

Delivered by:   On behalf of:  

Waste Management Workshop

Ali Kemp
4th October 2022

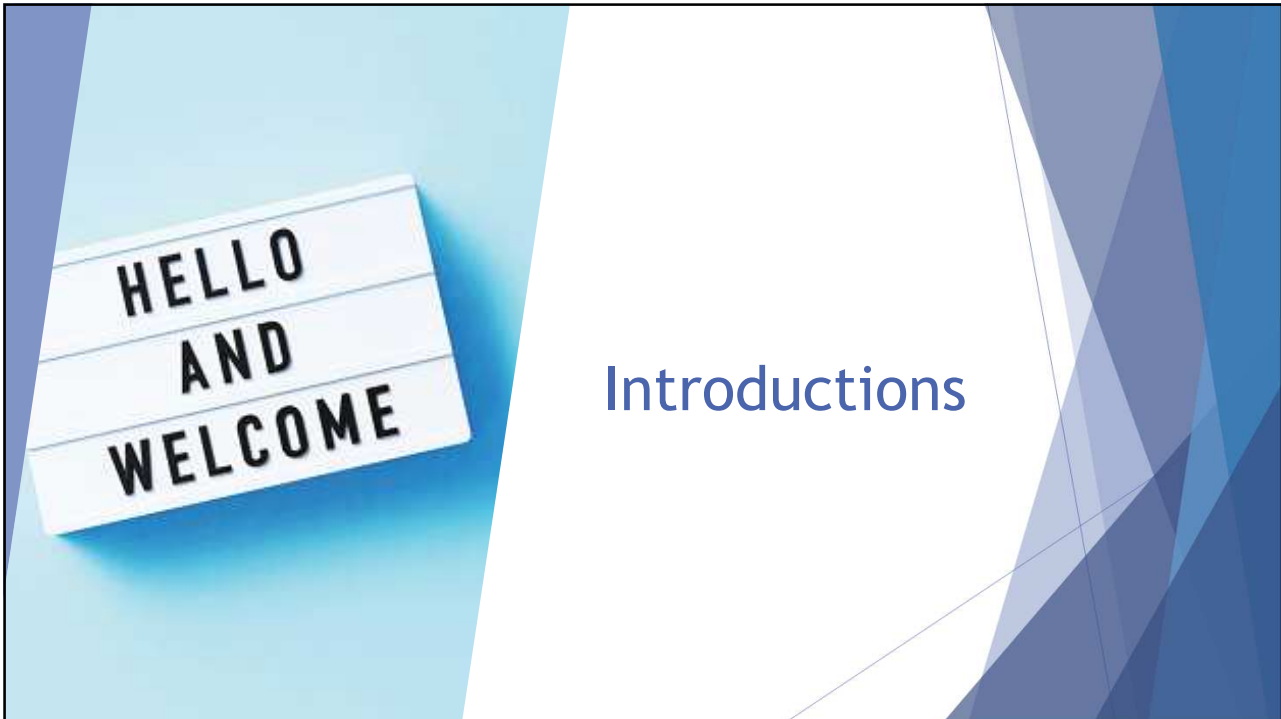


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Plan for the morning

- Introduction
- Setting Scene and Context
- Waste Legislation and Policy
- Waste Quiz
- Waste Hierarchy
- Circular Economy
- Planning for Change
- Fact Checking Workshop
- Implementation
- Questions and Ideas

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A bit about you


-  Which companies are represented in the room?
-  Any specific goals or aims from today?

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A bit about Wardell Armstrong



- ▶ Multidisciplinary environmental and engineering consultancy
- ▶ 13 offices in the UK and one abroad
- ▶ The newest office opened in Bristol last year



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Services

- ▶ Air Quality
- ▶ Archaeology
- ▶ Civil and Structural Engineering
- ▶ Ecology
- ▶ Energy and Climate Change
- ▶ Environmental & EIA
- ▶ Ground and Environmental Engineering
- ▶ Health and Safety
- ▶ Landscape and Urban Design
- ▶ Planning and Master Planning
- ▶ Waste and Resources Management
- ▶ Mineral Estate Management
- ▶ Noise and Vibration Monitoring

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Setting Scene and Context

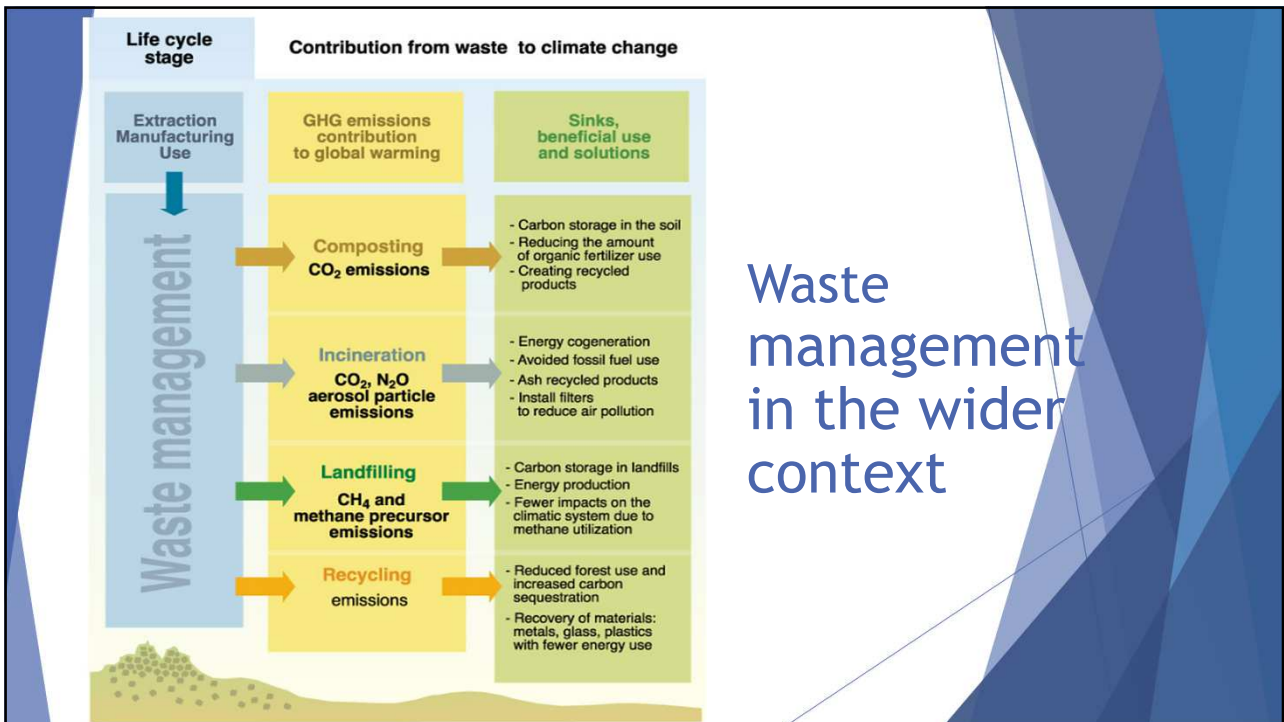


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What is Waste?



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Waste in the news

Climate > Sustainable living

UK homes binning 100 billion pieces of plastic a year, survey finds

'Pretending we can sort this with recycling is just industry greenwash,' said Greenpeace UK plastics campaigner Chris Thorne

Joanna Whitehead • Tuesday 12 July 2022 09:06 • 28 Comments

Plastic in the Depths: how pollution took over our oceans

So much plastic pours into the sea every year that species are now endemic to it. A new Guardian series looks at where it comes from, the harm it does and what can be done about it

● Plastic in the Depths: how tyre dust became the ocean's 'stealth pollutant'

Home / News / Resource Management / 1 in 3 throw away the equivalent of one shopping bag of food per week

1 in 3 throw away the equivalent of one shopping bag of food per week

Resource Management, Environment and Energy

29th September 2022

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Environmental Legislation

The Environment Act, 2021

Resources and Waste Strategy for England, 2018

Extended Producer Responsibility (EPR)

Deposit Return Scheme (DRS)

Collection Consistency

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WEST OF ENGLAND
Combined Authority

One City Plan

BRISTOL CITY COUNCIL

Local Legislation

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Waste Quiz

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What % of Bristol's carbon emissions are caused by the city's waste management?

A. 8%

B. 5%

C. 15%

D. 2%

17

What % of Bristol's carbon emissions are caused by the city's waste management?

A. 8%

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C. 15%

D. 2%

18

How many kg of cardboard did Bristol send for recycling last year?

A. 8 billion

B. 500,000

C. 9 million

D. 2 million

19

How many kg of cardboard did Bristol send for recycling last year?

A. 8 billion

B. 500,000

C. 9 million

D. 2 million

20

The UK construction industry consumes how many tonnes of materials each year?

A. 30 million

B. 400 million

C. 150 million

D. 2 billion

21

The UK construction industry consumes how many tonnes of materials each year?

A. 30 million

B. 400 million

C. 150 million

D. 2 billion

22

What % of print jobs are never collected from the printer?

A. 10%

B. 5%

C. 50%

D. 30%

23

What % of print jobs are never collected from the printer?

A. 10%

B. 5%

C. 50%

D. 30%

24

What % of waste put in residual bins in Bristol last year, could have been recycled?

A. 30%

B. 50%

C. 5%

D. 20%

25

What % of waste put in residual bins in Bristol, could have been recycled?

A. 30%

B. 50%

C. 5%

D. 20%

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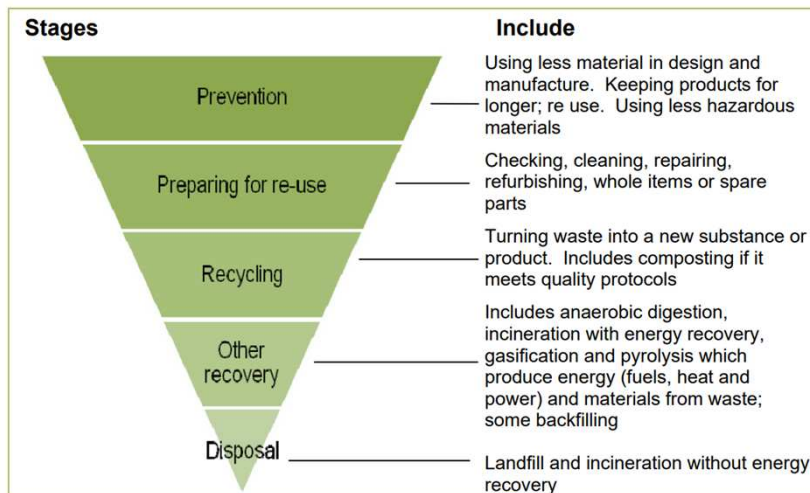


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The Waste Hierarchy



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1. Prevention / Reduction

- ▶ Waste prevention is defined in the Waste Framework Directive (2008/98/ED):
 - ▶ *'measures taken before a substance, material or product has become waste'*



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2. Re-use

Preparing for re-use

Checking, cleaning, repairing,
refurbishing, whole items or spare
parts

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Recycling

- ▶ Conserves resources
- ▶ Reduces reliance on raw materials
- ▶ Reduces the amount of waste to landfill

Recycling

Turning waste into a new substance or
product. Includes composting if it
meets quality protocols
Includes anaerobic digestion.

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Recovery

- ▶ Composting
- ▶ Anaerobic Digestion
- ▶ Gasification
- ▶ Pyrolysis
- ▶ Energy from Waste



incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste; some backfilling

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Disposal



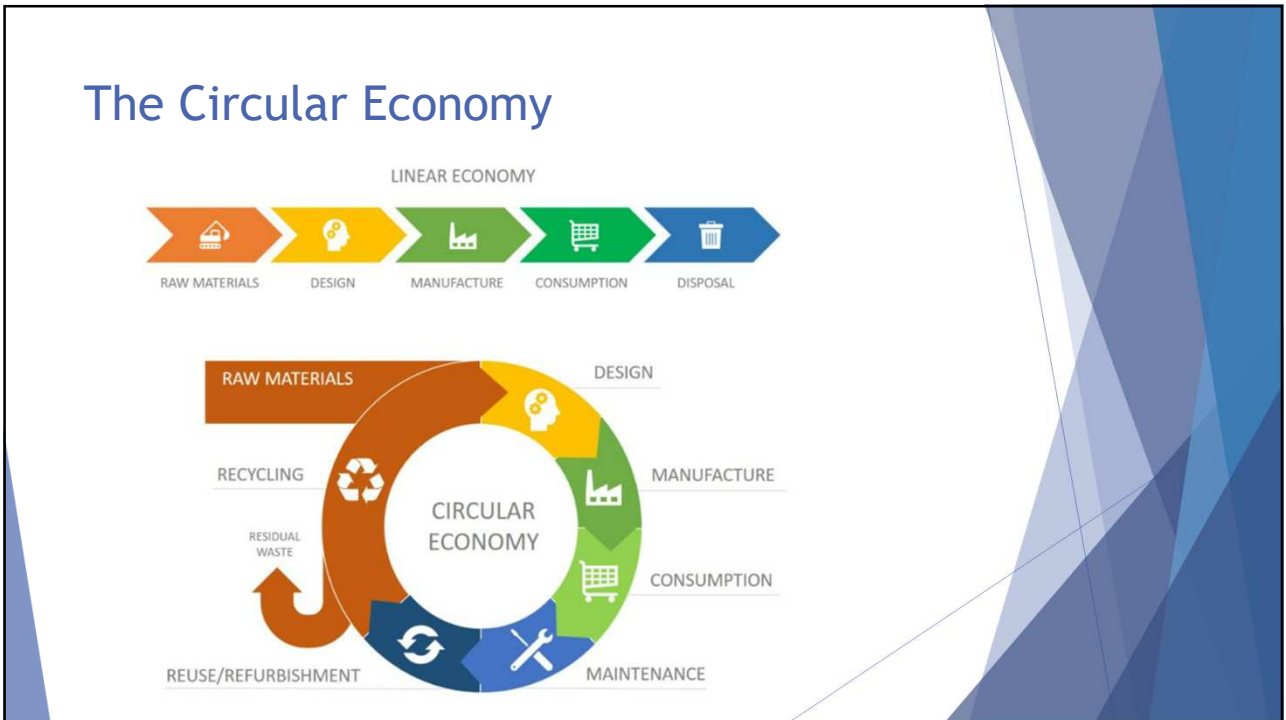
some backfilling

Landfill and incineration without energy recovery

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Principles of the Circular



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How to transition to the Circular Economy

Keep products in use - consider durability, recyclability and how to re-use, in order to keep materials circulating

Consider material use in your products - can you swap to biodegradable?

Improve waste segregation in the office / workplace

- Decrease contamination of waste
- Increase amount of waste recycled / decrease amount the landfill

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Businesses transitioning to a circular business model



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Planning for Change

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Step 1: Identify Current Situation

- ▶ Gather data and information on current material flows
 - ▶ What comes in
 - ▶ What goes out
- ▶ Speak to supply chain to understand where things going and potential impacts
- ▶ Look at quantities and material types - where to prioritise / focus
- ▶ Review costs



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Step 2: Identify Potential Opportunities for Improvement










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Step 3: Develop Draft Waste Strategy

-  Outline baseline / starting point
-  Set some realistic goals - short, medium and long term
-  Doesn't need to be big or time consuming
-  Assign timescales
-  Assign responsibility
-  Set dates for monitoring and review

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Step 4: Communication and Engagement

-  Speak to your team - staff, suppliers, customers
-  Communicate your aims and objectives
-  Get all on-board with making some changes
-  Set up workshops
-  Ask for volunteers
-  Consider incentives
-  Publish plan

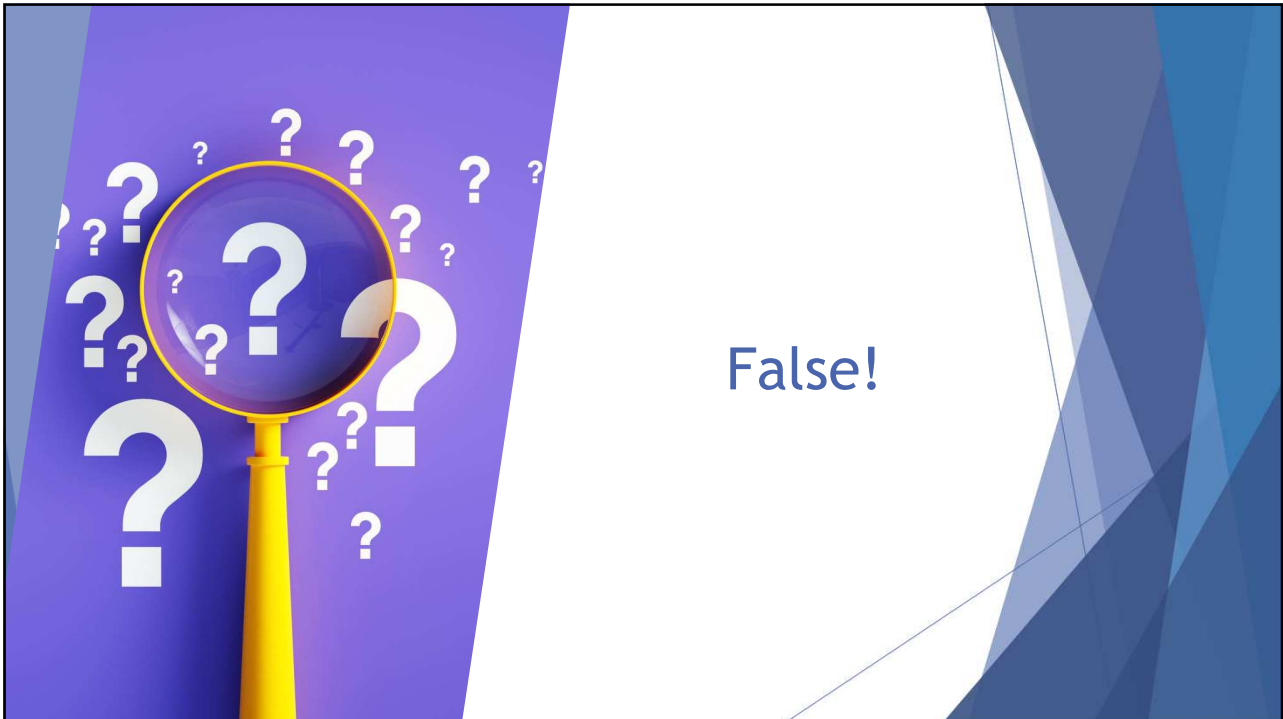
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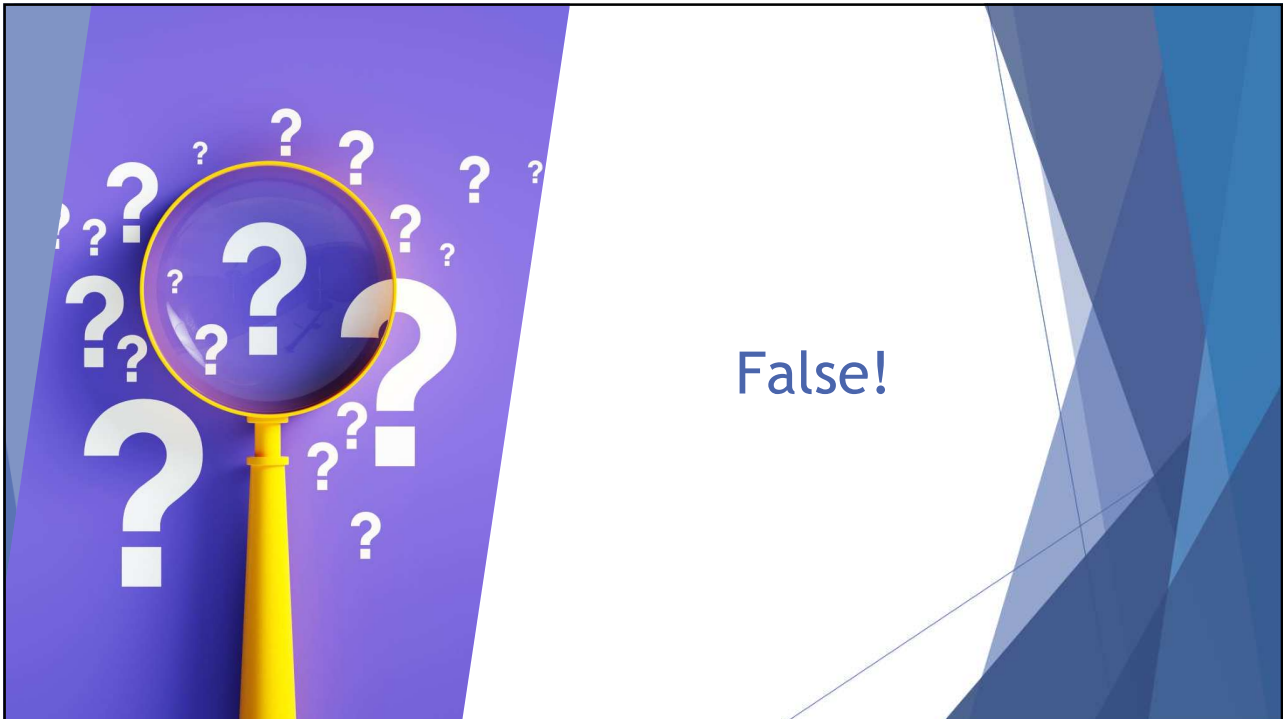
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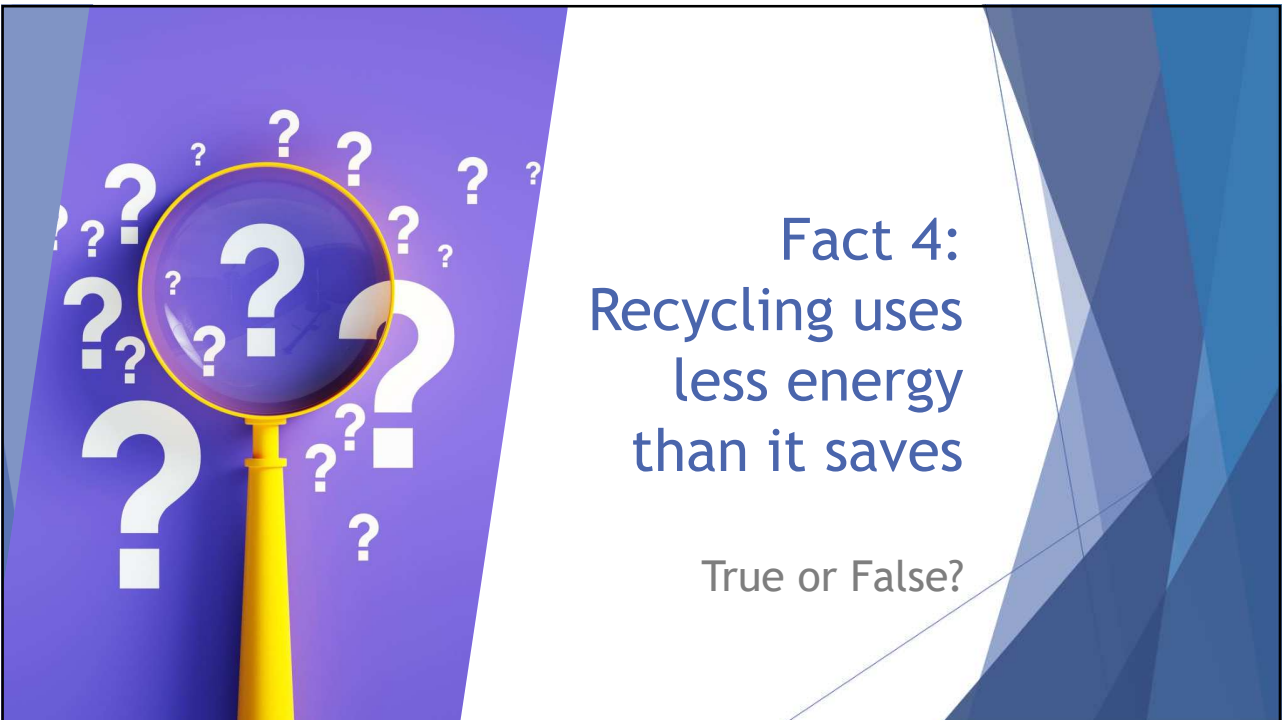
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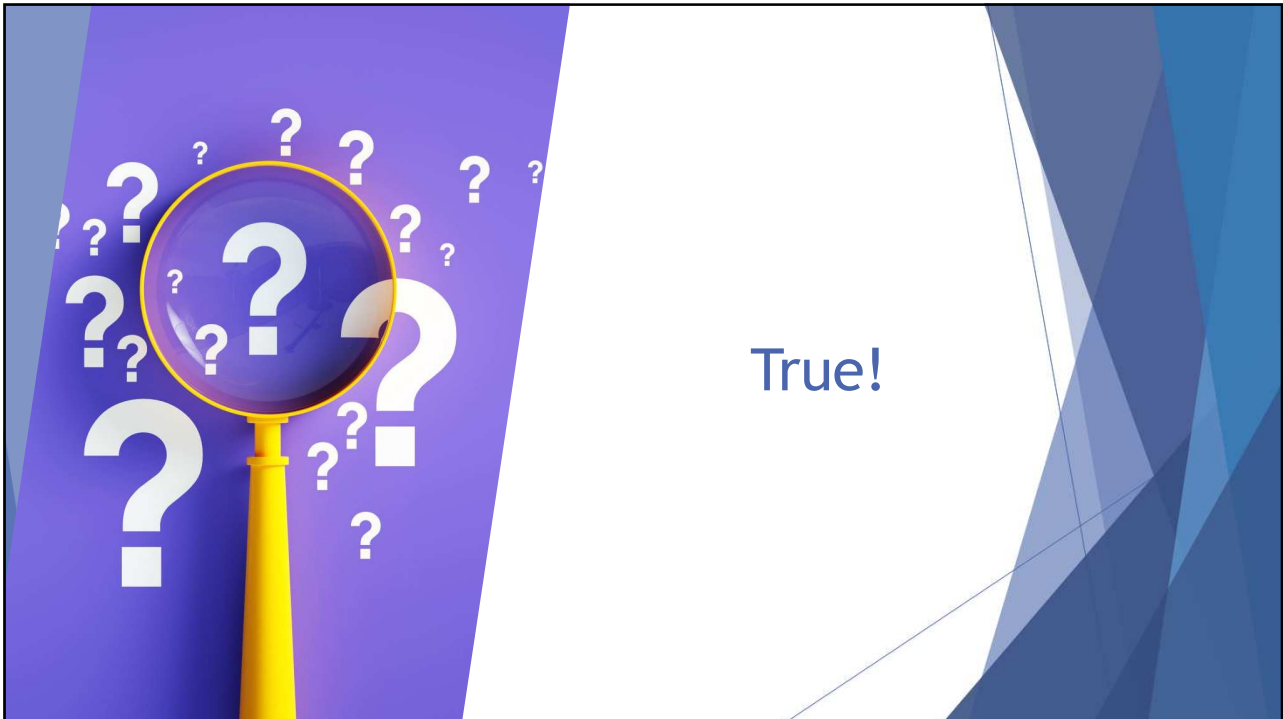
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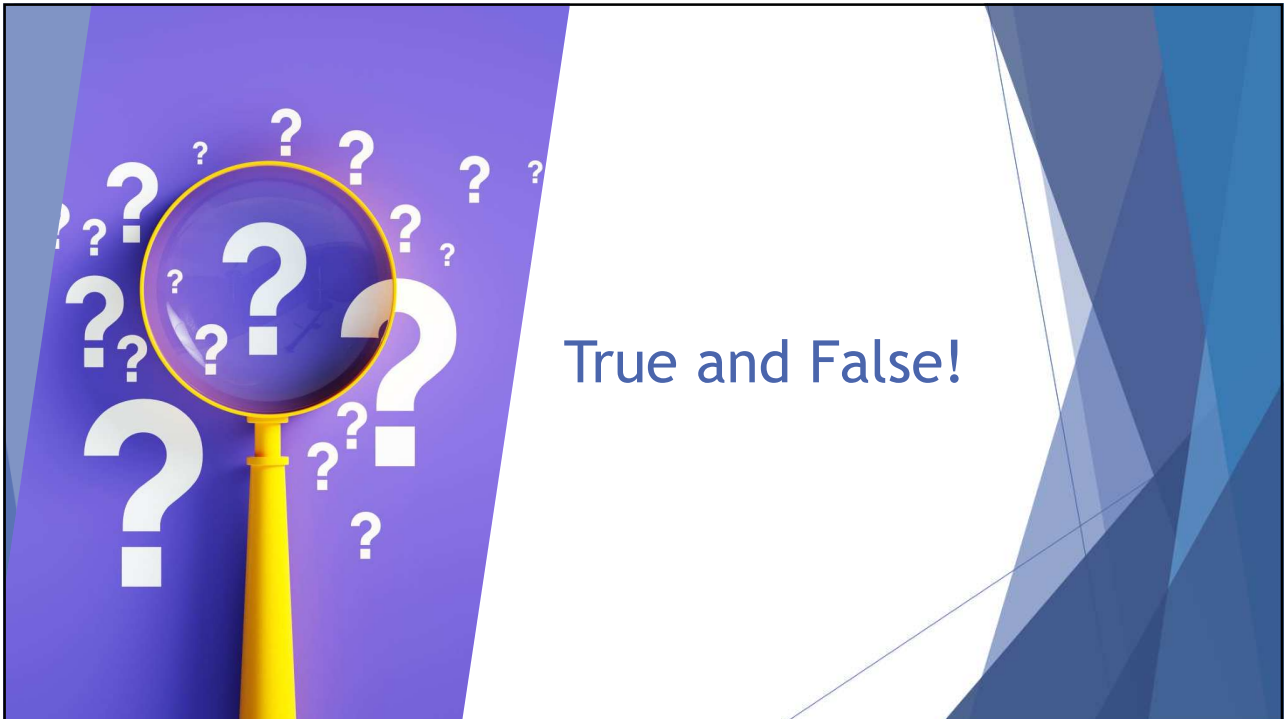
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Action Plan

- ▶ Clear set of actions
 - ▶ Easy wins
 - ▶ Longer term goals
- ▶ Set timescales for achieving them
 - ▶ weeks / months / years
- ▶ Assign ownership / responsibility
 - ▶ Could be individual or group / team
- ▶ Share with team

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Educate and Engage

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Report and Communicate



SHOUT ABOUT
YOUR SUCCESSES



KEEP THE TEAM
UPDATED



REWARD FOR
ACHIEVEMENT



PUBLISH
IMPROVEMENTS

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Evolving Process

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Cross Overs

- ▶ Waste and Resources don't need to be considered in isolation
 - ▶ Environmental Management Plans (EMP's)
 - ▶ Construction Environmental Management Plans (CEMPs)
 - ▶ Site Waste Management Plans (SWMP)
 - ▶ Operational Plans

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Set Targets

- ▶ *Ensure all key suppliers comply with our Waste Management Plan by 2025*
- ▶ *Stop using single use plastics by 2024*
- ▶ *Waste Management training incorporated in to all staff training*
- ▶ *Reduce packaging waste by 50% by 2023*
- ▶ *Increase use of recycled materials by 70% in next 2 years.*
- ▶ *Send zero waste to landfill by 2023*
- ▶ *Compost 50% of all organic waste produced by 2024*
- ▶ *0% construction waste to be removed from site*

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Record, Report, Publish!

Tulane researchers see promise in using recycled glass to help save Louisiana's coast

The project, called ReCoast, so far has shown sand from recycled glass can resist erosion better than silt, reseachers say.

KEITH MAGILL Daily Comet
4 hours ago

A project with roots in Terrebonne and Lafourche parish prove sand made from recycled glass can be used to help Louisiana's coast against persistent erosion.

Tweet

 Bristol Waste @BristolWaste

Thank you to the @HLInvest employees who litter picked with the #BigTidy in Hartcliffe this week! 🙌


They helped local residents remove 11 bags of waste from the Dundry area. 🌿

Want your company to start litter picking? Get all the info you need here:
bristolwastecompany.co.uk/household/get-...




📍 Bristol City Council and Marvin Riles

Farm shop's waste-reduction drive wins new customers

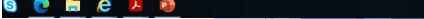
 Chris Hill

Published: 9:44 AM September 21, 2022



Emma Tacon with locally-sourced produce and the new milk dispenser at The Tacon's farm shop in Rollesby - Credit: Chris Hill

An eco-friendly Norfolk farm shop says it has attracted new customers by offering them more ways to reduce waste and packaging.



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Any Questions or Ideas?

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