

WASTE – AN UGLY TRUTH



temple

TEMPLE

Temple is a leading **independent environmental consultancy**, specialising in the environment, sustainability, ecology, planning and socio-economics.

Proud to have a reputation for excellence, working on complex infrastructure, planning and social programmes.

Part of the B-Corp community.

"(RE)ATING SUSTAINABLE FUTURES"

temple

Certified



Corporation

This company meets the highest standards of social and environmental impact

Example Projects

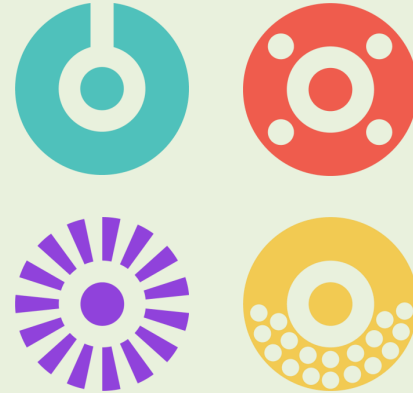


SOUTHWARK CLIMATE COLLECTIVE

The Southwark Climate Collective is a new 12-month programme designed to support SMEs across the borough in acting on climate.

Participating businesses have chosen to take part in one of four programme streams – **waste, energy, freight, supply chains** – through which they receive tailored technical support and training.

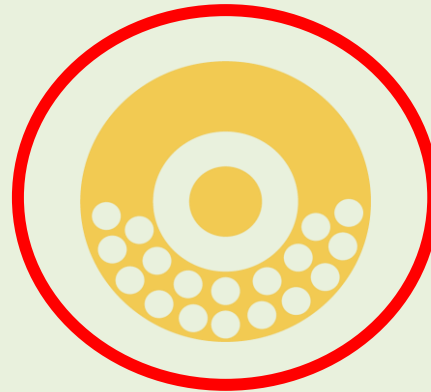
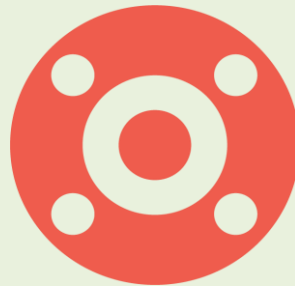
Better Bankside is one of the organisations coordinating, guiding and supporting the scheme. Temple has been appointed as a technical partner.



temple



SOUTHWARK CLIMATE COLLECTIVE



temple



INTRODUCTIONS

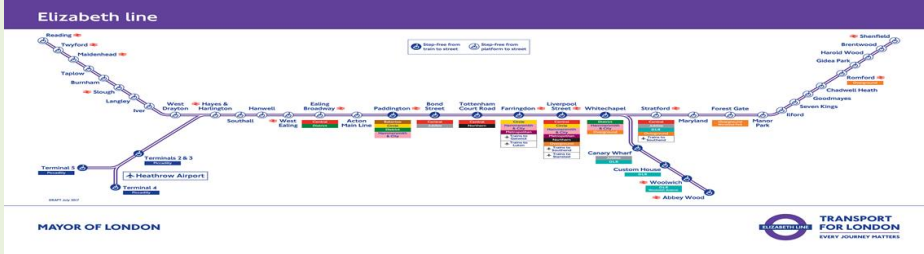
temple

Who Are We?

Rhian Halford

Director/BU lead- Project Director

Rhian leads the team, has vast experience in EMS assurance and consents in EM in rail, tunnelling & Highway sectors. Key skills include circular economy, managing and discharging consents, stakeholder management and CEEQUAL assessor. Lead IEMA & ISO14001 approved Auditor. Chartered Environmentalist (CEnv) and a full member of IEMA (MIEMA)



temple

Who Are We?

Harry Rogers

Environmental Consultant

Harry joined Temple as a Graduate in 2022 and has since gained experience implementing environmental improvements on several high-profile infrastructure projects, including HS2. Harry has robust Environmental Impact Assessment, carbon footprinting and sustainability strategy development experience. Associate member of IEMA. Prior to joining Temple, Harry worked as a Sustainability Analyst at Football For Future, where he still offers voluntary support.



Certified



Corporation



One Pack,
One Planet.



temple

COURSE OVERVIEW

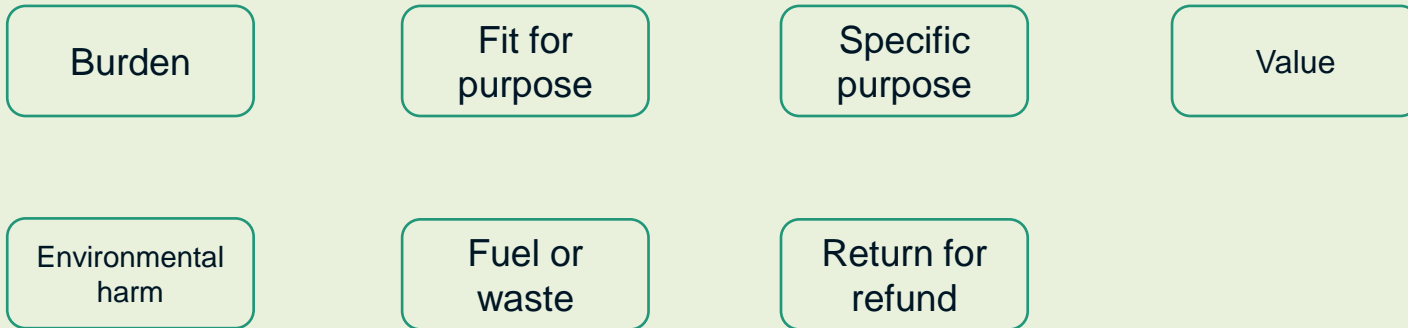
The learning objectives of today:

- Understand the context of **waste in the UK** setting and link the problems of waste to SMEs.
- Describe the variety of **factors which contribute to waste generation**, particularly in a business setting.
- Assess the many significant **impacts of waste** and use this knowledge to investigate the potential waste impacts of a **case study business**.

WASTE IN THE UK

Waste is a significant problem for the UK and has impacts that span society, the economy and the environment.

According to Defra, 'waste' means **“any substance or object which the holder discards or intends or is required to discard.”** But defining and assessing waste can be a complex, grey area:



How much waste does the UK generate?

The UK generates around **200 million tonnes** of waste every year. England is responsible for 84% of this total.

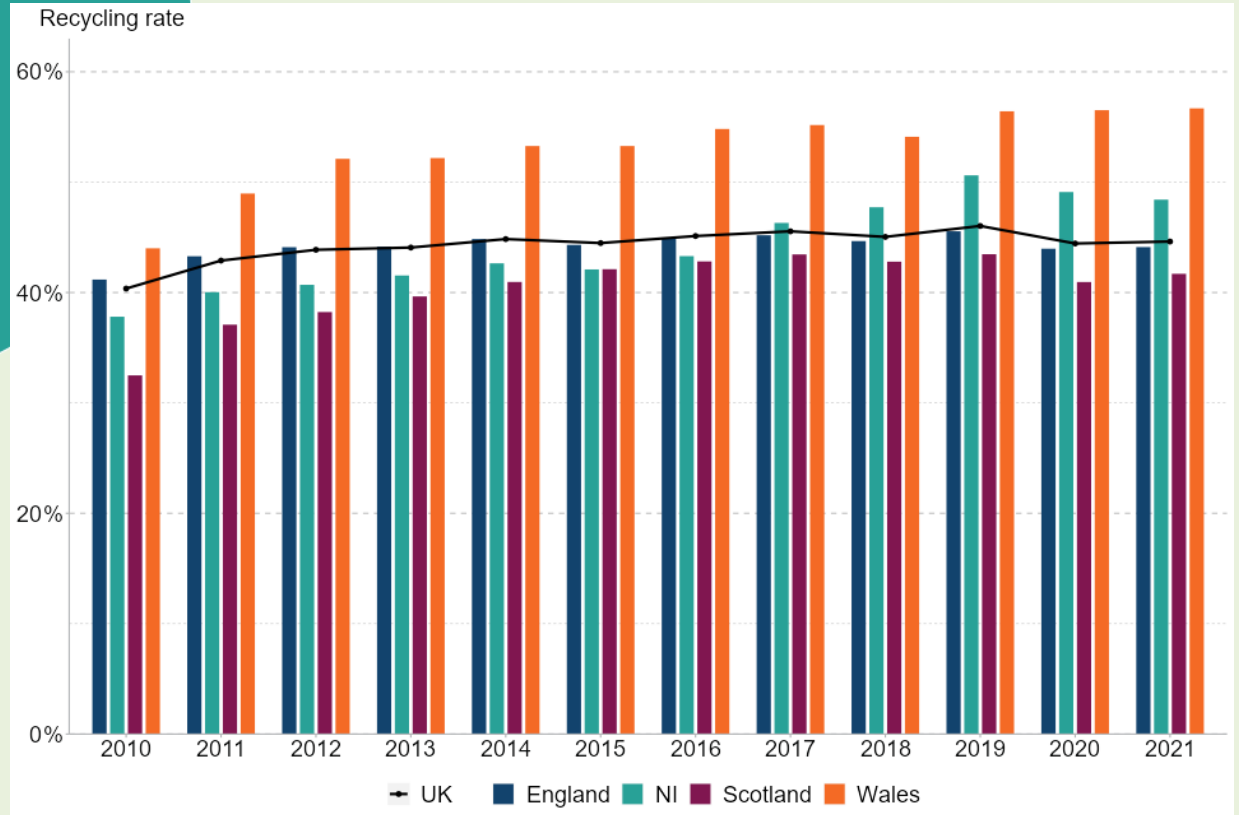
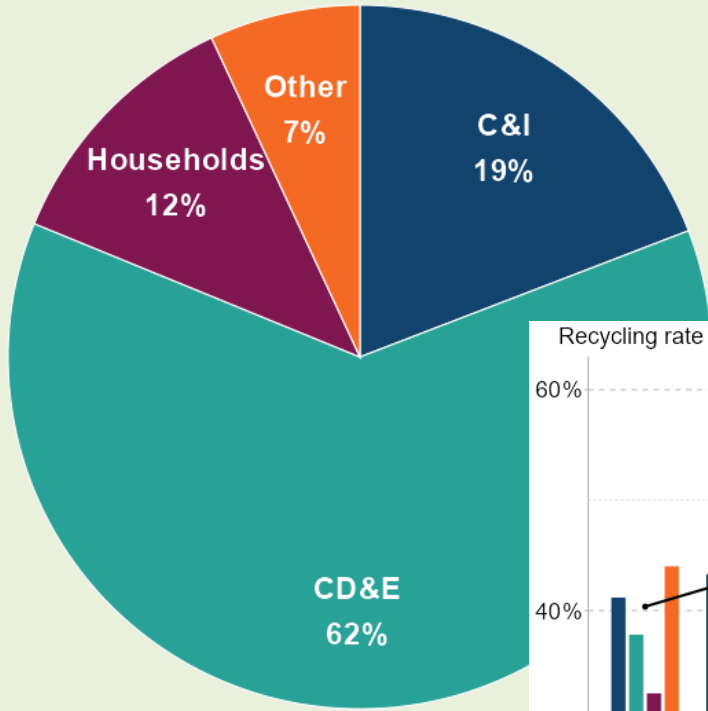


Of the total figure, the commercial and industrial (C&I) sectors contribute **41 million tonnes** of waste annually.

temple



From GOV.UK:



MARINE
CONSERVATION
SOCIETY

Great British Beach Clean

64,139
metres surveyed

129,391
items of litter
collected

424
events, increase
of 11% from 2022

5,416
volunteers, increase
of 3% from 2022



temple



Southwark
Climate
Collective

**BETTER
BANKSIDE**



What about London?

London's homes, public buildings and businesses generate approximately **7 million tonnes** of waste each year. Commercial and industrial sectors account for roughly 4 million tonnes.

However, London needs to increase its recycling rate, with only **52% of this currently recycled**. Recycling performance has stagnated. The capacity of landfills accepting London's waste is **expected to run out by 2026** and London's waste bill is now in excess of £2bn per year.

Newham and Westminster have reported some of the lowest recycling rates in the country, often falling below 30%.

temple

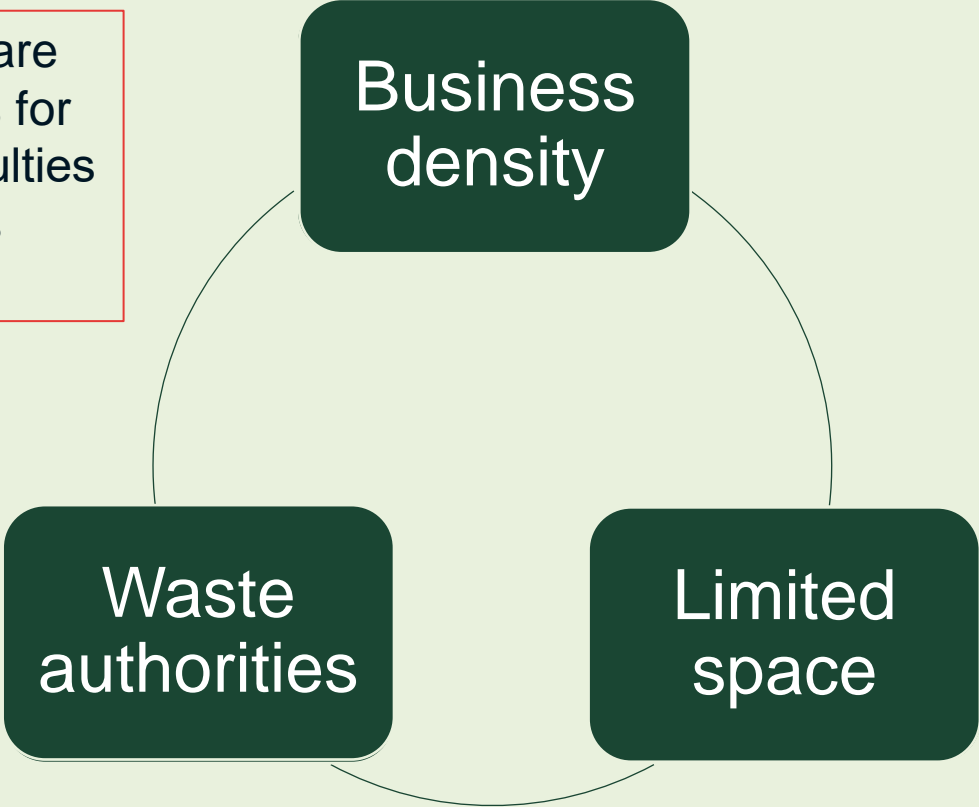


Southwark
Climate
Collective

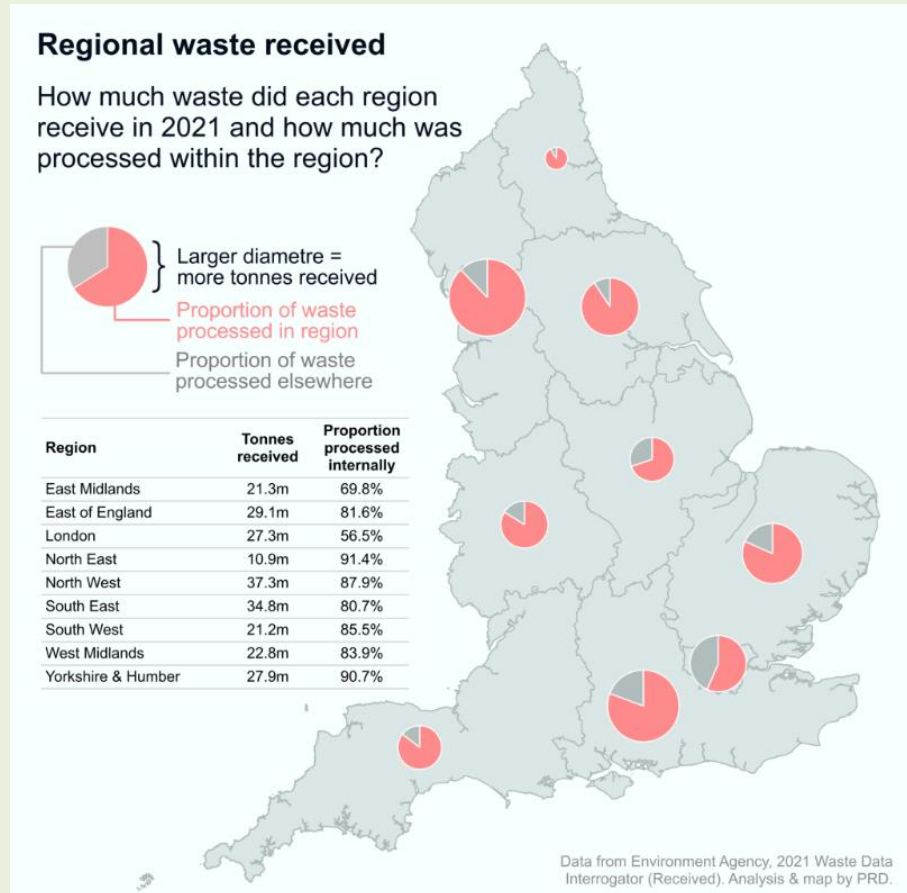


London's **waste management challenges** are unique due to a variety of reasons.

Discuss: what are **some reasons** for London's difficulties in managing its waste?



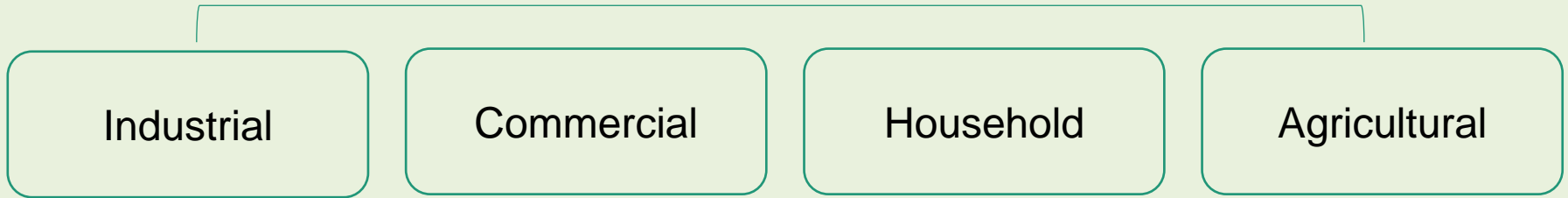
Among England's regions, **London processes the lowest proportion** of its received waste within its borders.



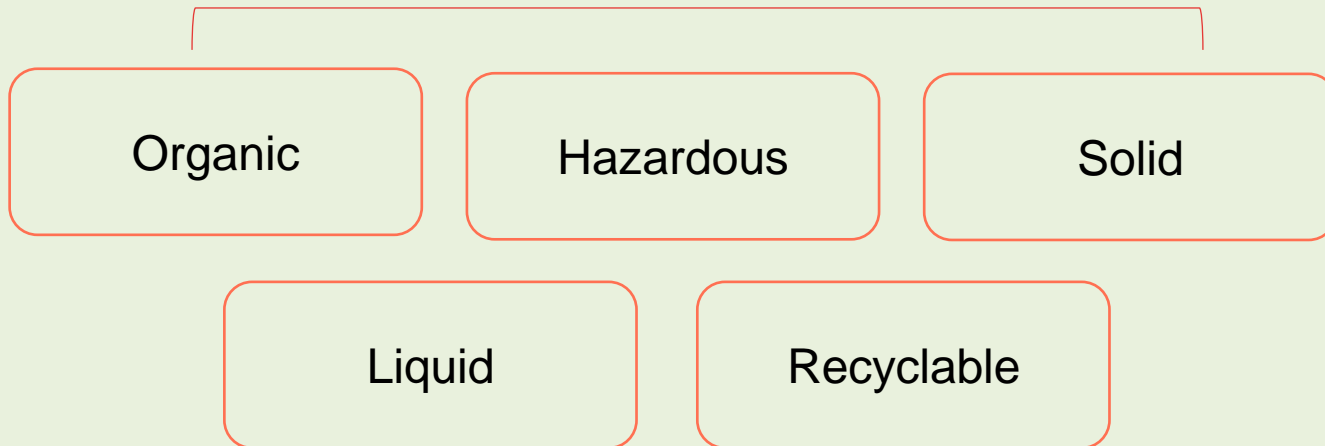
What does this mean?

Understanding the different sources and categories of waste is important for both businesses and households to manage waste effectively.

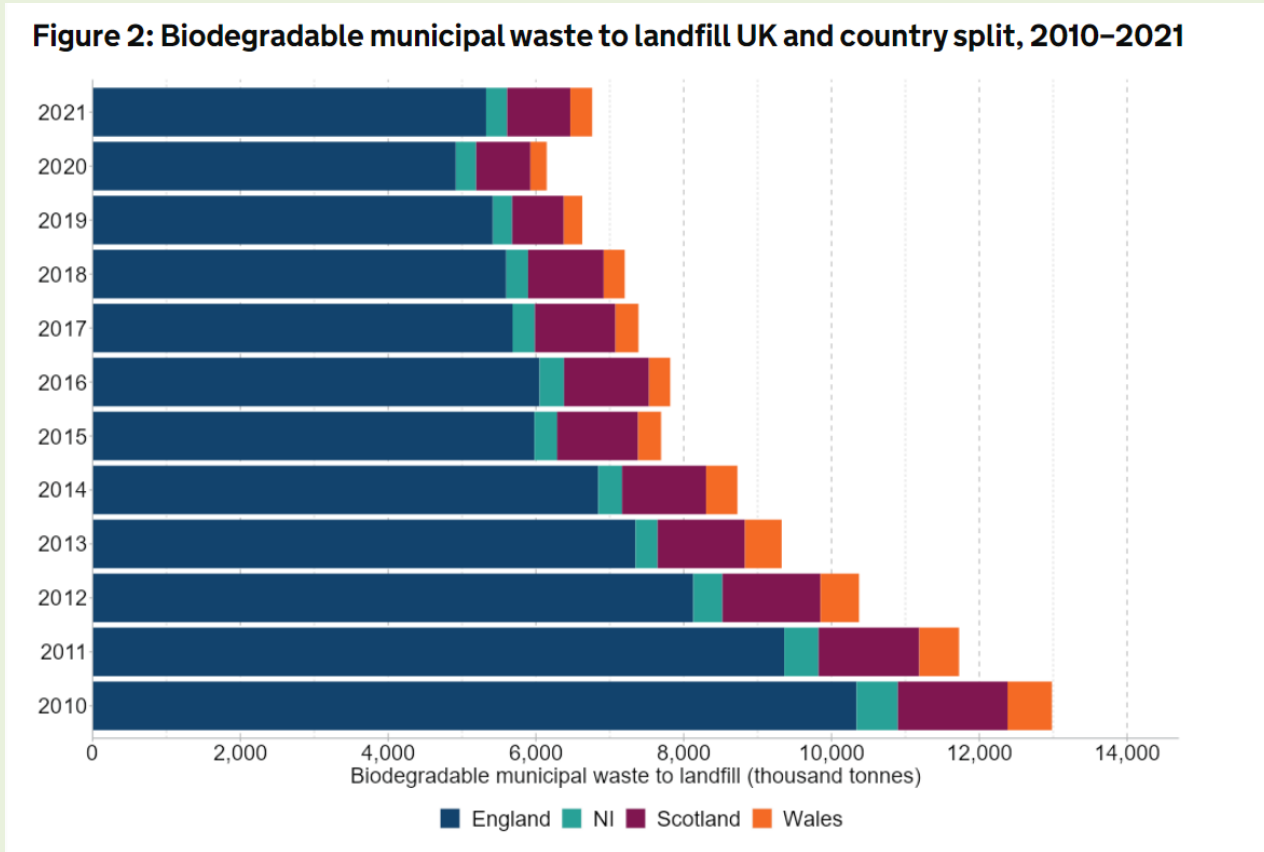
Sources



Categories



Biodegradable municipal waste sent to landfill in the UK has fallen significantly since 2010.



The average person in the UK produced 413kg of waste in 2021 – **over 1kg of waste per day.**

Let's think about our **typical day** – where does all of this waste come from?

temple



Did you use any disposable **coffee pods, tea bags**, or water bottles?



What about any **personal care products** or packaging which you threw away?

Think about the **packaging** involved in your breakfast.



Did you discard any **food scraps**?

Did you have a packed lunch? Did you use **disposable packaging**?



Did you **eat out**? What did your meal come with?

Count the number of **snack wrappers or drink containers** you disposed of.



What **material** were the containers made from?

Did you use **reusable bags** or use new plastic bags?



Think about what you did with all the **packaging** your shopping came in.

Did you dispose of anything **hazardous** today?



Think about anything you threw away which could have been **donated**.



Think about homemade meals – what happened to the **food waste**?

What about any packaging use for a **takeaway**?

temple



Southwark
Climate
Collective



Every year, an **average person** uses:

90 drinks
cans



876 coffee
pods

107 plastic
bottles



45kg of
plastic

An average UK family throws away
paper waste which is worth **6 trees!**



The UK has established a comprehensive framework of waste legislation.

The EPA 1990

- The main legislation in the UK that regulates waste handling.

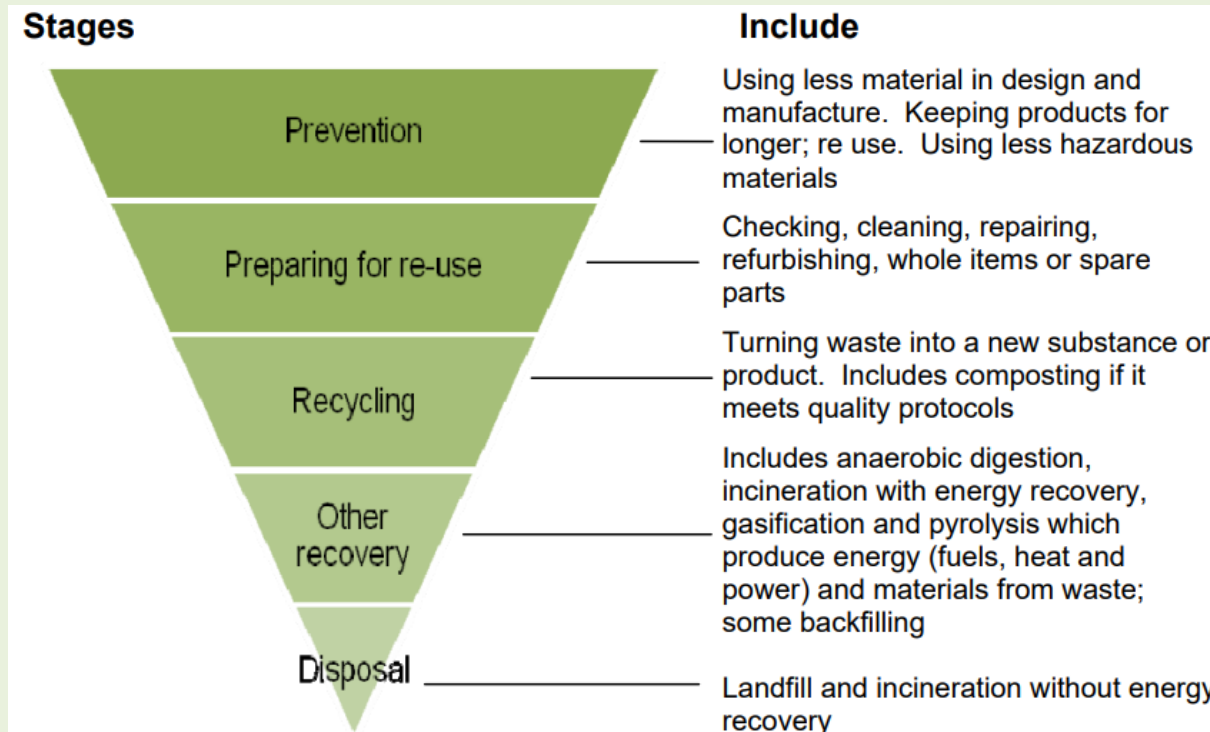
Waste (England and Wales) Regulations 2011

- Requires businesses to confirm they have applied the waste management hierarchy.

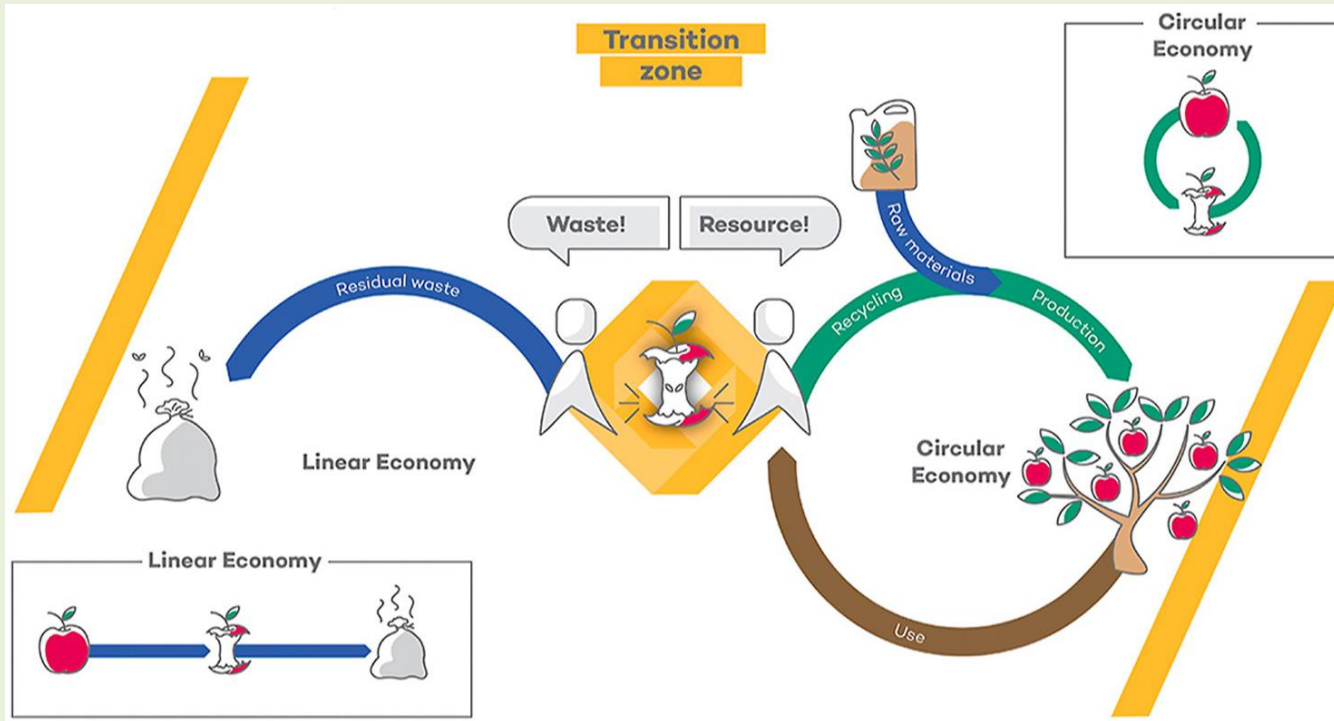
Resources and Waste Strategy for England 2018

- An ambitious strategy setting out various ways in which the UK will minimise waste.

Two key principles from the EPA 1990 and the Waste (England and Wales) Regulations 2011 include the “**waste hierarchy**” and the concept of “**waste as a resource**”.



Two key principles from the EPA 1990 and the Waste (England and Wales) Regulations 2011 include the “**waste hierarchy**” and the concept of “**waste as a resource**”.



What are some other **initiatives** that the UK has introduced to reduce waste and promote recycling?

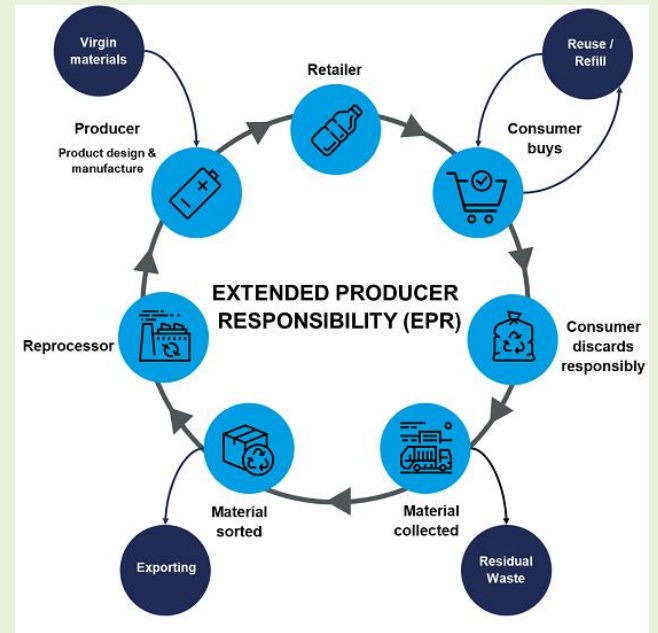
Plastic Packaging Tax



Guardians of Grub



Extended Producer Responsibility



Small and Medium sized Enterprises (SMEs) play a significant role in waste generation in the UK. An estimated 30.8 million tonnes of waste is generated by SMEs in England – more than households.

Businesses generate waste through their various operational processes, from office activities to manufacturing and service provision. Typical waste can range from paper and packaging in offices, to industrial by-products in manufacturing. **Most common types** sent to landfill by SMEs:

- Cardboard
- Paper
- Plastic wrapper
- Wood dust
- Particleboard/MDF

temple

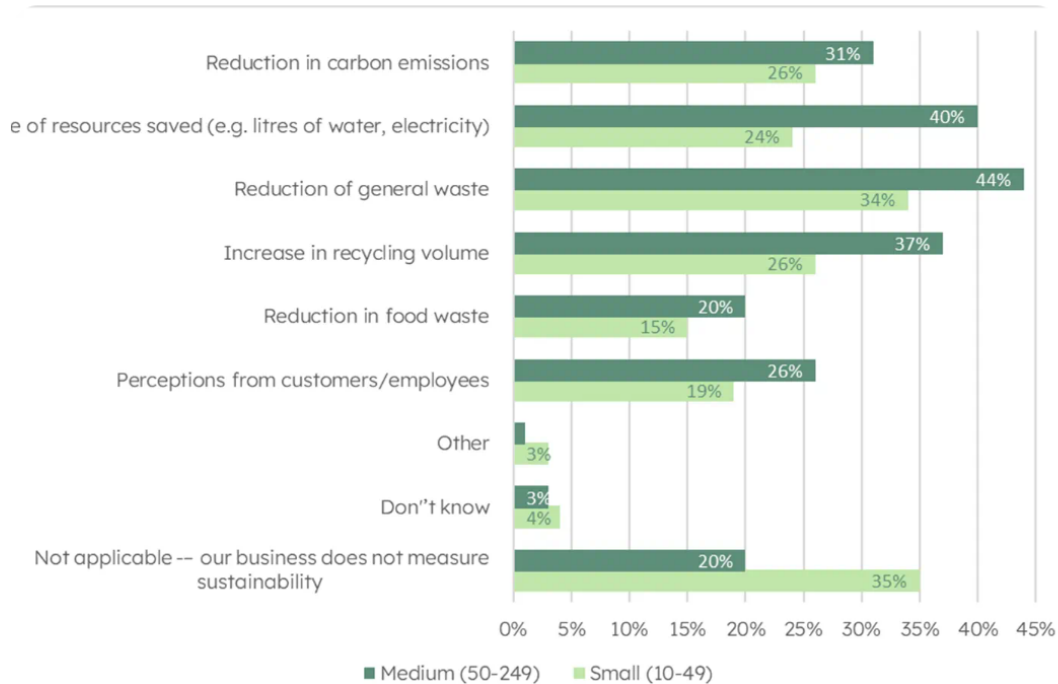


Southwark
Climate
Collective



Research from Biffa found that only **around half (47%)** of SMEs are using some type of commercial recycling service, compared to 89% of households carrying out recycling.

We asked business decision makers, "If at all, how does the business you work in measure sustainability?"



But the **reduction in general waste remains the most common way** for an SME to measure sustainability progress.

CAUSES OF WASTE

Now to discuss some high-level and potentially systemic **causes of waste in the UK, both on an individual and corporate level.**

The **‘throwaway society’** describes a (largely historical but still relevant) society and culture in which items tend to be used only once and products are not designed for reuse. The term describes a **critical view of overconsumption** and excessive production of short-lived items.

‘Culture of convenience’

‘On-the-go’

WRAP’s *Plastic Market Situation Report* estimated the UK produces 2.2m tonnes of plastic packaging, with only half recycled. In the UK, **825,000 plastic bottles** are produced a year.



The issue of **inadequate waste management infrastructure** and strain on public services also limits the uptake of more sustainable recycling solutions.

A report by the UK Parliament's Environmental Audit Committee in 2019 noted that the UK's recycling infrastructure was **outdated and incapable** of handling the increasing complexity and volume of waste.



'Pre-e-commerce era'

'£10 billion of investment'

Difficult waste streams

Massive **variation in provision of infrastructure** and services across the UK. Parts of Wales reach 60% recycling, whereas some boroughs in London fall below 30% (Newham and Westminster).

Excess waste, either elsewhere within the UK or abroad, can be generated through **outsourcing waste management**.

Insufficient investment into domestic infrastructure leads to a reliance on exporting waste. According to the Green Alliance, the **UK exported 611,000 tonnes of plastic** waste in 2019. Outsourcing these activities can lead to increased waste due to less stringent environmental regulations in some countries.

The transportation of waste to other countries contributes to additional carbon emissions.

The changes in global waste markets (such as China's National Sword Policy in 2018) exposed the **vulnerability of the UK's recycling strategy** and led to a scramble to find other markets.



Public engagement and awareness play crucial roles in the effectiveness of waste reduction initiatives.

A WRAP survey found that **68% of the UK public express uncertainty** about how to correctly recycle certain items. Consistently highlights confusion about what can be recycled – common items like pizza boxes, coffee cups and plastic film.

Businesses also face confusion. Majority of **black plastic packaging** is coloured using carbon black pigments which do not get picked up by Near Infra-Red (NIR) sorting technology – ends up as residue and is disposed of in landfill.



Lack of knowledge leads to the issue of ‘**wishcycling**’.



Fly tipping is the illegal dumping of waste in unauthorised areas and is a significant issues and cause of additional waste in the UK.

According to Defra, there were over **1 million fly-tipping incidents** reported in England in 2020/21, higher than previous years. Two-thirds of fly-tipped waste consists of household waste, whilst construction and demolition waste and white goods make up the majority of the rest.

Several **factors** contribute to illegal dumping of waste:

- High disposal costs
- Access to centres
- Lack of awareness and enforcement

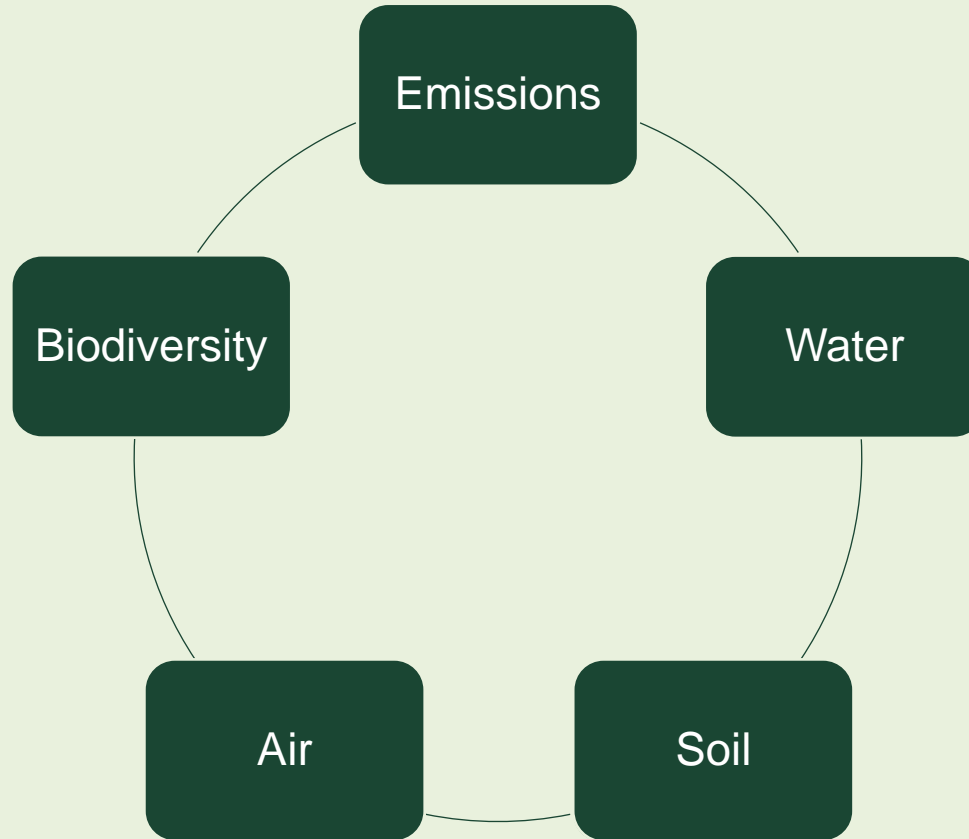


THE COST OF WASTE

temple

The **environmental costs** of waste encompass a broad range of impacts.

Discuss: what are **some environmental costs** of waste generation?



Beyond environmental issues, there are some significant **financial costs** of waste.



By not engaging in waste reduction strategies, businesses can incur **opportunity costs**, or missed opportunities to reduce their costs or even generate revenue from selling recyclable materials.

‘Waste as a resource’

Food waste costs households £50 per month. Cutting the food waste stream in London by 20% could take over **£40 million off London’s waste disposal bill**. More money for infrastructure improvements!

Reputational costs associated with waste can significantly impact business performance – brand image, customer loyalty, sales.

Burberry burns bags, clothes and perfume worth millions

© 19 July 2018



Climate > News

Plastic packaging from a UK supermarket found dumped in vulnerable Myanmar communities

...the recycling of plastic, you realize that it's really a sham,' an international waste trade expert tells senior climate correspondent [Louise Boyle](#)

Save more than money

If you need something new, try something used



INGOLF
Chair, preloved
~~\$79~~
\$37*

Shop our pre-loved pieces in As-is, located just before the check-outs.
*Pricing and availability will vary.



temple



Southwark
Climate
Collective



WASTE IN A CASE STUDY SME

Using what we've learnt today, it's time to explore the **different types of waste generated in a typical SME**, as well as some useful waste management tips.

Located in the heart of London, Roots and Fruits is a cosy vegetarian bakery and restaurant which offers a fusion of flavours and cuisines. It serves up to 100 customers a day, is open seven days a week and creates popular dishes for lunch and dinner, as well as weekend brunches. Its delivery service is also becoming even more in-demand. The restaurant would like to reduce its waste, but doesn't know where to start in assessing where its waste comes from.

Let's take a closer look at the waste generated by Roots and Fruits...

temple



Let's look at a typical day for Roots and Fruits. Can you think of any waste which may be generated **during these different stages** of operation?

Try to keep in mind the **different categories** of waste we discussed earlier:

- Organic, hazardous, solid, liquid, recyclable.

And keep in mind the **waste hierarchy**!

	Prep	Cooking	Service	Delivery	Closing	Other
Waste						
Reduction actions						

Peels, skins,
trimmings

Spoiled food

Packaging



Composting

Staff training

Supplier
engagement

temple



Southwark
Climate
Collective

**BETTER
BANKSIDE**



Food scraps

Oils and fats

Packaging

Hazardous

E-waste

Items and uniforms



Menu planning

Kitchen recycling programme

Donations

temple



Southwark
Climate
Collective

**BETTER
BANKSIDE**



Plate waste

Disposable
items

Recyclables

Spills



Portions

Reusable items

temple



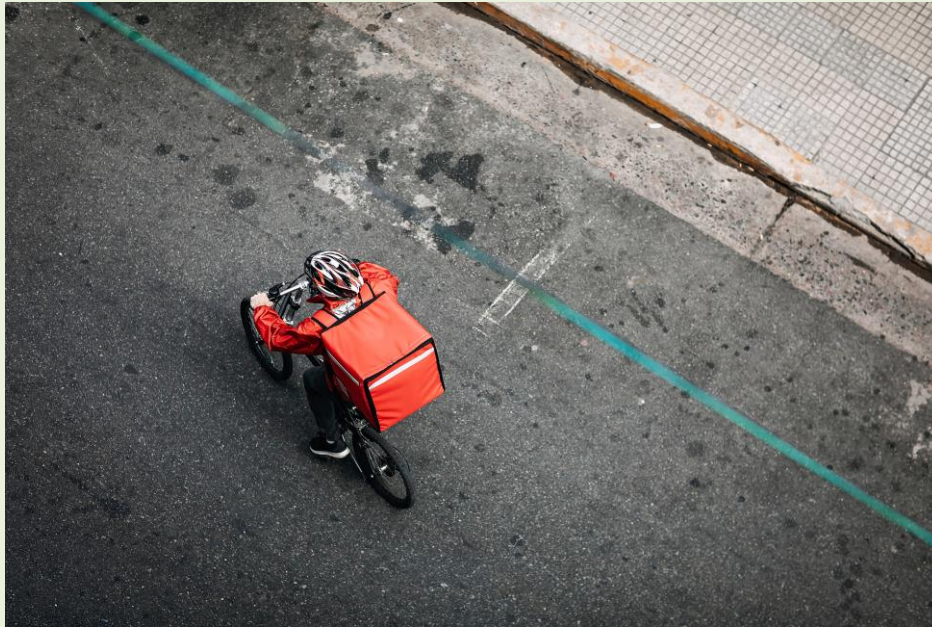
Southwark
Climate
Collective



Packaging

Food

Disposable
items



Minimal design

Returns

Communication

Food

Hazardous

Packaging



Donations

Minimise use

Inventory checks

Some **useful resources**...

[UK Business Climate Hub](#) – The UK partner of the SME Climate Hub, the global initiative which empowers small and medium-sized enterprises to take climate action. Features specific advice on how SMEs can prevent waste from going to landfill.

[WRAP](#) – the Waste & Resources Action Programme, a charity that works with businesses, individuals and communities to reduce waste and achieve a circular economy. Features specific guidance on recycling practices for businesses.

temple



Southwark
Climate
Collective



COURSE OVERVIEW

The learning objectives of today:

- Understand the context of **waste in the UK** setting and link the problems of waste to SMEs.
- Describe the variety of **factors which contribute to waste generation**, particularly in a business setting.
- Assess the many significant **impacts of waste** and use this knowledge to investigate the potential waste impacts of a **case study business**.

The Do's and Don'ts of Recycling

24th September 2024

Learning Objectives:

- Understand the basic **recycling process** and the landscape of UK recycling.
- Assess best-practice recycling case studies and discuss common **recycling misuse issues**.
- Explore environmental, economic and social **consequences of improper recycling**.
- Link learnings to recycling **opportunities for SMEs**.

THANK YOU



temple

Q&A



temple

CONTACT US

RHIAN HALFORD - DIRECTOR

Temple (3rd floor)
The Clove Building
4 Maguire Street
London, SE1 2NQ

+44 (0)20 7394 3700

+44 (0)7484 054 252

rhian.halford@templegroup.co.uk

HARRY ROGERS- CONSULTANT

Temple (3rd floor)
The Clove Building
4 Maguire Street
London, SE1 2NQ

+44 (0)20 7394 3700

Harry.rogers@templegroup.co.uk

temple

Certified



Corporation

This company meets the
highest standards of social
and environmental impact