Glossary

Biological treatment

A type of process that uses naturally occurring microbes to break down organic material to produce compost, digestate, biological gas or compost-like output.

Combined heat and power (CHP)

Treatment facilities create heat and electricity, and CHP facilities use of both of these to supply electricity to the grid and directly heat homes and businesses.

Compost-like output (CLO)

Mixed waste including organic material that has been composted.

General waste

Often known as black bag waste or mixed waste, it is a mixture of discarded materials (rubbish) collected within the same bag or container and which is not recycled.

Treatment

A type of process which reduces the quantity of input material either by using heat (thermal treatment) or a biological process. They also produce heat, electricity, fertilisers or other outputs.

Further information

Zero Waste Scotland (ZWS)

For more information on Zero Waste Scotland, its work and research, please visit: **www.zerowastescotland.org.uk**

For more information on waste facilities and how they are developed, please visit: **www.zerowastescotland.org.uk/infrastructure**

Scottish Environment Protection Agency (SEPA)

For information on waste regulation, licencing, data and more detailed technical information on facility types and the standards they are required to achieve, please visit: **www.sepa.org.uk**

Recycle for Scotland

For more information on how to reduce, re-use and recycle, please visit: **www.recycleforscotland.com**

Videos

To watch videos explaining what different facilities do, please visit: **www.recycleforscotland.com/facts-figures/facts-figures**

Chartered Institution of Wastes Management (CIWM)

For more detailed and technical information on different facilities and on waste management issues in general, please visit: **www.ciwm.co.uk**

Renewable Energy Association

For more information on thermal and biological treatment facilities which create energy from waste, please visit: **www.r-e-a.net/renewable-technologies**

Environmental Services Association

For more information on waste management and the different types of facilities, please visit: **www.esauk.org/**

ZERO WASTE SCOTLAND

Jack of all trades

Multi-Activity Sites

Freephone Helpline
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zerowastescotland.org.uk

Overview

Multi-activity sites, are places where two or more different types of waste and recycling facility are located on the same site.

Multi-activity sites are sometimes called eco-parks however this can cause confusion. Not all "eco-parks" include waste management facilities, and some of them may have both waste facilities and other infrastructure in place (such as renewable energy generation).

It can be beneficial to have several facilities on one site in order to reduce transportation of materials and in the case of combined heat and power (CHP) plants, it means there is a constant demand for the waste heat produced.

What goes in?

The types of materials accepted at multi-activity sites depends on the range of different facilities/ technologies on the site. For example:

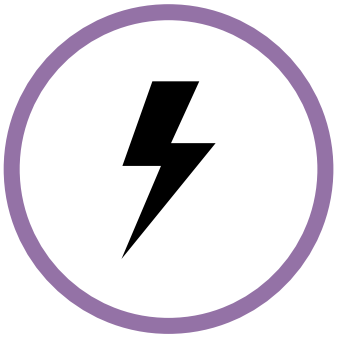
- Sites with landfills – **non-recyclable waste (general waste)**.
- Sites with Material Recovery Facilities – **mixed recyclables.**
- Sites with biological treatment facilities (composting or anaerobic digestion) – **food waste** and/or **garden waste.**
- Sites with thermal treatment facilities (incineration, gasification, plasma arc or pyrolysis) – **non-recyclable waste (general waste)**.

What happens?

Materials arrive on site and are taken to the appropriate facility.

Materials recovery facilities: Separate mixed recyclables or recyclable material from general waste.

Biological treatments: Use microbes to produce fertiliser (either compost, digestate or compost-like output.



Thermal treatments: Burn or heat waste to create energy and heat.

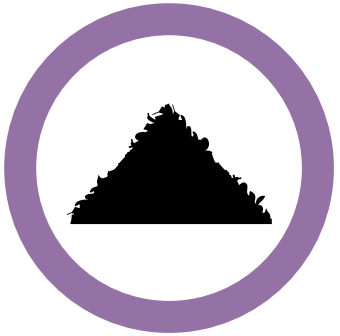
Disposal: Landfill material that cannot be re-used, recycled or treated.

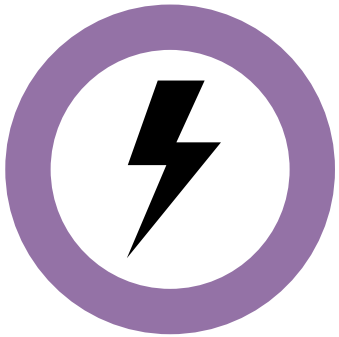
What comes out?

The outputs will depend on which technologies are on site but they could include:

Sorted recyclable materials: facilities can sort mixed recyclables into different material types so that they can then be sold on to reprocessors or manufacturers to be made into new products or a raw material.

Fertiliser or soil conditioner: Where this meets the relevant quality standard it can be used for many purposes by householders, farmers, gardeners and so on.





Energy & heat: Anaerobically digesting, burning, heating and landfilling waste produces gas . The gas is captured and cleaned before being put through a turbine to produce electricity. This can be fed into the national grid. The turbines produce waste heat which can be used to heat local businesses and homes.