

UNDERSTANDING CARBON IN OUR WASTE STREAMS

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3 March 2022

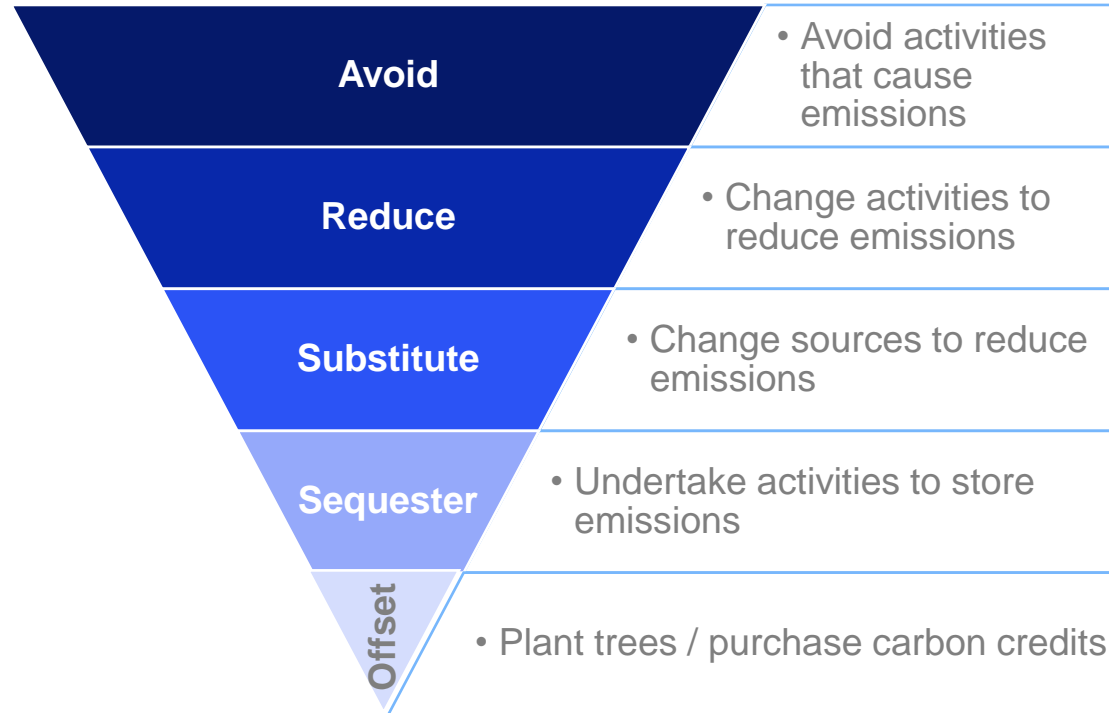


Carbon consumption is
more important than
carbon production

Is their production using renewable or
finite resources as important as their
consumption ?



The Carbon Hierarchy



But don't forget...Resource consumption reduction.



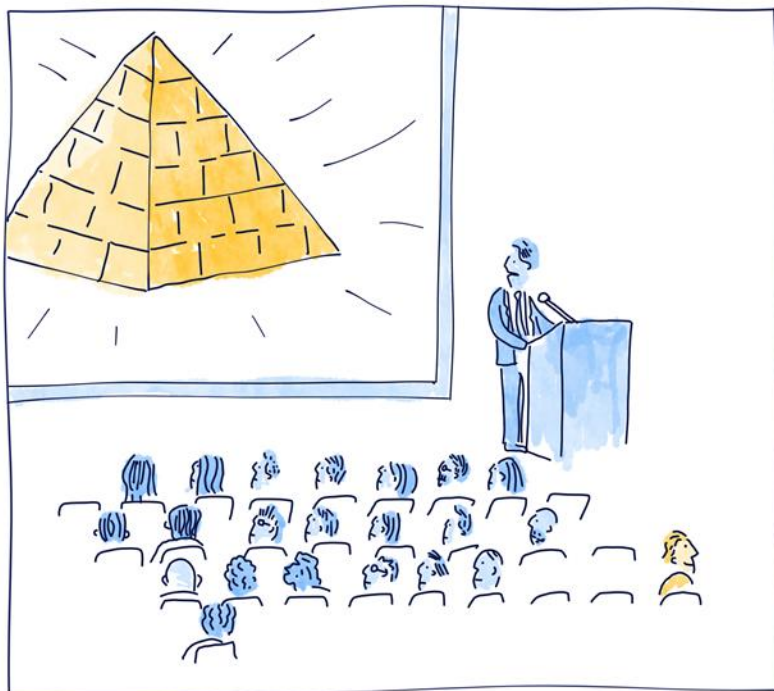
Current ~7.65 t per person
 OWL = ~3.19 t per person

~58% reduction – current population



Current ~7.65 t per person
 OWL = ~2.78 t per person

~64% reduction – 2050 population



GRAND PLANS



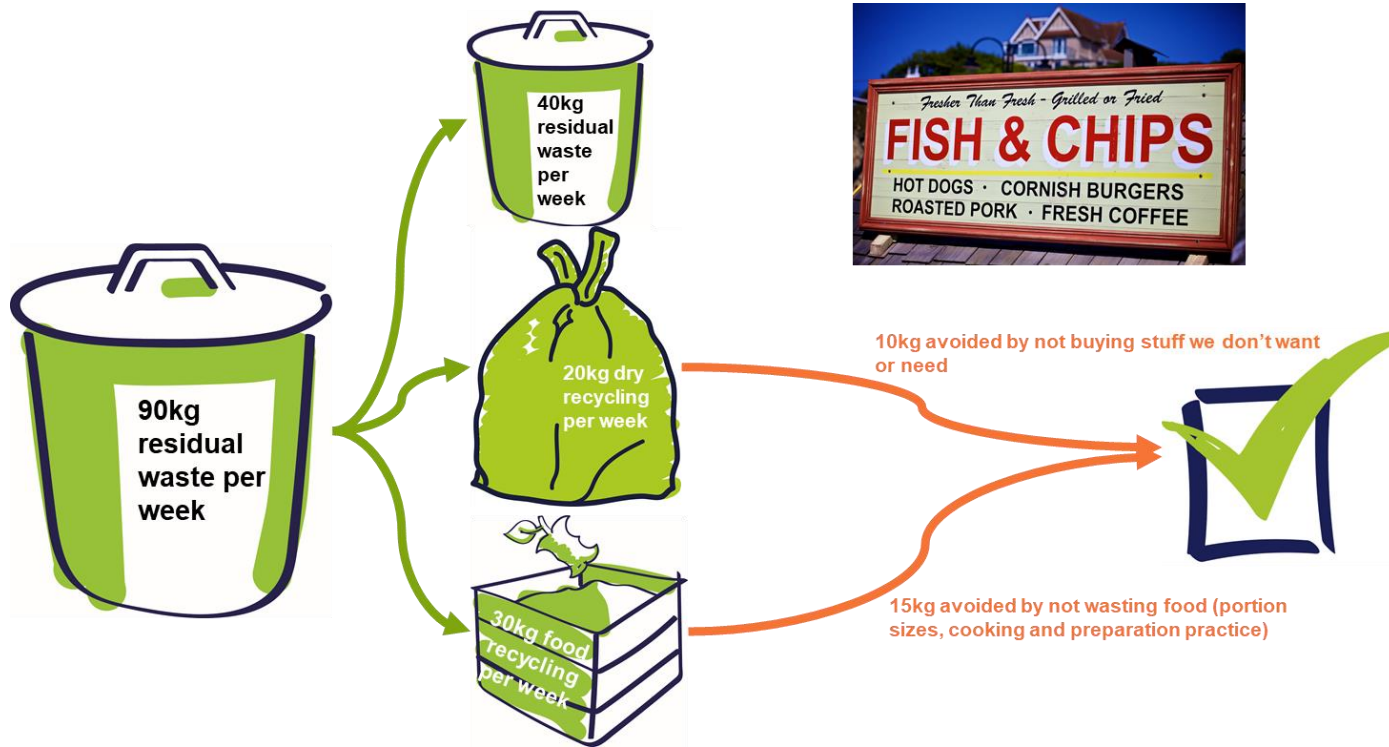
MEANWHILE...

Don't just wait for the grand plans, make changes that you can today, share and let other make their changes as well.

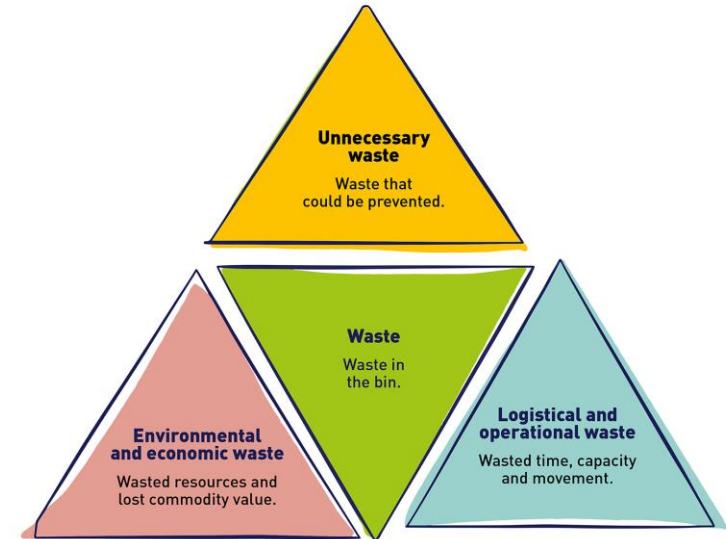
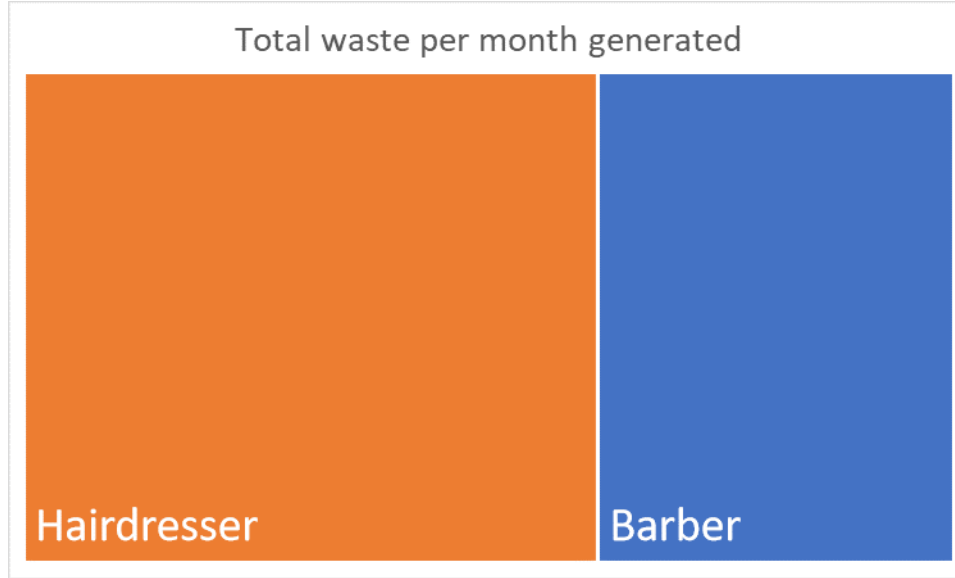
Think prevention before recycling, in many cases its easier.



There is no lost cause



Data can drive knowledge which can drive interventions



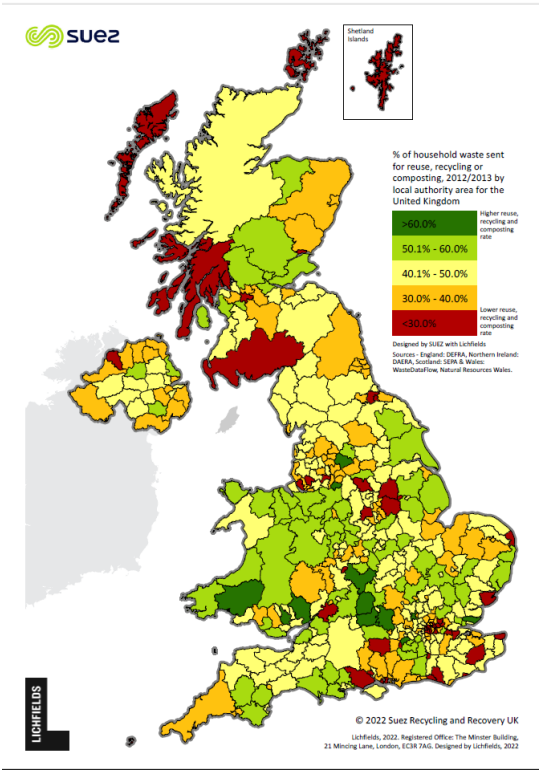
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What do you know ?



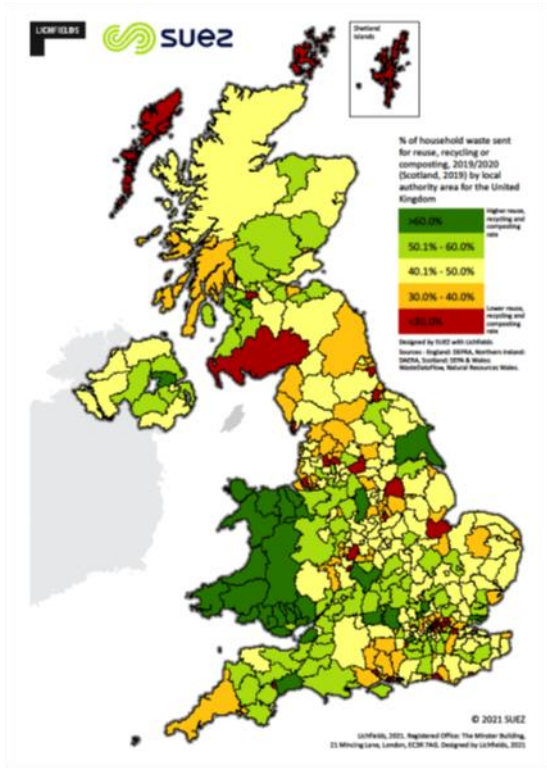
Industrialising reuse – where it forms a fundamental part of a circular economy and where participants and companies can be financially sustained by that economy

Learn from the past

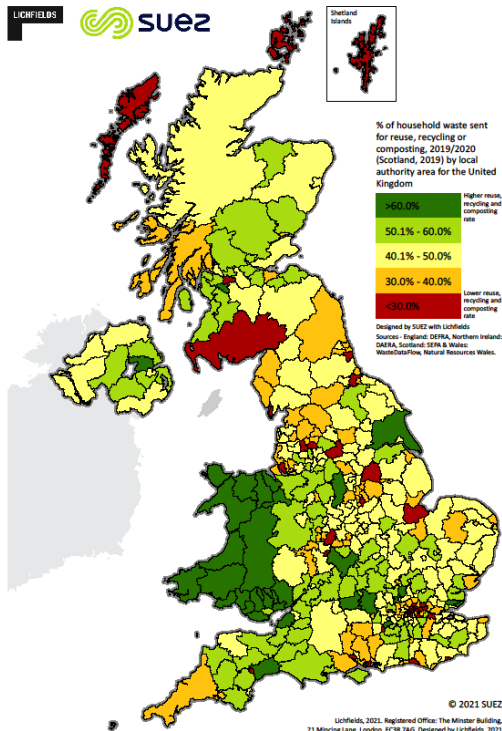


2012/13 to 2019/20

7 year transition



Apply to the future



2019/20 to 2029/30

10 year transition



2023 for Scottish DRS, 2025/6 fully implemented

2024 for EPR for municipal to start, 2029/30 for most implementation

2024/5 for EPR for some businesses and rest of the UK DRS, some businesses may not receive any support under the new EPR.

Other...

Net Zero - roles & responsibilities, burdens & benefits

Waste prevention –

benefits waste producers, service providers are funded through savings

Reuse and refurbish

Benefits waste producers, service providers are funded by sales

Recycle

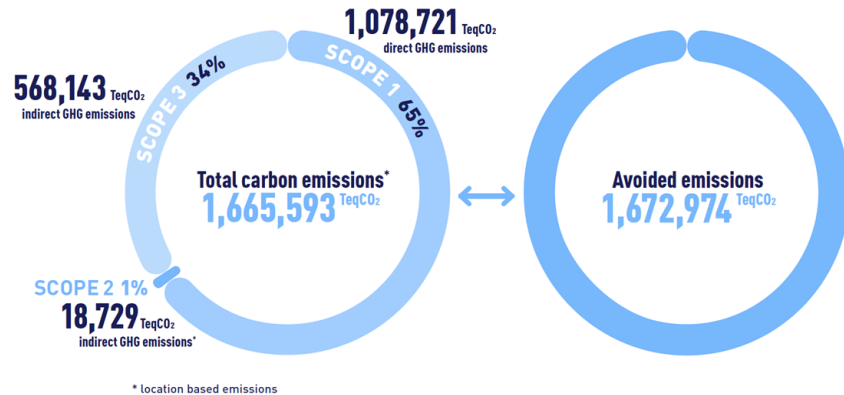
Burden to waste producer and service provider, benefit to users of secondary resources.

Recovery

Burden to waste producer and service provider, benefit to users of energy and commodities

Disposal

Burden to waste producer, long term burden to waste services provider



Why does carbon cost matter to the waste and resource sector. ?

£80/t

Carbon price

If applied to EFW,

50% fossil and 50% biogenic

At 0.9t CO₂e per 1 tonne of waste combusted

So for fossil component – gate fee cost would be **£36/t** addition cost.

If applied to recycled secondary resources

No direct benefit as these are avoided emissions. All Scope 1,2 and 3 emissions a burden for their production

- For closed loop recycled fibre – carbon uplift of recycled materials 1.14 tCO₂e/t = ~£91/t in carbon value in the recycled materials
- For closed loop recycled textiles 14.7tCO₂e/t = ~£1,180/t in carbon value in the recycled materials if reused or repaired

And finally

Little actions matter

- **Find them, copy them and replicate them**

Things are already happening

- **Capture, promote and multiply**

Remove barriers and support

- **Listen, identify the barriers and use the power of yourself, your organisation and the system to move them. Don't be a barrier.**

Every kilo counts

- **Don't just go for the big wins, multiple little wins add up to big wins as well.**

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