

# What are biodegradable plastics?

## He aha ngā kirihou pōpopo kore?

It's the type of plastic, not what it is made from, that determines whether it will fully break down



### He kirihou pōpopo kore

#### What are non-biodegradable plastics?

Most plastics we use today are created in a form that is not biodegradable. This means they can't be broken down into components which could be reused by living organisms. The advantage of this is they are durable, but when discarded into the environment they break into smaller and smaller pieces called microplastics.

### He aha ngā kirihou pōpopo?

#### What are biodegradable plastics?

Biodegradable plastics are designed to be easily broken down by microorganisms under certain environmental conditions such as commercial compost facilities or even in your home compost. They can be made from fossil fuels or other biological material, such as from plants.

### He aha ngā kirihou hangarua?

#### What are bioplastics?

The term bioplastics usually means plastics made from biological materials such as cellulose, sugar and starch extracted from renewable plant crops. Bioplastics may or may not be biodegradable; it depends on what types of plastic are made from the source material.

Oxo-degradable plastics are not a good solution because they quickly break down into microplastics that can cause issues in the environment.



## Take! Action Kia kaha te mahi

Look at the diagram to see how quickly different types of plastics degrade. When do you need plastics to break down quickly, and when do you need them to last a long time?

TOITŪ TE MARA A TANE  
TOITŪ TE MARAE A TANGAROA  
TOITŪ TE WHENUA

Care for the domain of Tane Mahuta (Guardian of the Forest) and Tangaroa (Guardian of the sea) and the land will sustain you



# Plastic types, biodegradation and fragmentation

The chemical structure of the plastic, not whether it was sourced from renewable or non-renewable resources, determines whether a plastic is biodegradable.

