

# Rethinking Plastics

## in Aotearoa New Zealand

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Dr Rachel Chiaroni-Clarke and Professor Juliet Gerrard

Office of the Prime Minister's Chief Science Advisor  
Kaitohutohu Mātanga Pūtaiao Matua ki te Pirimia



# Why plastics?



- **Juliet's listening tour** – need to use science and innovation to address plastics issues
- **Public** – Colmar Brunton 2018 Better Futures report as #1 concern; big pushback on retailers/brands
- **Businesses** – Packaging declarations – need support to meet targets and make decisions around material choice
- **Government** – Programme on waste
- **Global** – response to National Sword, Basel Convention, marine litter
- **The evidence to guide change is lacking...**

# Rethinking plastics – overview

- Assembled a core panel – 11 people
- Talked to many, many more!
- Decided on a very broad scope
- Looking at evidence across the whole system
  - Whole life cycle of plastic
  - Building on local research and reports
  - Successful local initiatives
  - International best practice



# Rethinking plastics – outputs

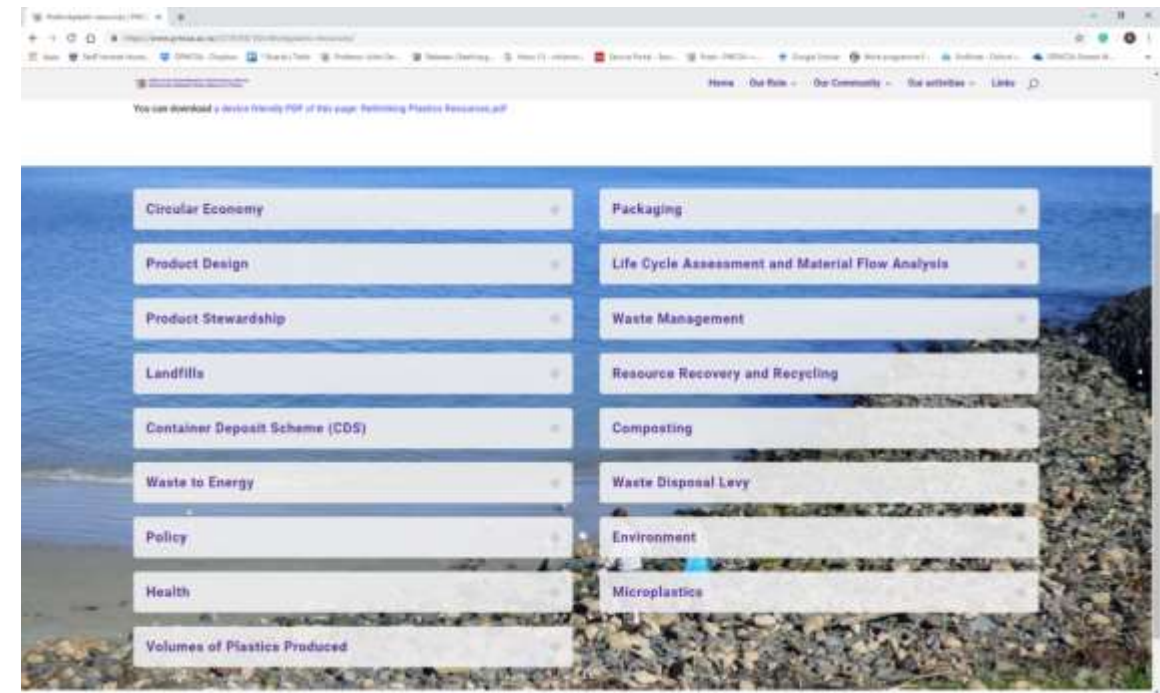
## Chapters

1. Motivation for rethinking plastics
2. Changing our relationship with plastics
3. Ideas for a more sustainable future – embracing innovation
4. Plastics and the environment – life-cycle assessment and beyond
5. To what extent can we quantify Aotearoa's plastic?  
New Zealand's data challenge

**Launching on December 8!**

## Outputs

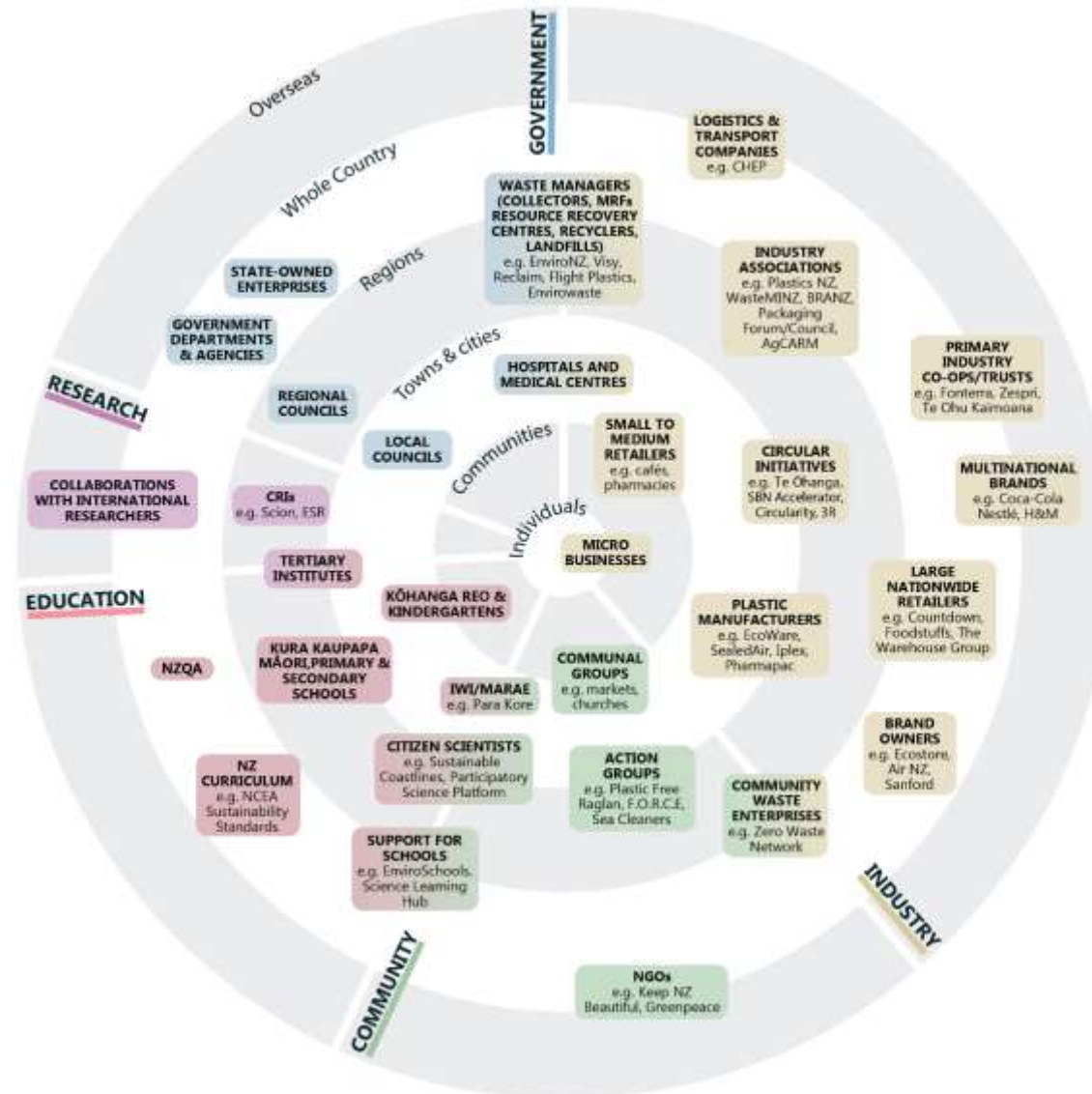
- Long detailed report
- Short summary report
- Website
- Resource portal



Resource portal at [pmcsa.ac.nz](https://pmcsa.ac.nz)

# Changing our relationship with plastics

*Tackling the problem of plastic waste needs a systems change, a collection of adjustments – some large, some small – across all aspects of society.*



We highlight evidence and examples of ways that we can change our relationship with plastics, presented as possible actions that central government, local government, sectors, businesses, communities, the education system and individuals can take, as part of a global community.



# Ideas for a more sustainable future – embracing innovation

*Much of our work was about seeking out and showcasing best practice and most of our recommendations can actually be captured in a single phrase: 'make best practice, standard practice'.*



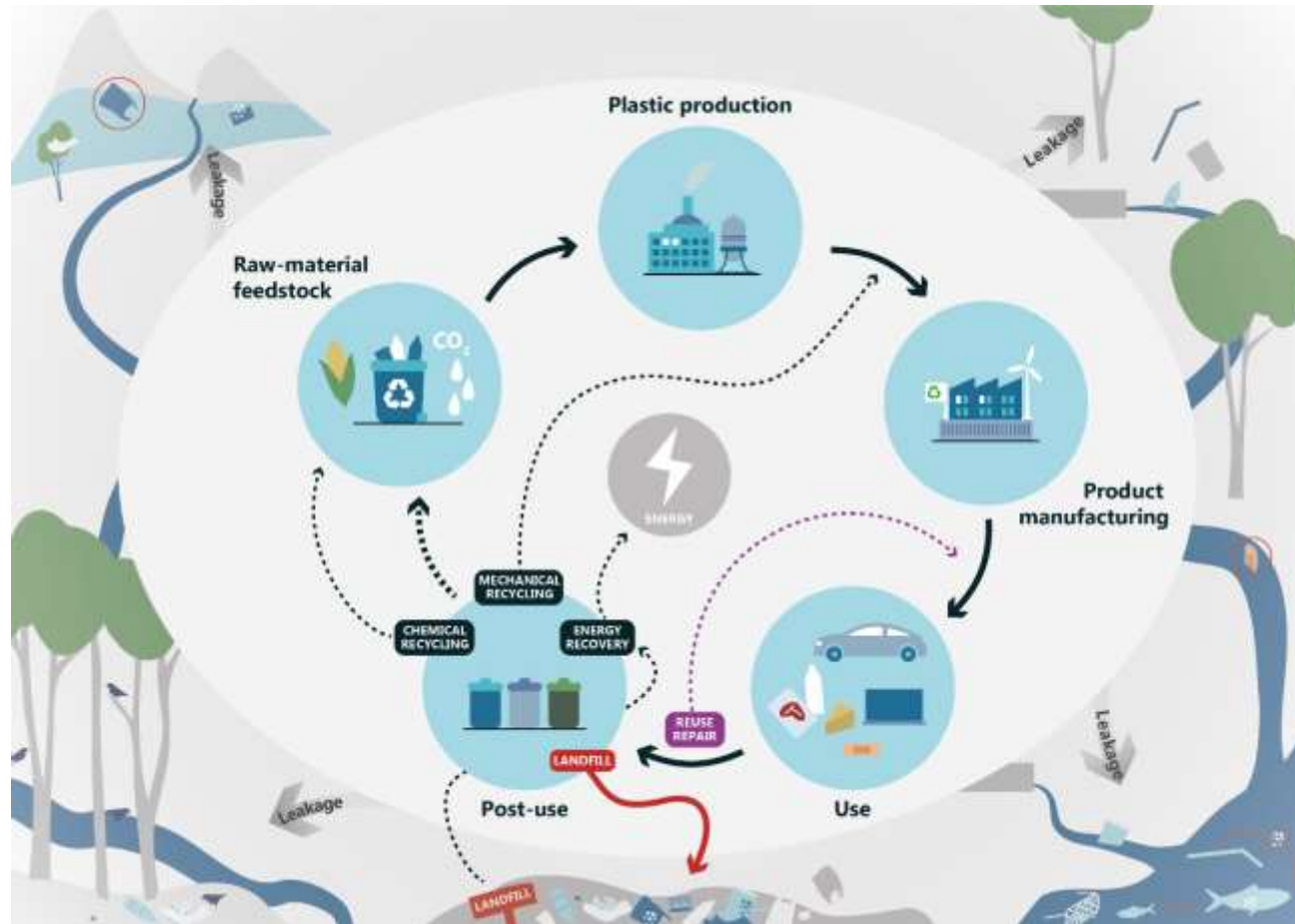
We introduce innovative ideas that can help us shift to a more sustainable use of plastics.

These are framed as actions that align to the 6rs – rethink, refuse, reduce, reuse, recycle and replace – as well as options for disposal as we move towards zero plastic waste.



# Plastics and the environment – life-cycle assessment and beyond

*Understanding and responding to plastic risks, and making informed decisions in the face of those risks, demands a full life cycle approach*

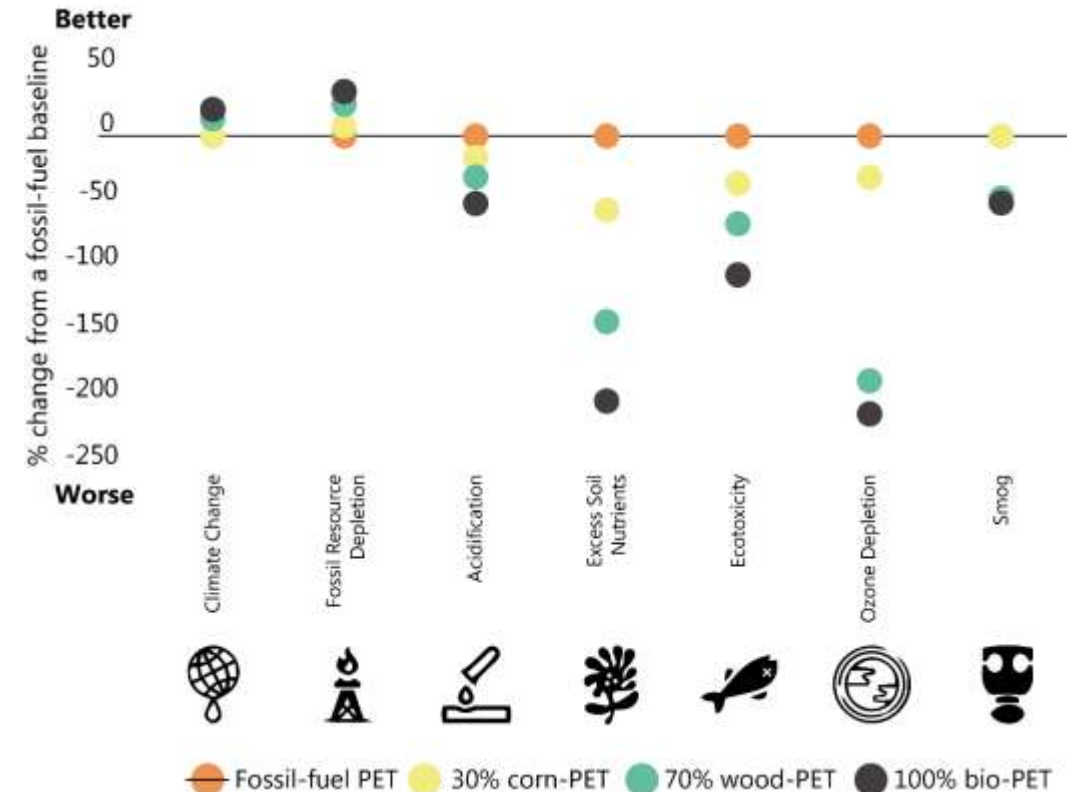


We focus on the environmental impacts of plastic. Through a series of case studies we demonstrate the importance of thinking about the environmental impacts of a product through its whole life cycle – not just disposal.

We then summarise the growing body of evidence around the impacts of plastic in the environment and what this means for Aotearoa New Zealand.

# Life-cycle assessment for Rethinking Plastics

- Are **reusable** products always better than **single-use** alternatives?
- Should we switch to **bio-based plastics**?
- Is **recycled plastic** actually better for the environment?
- Should we **ban plastic packaging** altogether?
- Should we use an **alternative** material to plastic?
- Should we **restrict our use** of plastic to certain types?
- What **end-of-life** options for plastic are best for Aotearoa New Zealand?





# Other considerations

- Plastic causes **physical harm** to marine life and other species
- Additional risks come from **chemicals** added to plastic
- We don't fully understand the impacts caused by **microplastics**
- We know less about the impact of even smaller plastic particles (**nanoplastics**)
- Plastic pollution poses a **biosecurity** risk
- Plastic may contribute to **antimicrobial resistance**
- Plastic may impact human **health and wellbeing**

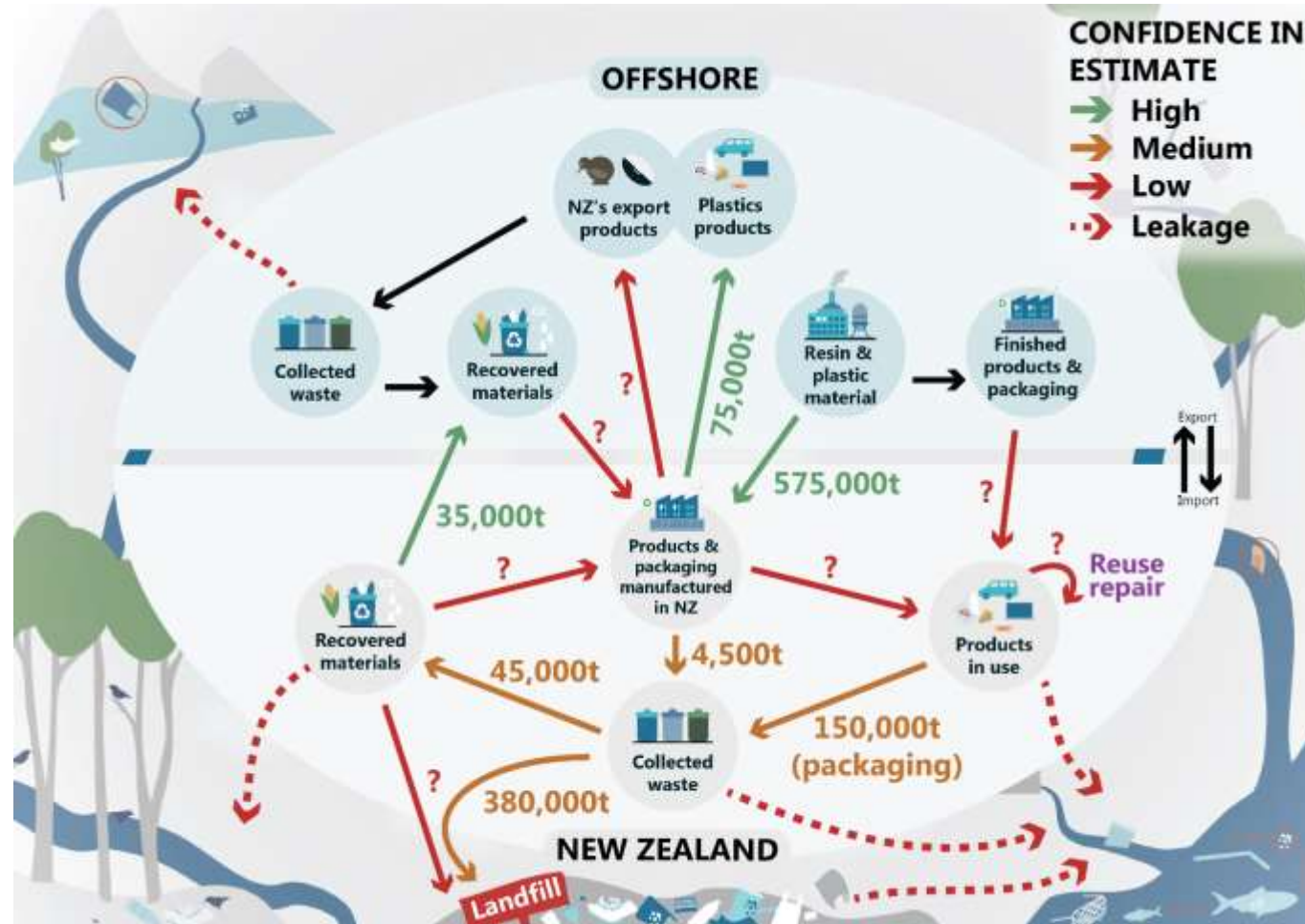


# To what extent can we quantify Aotearoa's plastic?

## New Zealand's data challenge

“WE LACK A FULL NATIONAL PICTURE OF WHAT IS GOING TO LANDFILL, AND WHAT IS BEING RECOVERED OR RECYCLED. KNOWING THIS IS CRITICAL IF WE ARE TO MAKE INFORMED DECISIONS”

MINISTER EUGENIE SAGE



We draw on publicly accessible data to attempt to quantify plastic flows through Aotearoa New Zealand.

We highlight knowledge gaps and what data are needed to inform plastics action across the country.

# WHAT SUCCESS LOOKS LIKE

Best practice is standard practice  
Decreasing plastics in our environment  
Reuse is the new norm  
Our recycling system works  
Robust data on plastics



Improve plastics data collection  
Embedding rethinking plastics in the government agenda  
Create and enable consistency in design, use and disposal  
Innovate and amplify  
Mitigate environmental and health impacts of plastic

# NATIONAL PLASTICS ACTION PLAN



Ngā mihi!