

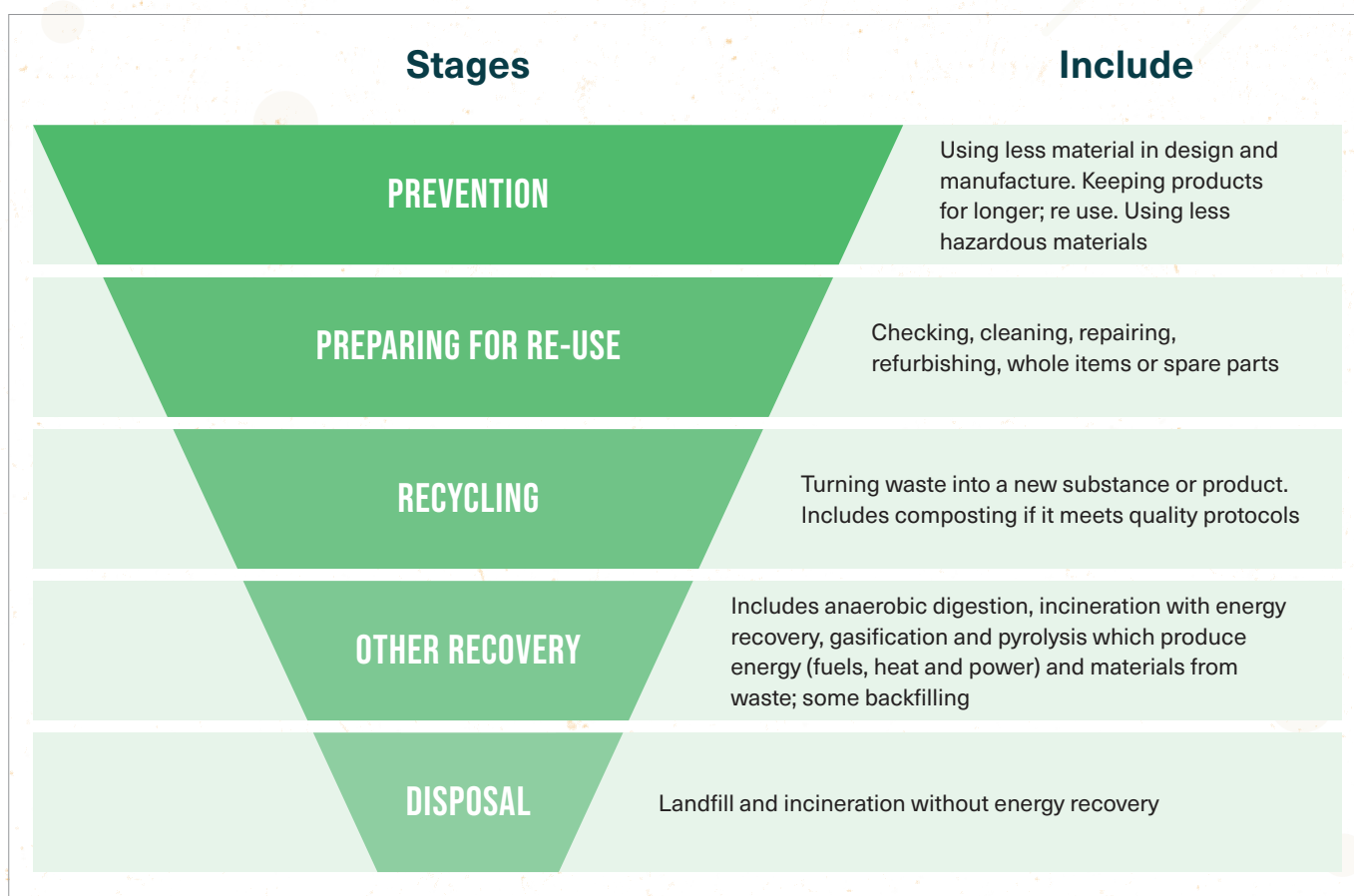


GLOSSARY OF TERMS

The purpose of this document	This document explains technical terms within waste management.
Who it is for	Waste Leads and anyone else having conversations about waste management.
How to use it	As a reference for understanding any technical terms of which you are unsure.

THE WASTE HIERARCHY

The waste hierarchy is an approach to prioritising how waste is managed to minimise environmental impacts. The waste hierarchy is set out in UK law, requiring all organisations that produce waste to follow the approach. See below for the hierarchy.



General waste terms

GENERAL WASTE OR RESIDUAL WASTE

is material that cannot be recycled.

WASTE-TO-ENERGY OR ENERGY-FROM-WASTE (EFW)

A waste-to-energy scheme is a process where waste is burned (incinerated), creating heat or steam to generate energy. This is not a form of recycling. This sits at the 'recovery' section of the waste hierarchy towards the bottom in the list of actions to minimise environmental impacts. This should only be used for general waste to avoid it being sent to landfill and not as a solution for recyclable materials. Other similar terms linked to this include:

SOLID RECOVERED FUEL (SRF) AND REFUSE DERIVED FUEL (RDF)

These terms refer to household, commercial or industrial waste materials which are shredded and baled and then sent to an energy-from-waste plant or cement kiln to be burned for electricity.

ZERO WASTE TO LANDFILL

This term is often used as a target for organisations to achieve but should be used with caution, as this can be achieved in an unsustainable way by simply burning waste to turn it into energy, a process which still causes significant environmental impacts. When waste contractors make a 'zero waste to landfill' claim it does not necessarily mean the waste hierarchy has been followed to prioritise waste reduction or reuse. Proceed with caution!

CIRCULAR/CIRCULAR ECONOMY

A system in which waste is brought back into the supply chain as new resources, rather than going to landfill or being burnt. A true circular system is where a product is recovered at the end of its use to perform the same function again (e.g. a reusable cup is recovered and is used as a reusable cup again; or an aluminium can is recycled and turned into a new aluminium can), without loss of material quality.

LANDFILL

A landfill site is a location where waste materials get buried in the ground. This is a large source of greenhouse gas emissions creating climate change.

MECHANICAL BIOLOGICAL TREATMENT (MBT)

An MBT plant or facility processes organic and recyclable materials from mixed household waste. Due to the fact everything has arrived together, there are very high levels of contamination in the recycling and the organic materials can't be used for compost. Most of the material is turned into 'solid recovered fuel' (SRF) and 'refuse derived fuel' (RDF) and subsequently incinerated.

Recycling terms

RECYCLING

Recycling is the process of converting waste materials into new materials and objects. This can be the same as the original material (e.g. cans back into cans). Materials are also downcycled if they are turned into a different item from their original form and decrease in material 'value'.

DOWNCYCLING

Describes the process whereby a material is recycled into a product which cannot be subsequently recycled again or which is a substantially lower quality material. Plastics can only be recycled a certain number of times, and the amount of materials and energy needed to maintain its use increases each time it is recycled. Downcycling isn't necessarily a bad thing because it reduces new resource extraction, but the term helps us to understand the importance of avoiding new products, as recycling isn't an infinite solution.

DRY MIXED RECYCLING (DMR)

This is a term for a mixed recycling stream that usually includes plastic, cans, paper, and cardboard. These recyclable materials can be contaminated by food, meaning they cannot be recycled. You can avoid contamination by having more than two waste and recycling streams.

MATERIALS RECOVERY FACILITY (MRF)

A MRF is a physical site that manages and separates commingled or mixed recyclable materials so they can be sold as separate material streams for recycling.

Composting terms

COMPOSTING

Composting is the natural process of organic materials decomposing. Composting can happen through heat or microorganisms breaking the materials down.

ANAEROBIC DIGESTION

Anaerobic digestion (AD) is the process of breaking down organic matter with organisms.

Industrial AD facilities are widely available in the UK. They break down organic waste to create gas which can then be used for heat and energy. AD facilities cannot process packaging, regardless of whether it is compostable or not.

IN-VESSEL COMPOSTING

In-vessel composting is the process of breaking down organic matter with heat and oxygen. There are about 50 plants in the UK. They produce compost.

Aerobic digesters can process compostable packaging but all plants will need to be contacted in advance to see if they will accept your waste because packaging often takes longer to break down.

Packaging terminology

COMPOSTABLE

INDUSTRIALLY COMPOSTABLE

Most food and drink serveware that claims to be compostable has been certified as EN13432. This means it requires industrial composting in an aerobic digester plant, for 90 days at 60 degrees. Plants may or may not accept materials and they will often want to test the compostability of each material first.



HOME COMPOSTABLE

The **OK Compost certification** is meant for materials that can go in the compost bin at the end of the garden, not from a council food waste collection. Materials can receive the home compostable label if they degrade within 28-60 days at 20-30 degrees.



BIODEGRADABLE PLASTIC

Plastic that can be broken down by microorganisms faster than regular plastic under certain conditions, but may still take hundreds (rather than thousands) of years to do so. Biodegradable plastics may still release greenhouse gases when they break down and contribute to micro-plastic pollution, with implications for the food chain. It is also still a single-use material.

BIOPLASTIC

Plastic made primarily from plant-based material instead of oil used in conventional plastics. This does not necessarily make it a more sustainable choice. It is still a single-use material, is hard to recycle and is often energy-intensive to produce.

If you're keen to learn more, we recommend this inspiring book, a deep dive into the global waste industry by award-winning journalist Oliver Franklin-Wallis: *'Wasteland: The Dirty Truth About What We Throw Away, Where It Goes, and Why It Matters'* (please buy second hand!).

For a comprehensive glossary of general sustainability terms see the Vision: 2025 website [here](#).