

## Top-line structure of report

1. Building context
  - a. Motivation for the report
  - b. Guiding framework
  - c. How we define plastics
  - d. Current state of plastics in NZ
  - e. International considerations
  - f. Barriers to change
  - g. Risks of doing nothing
2. Evidence-base (4 workstreams including evidence, case studies, international examples, gaps in knowledge; regulatory frameworks and recommendations woven throughout)
  - a. Categorisation of plastics entering and leaving Aotearoa New Zealand
  - b. Changing our relationship with plastics
  - c. Life cycle assessment of product systems
  - d. Innovation solutions
3. Recommendations

## Detailed scoping of report

### Section 1: Building context

- **Motivation for the report**
  - To provide an evidence base to government on options for rethinking plastics for the benefit of all New Zealanders
  - Connecting to the policy agenda
  - Be a trusted source of information on the state of plastic use in NZ
- **Guiding frameworks**
  - Kaitiakitanga and guardianship of the environment as a guiding principle
  - Guidance from Te Ao Maori, including human-centred design, an intergenerational approach, consideration of future generations, planetary boundaries, plastics as part of a bigger, more complex system
  - Public interaction and cross-sectional interaction
  - Targets 12.4 and 14.1 of the United Nations Sustainable Development Goals (UNSDGs)
- **How we define plastics**
  - A glossary for this report, in line with local and global practices or key reports
- **Current state of plastics in NZ**
  - The challenge around plastic in NZ in 2019
  - Goals to transition to a circular economy – NZ's voluntary and compulsory commitments (via MfE + MFAT)
  - Existing incentives for the reuse, redesign and recycling of plastics

- Existing local solutions (and how these differ between regions)
- **Local workstreams** - understand the scope of these workstreams to avoid redundancies, refer to published reports where possible
  - Better Futures 2018 report (Colmar Brunton) - insights into consumer perspectives
  - RSNZ report on plastics in the environment, including factsheets - build on this with solutions and bring into policy context
  - PCE report on plastics (timeline unknown) - build on report with solutions
  - SBN report (part of reading pack) – build on and refer to
  - MfE - upcoming changes to the Waste Minimisation Act; Waste Minimisation Fund
  - MFAT
  - MBIE procurement guidance (in consultation)
  - Maturanga Maori (connect to people within this knowledge base)
  - Packaging Council – making roadmap (just starting)
  - Tech Alliance – launching food tech, where to start with sustainable packaging
  - SCION has two funds – circular economy + (*Elspeth to update*)
- **International considerations**
  - Successful/unsuccessful overseas models
  - International workstreams
    - Ellen MacArthur Foundation, OECD etc.
  - How NZ's activities can impact developmental work in South Pacific
  - International standards – feasibility of NZ adopting these
  - Global/social trends influencing consumption
  - Flows between local and international workstreams
- **Barriers to change**
  - Current obstacles to change in NZ (e.g. Councils having ongoing contracts with certain providers)
- **Risks of doing nothing**
  - Environmental consequences
  - Non-tariff barriers
  - Reputation
  - Not keeping up with international best practice
  - Health (e.g. microplastics – knowledge gap, chemicals within plastics – potential risk report with MPI coming soon)

## Section 2: Evidence base

1. **Categorisation of plastics entering and leaving Aotearoa New Zealand**
  - a. Categorise plastics in NZ by types, uses and how problematic it is
  - b. Additives in plastics in NZ (may be in RSNZ report)

- c. Include any available data and quantitative assessment on what is coming in and going out (refer to SBN report). Look for data on international shipping (e.g. from Amazon)
- d. Knowledge gaps (want to improve on gaps but not halt action until data is complete)
  - i. Mandate the collection of data
- e. Barriers/limitations for standardisation and labelling of all plastic imported, manufactured and currently in circulation

## 2. Changing our relationship with plastics

- a. What are the unifying goals to make New Zealanders want to change how they use plastic?
  - i. Sustainable and healthy environment (kaitiakitanga/guardianship of the environment)
  - ii. Reducing our reliance on international sources
  - iii. Keeping up with international standards with our exports
- b. What are the best ways to engage with the public on this issue?
  - i. Who are the trusted voices New Zealanders will listen to? Role for ambassadors
  - ii. Evidence of what has worked before (e.g. society's relationship with smoking changed because of changes in social norms, legislations, impracticalities and inconveniences. Note: framing will be different to health)
    - 1. Contagion approach – information to flow through the community. Need to reach those that can make an impact above the individual level (i.e. Climate Leaders coalition through businesses). Need to maximise getting through to the most people across different sectors via clusters. Coming from multiple spaces.
    - 2. Via the education sector – primary school programmes (e.g. EnviroSchools), secondary schools, universities. Potential moral hazard of putting onus on the young
    - 3. Via the business sector
    - 4. Via the community – e.g. beach clean ups
    - 5. Sense of mastery – e.g. learning best practices at work then taking knowledge home
- c. Public education
  - i. Consistent/clear product labelling (difficult to achieve)
  - ii. Easy access to consumer-friendly information (e.g. what happens to recycled products, coloured PET can't be recycled)
  - iii. Region-specific education where needed
  - iv. Methods for ongoing public outreach (what is existing, effective)
- d. Businesses
  - i. How can we help our businesses be at the forefront of this change? How best to provide guidance, reward improvements, discourage lack of change
  - ii. Product stewardship

- iii. Existing local (voluntary) practices
- iv. Regulatory changes – feasibility, resourcing requirements
- e. Ethical considerations of imported plastics

### 3. Life cycle assessment of product systems

- a. LCA (including end-of-life options) for various materials, including material flow and economies to regain the untapped value
  - i. Refer to existing case studies
    - 1. Single-use plastic bags (MfE report references Danish study that compares single-use plastic bag vs cotton) - lots of public interest in this issue
    - 2. Make clear the limitations of LCAs – e.g. haven't looked at littering so don't currently tell the whole story
- b. Planetary boundaries
  - i. Assessment of net environmental impact for plastics, for different streams
- c. Intersections of report
  - i. How changes to plastics can impact other issues e.g. food sources being the same as some plastic feedstock
- d. Knowledge gaps

### 4. Innovation solutions

- a. Is reduce/reuse/redesign the model we should be using? Are we ignoring other options?
- b. Setting nationwide standards/practice for plastic use
  - i. What are the best practices for recycling, reuse etc.?
  - ii. Should there be a minimum acceptable practice across NZ (e.g. local councils)?
  - iii. What can/should be consistent across NZ?
  - iv. What processing should be centralised/decentralised?
  - v. Should certain plastics be banned/restricted and how can that work for a small economy? (e.g. piggy-back on Japan's need for products that don't use plastic types 3-7)
- c. Developing onshore processing capabilities
  - i. Opportunities for new jobs and profit-making enterprises
  - ii. Financing – how should capital be accessed? E.g. Levies via WMF, private capital and/or government support
- d. Alternatives to plastic
  - i. Evidence for viable alternatives for NZ (considering population size, geographical position, economies of scale)
- e. Logistics innovation

- i. Changes to supply chains (e.g. packaging for a specific country being shipped to the producer to meet that country's requirements)
    - ii. Business model innovation (e.g. industrial symbiotic processing)
  - f. System redesign
    - i. Citizen-centred recycling redesign – from user point of view
    - ii. Product stewardship options and extended producer responsibility
    - iii. Container deposit schemes
    - iv. Co-benefit programs (e.g. Japan has bottle recycling in exchange for public transport tickets)
  - g. Knowledge gaps

### **Section 3: Recommendations**

- Recommendations using a 'three horizons' framework for actions and solutions, including regulatory changes within the WMA and urgent research needs
  - a. Horizon 1 – short-term, quick actions
  - b. Horizon 2 – medium-term actions
  - c. Horizon 3 – long-term actions

### **Tentative timelines**

- Section 1 (February, March)
- Section 2a + 2b (March, April, May)
- Section 2c + 2d (May, June, July)
- Section 3 (July)