the Environment will make decisions for funding in accordance with the Waste Minimisation Act 2008.
- note that for applications less than \$1 million, the Minister for the Environment will delegate decision-making to the Secretary for the Environment.
- 4 **note** the eligibility and assessment criteria in Appendix One, which the Minister for the Environment intends to include in the relevant Gazette Notice.
- note that the Minister for the Environment will use his powers under the Waste Minimisation Act 2008 to allocate funding for plastics related projects using waste levy revenue in accordance with the terms of the Act.
- note no new funding is being sought in this paper. The fund's project grants, administration and monitoring costs will be met from waste levy revenue. Projected waste levy revenue is already within MfE's baseline.
- 7 **note** that the Minister for the Environment will announce the fund in mid 2021 and it will be opened for expressions of interest in November 2021.

Authorised for lodgement

Hon David Parker

Minister for the Environment

Appendix One – Eligibility and Assessment Criteria for the Plastics Innovation Fund

Eligibility criteria

- 1. Eligible applicants include research institutions, such as Crown Research Institutes and degree-granting tertiary education organisations, businesses, sector groups, non-Governmental organisations, iwi/Māori and community groups. The applicant must be a legal entity.
- 2. To be eligible, projects must promote or achieve plastic waste minimisation and be aligned to the plastic priorities in effect for that round. Plastic waste harms our ecosystem and climate. The majority of funding allocated will be to projects aiming to reduce, manage, or mitigate the impact of plastic waste.
- 3. Projects must be within the scope of the fund and include those that:
 - aim to reimagine how we make, use, recycle or dispose of plastics, to provide more sustainable alternative options⁸
 - may involve innovation across the plastics lifecycle and the "6Rs"
 - may innovate across a range of approaches, including mātauranga Māori, engineering, economics, the social and biophysical sciences
 - may involve international collaboration to find or adopt international solutions to reduce harm to our environment from plastics.
- 4. Projects must promote or achieve new activity on the part of the applicant, or involve a significant expansion in the scope or coverage of existing activities.
- 5. Projects that adopt, scale up or increase in uptake of existing technologies and innovation, developed in New Zealand or overseas are also eligible.
- 6. Funding is not for the running costs of the existing business as usual activities of organisations, individuals, councils or firms.
- 7. Funding can be for operational or capital expenditure over multiple years, up to a limit of four years.
- 8. For projects where other Government funds are available (such as research funding from the Ministry of Business, Innovation and Employment and Ministry of Primary Industries), applicants should seek early advice from the Ministry for the Environment, to ensure that the application fits with the fund.
- 9. In general, the fund will not cover the entire cost of the project. Applicants should seek part-funding from other sources and, if obtained, must have commitments in place for this funding at the time of application.
- 10. The minimum grant for feasibility or scoping studies will be \$20,000. The minimum grant for all other projects will be \$50,000.

⁸ Including supporting transitions away from hard-to-recycle and single-use plastics proposed to be phased-out.

⁹ Rethink, replace, refuse, reduce, reuse, recycle, as set out on page 23 of *Rethinking Plastics*, December 2019.

Assessment criteria

Project benefits

- 1. Preference will be given to projects that are directed towards promoting or achieving both the primary and secondary objectives of the fund.
- In general, projects that reduce some environmental harm, but are likely to increase climate change emissions will not be supported if evidence of mitigation of those impacts is not provided by the applicant.
- 3. In considering whether a project meets the secondary objectives (ie jobs, industry transformation and/or clean-green reputation), relevant Industry Transformation Plans (ITP) and advice provided by the lead agency for the ITP will be taken into account. Preference will be given to projects that collectively give the largest net benefit over time. Assessment of a project's effectiveness will include the extent to which the project can demonstrate:
 - potential to minimise waste (eg reduction, reuse, recycling, or recovery)
 - potential to reduce environmental harm, including climate impacts
 - the potential to add to our knowledge base (including wider New Zealand's access to the underlying data and results of the project)
 - the potential to act as a catalyst for innovative system change
 - the potential for collaboration across sectors
 - economic, environmental, social, or cultural benefits
 - longer term benefits after the completion of the project (how will this
 project move New Zealand toward a low-waste circular economy)
 - likelihood of success.
- 4. Projects will be assessed for their strategic value in achieving the fund's objectives.
- 5. The degree of partnership, collaboration and public benefit will be taken into account in assessing the strategic value of proposals.

Project delivery assessment criteria

- 7. The applicant must demonstrate:
 - clear understanding of the problem their project aims to solve
 - clear project governance, as well as the ability and expertise to deliver the project, (or, as part of the project scope, resources are allocated to enable delivery)
 - how the project will achieve its goals including an aligned project budget
 - how the project effectiveness will be monitored, evaluated and reported
 - if and how the project will benefit the wider public
 - if and how the project's identified outputs will continue after funding ends.