

Our plastic use Te whakamahi i te kirihou

Plastics are often useful in modern life and our use is increasing

He aha ngā kirihou?

What are plastics?

The term 'plastics' refers to the large variety of materials made from polymers and additives that can be moulded and set into various shapes. Most plastics are made from fossil fuels.

He aha te take?

Why were plastics invented?

Plastics were first created in the late 19th and early 20th centuries as a substitute for natural resources that were in short supply including ivory, horn, silk, cotton and natural rubber.

He aha ai?

Why are plastics useful?

Plastics have many desirable properties including being strong, lightweight, heat and water resistant, hypoallergenic and easy to sterilise. Plastics are also cost-effective to produce and easily adapted into different shapes and colours.

Te rahi o te kirihou?

How much plastics do we use?

Global production of plastics has grown exponentially and the industry is still expanding. In 2015, 407 million tonnes of plastics were produced worldwide, and 302 million tonnes of plastics were discarded.

By 2015, plastics represented a quarter of all types of packaging (by volume) and it is expected that plastic packaging volumes could double within 15 years.



Take! Action Kia kaha te mahi

Look at the diagram and see how we use and dispose of plastics. What properties of plastics make them so useful in all these industries?

KO TŌ RINGA KI NGĀ RĀKAU A TE PĀKEHĀ HEI ORA MŌ TE TINANA
Nā Tā Apirana Ngata

Embrace the technologies of new



Global Plastic Production, Use and Disposal

Primary Production



407 million tonnes of fossil fuel-based plastics were produced



Plastics in Use

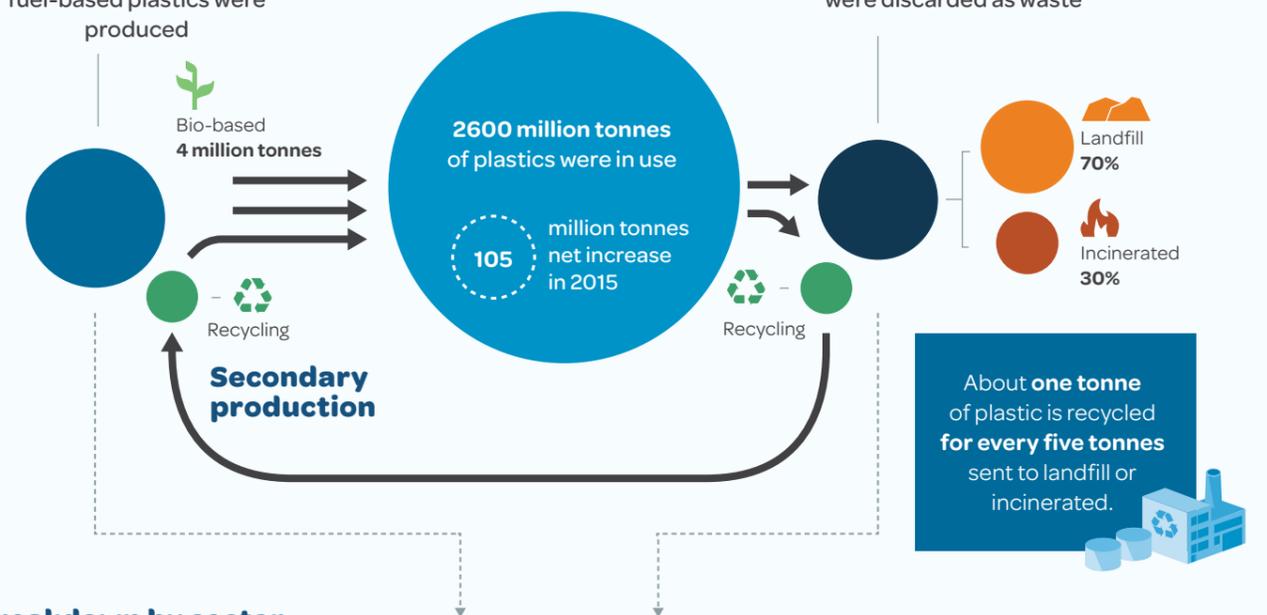
2600 million tonnes of plastics were in use

105 million tonnes net increase in 2015

Primary Disposal



302 million tonnes were discarded as waste



Breakdown by sector (in million tonnes)

Sector	Primary Production	Primary Disposal
Packaging	146	141
Building & Construction	65	13
Textiles	59	42
Consumer & Institutional Products	42	37
Transportation	27	17
Electrical/Electronics	18	13
Industrial Machinery	3	1
Other	47	38

While plastics produced for packaging are usually disposed of within a year, plastics produced for building and construction can stay in use for 20 years and longer, resulting in the different sector breakdowns for production and disposal.