



Association for Public Service Excellence



Waste, Recycling and Circular Economy

The leaders in policy and innovation

Thursday 23 October 2025

Nottingham Belfry Hotel, Mellors Way, Off Woodhouse Way, Nottingham,
Nottinghamshire, NG8 6PY.



Llywodraeth Cymru
Welsh Government

Wales' World leading success on high quality recycling and the circular economy

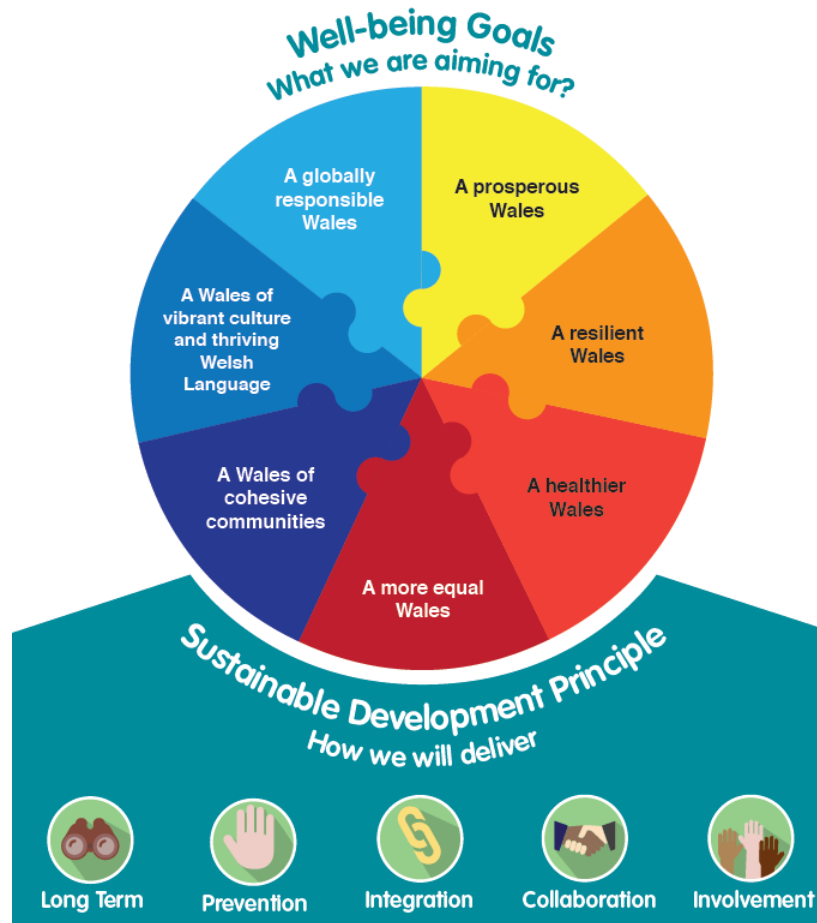
Dr Andy Rees OBE, Head of Waste Strategy
Resource Efficiency & Circular Economy Division
Welsh Government



Cenedl fach, gydag uchelgais fawr • A small country with big ambition

Our well-being objectives for 2021 to 2026 (A statutory requirement under the Well-Being of Future Generations (Wales) Act 2015)

7 Well-being goals and 5 ways of working



The Welsh Government's 10 well-being objectives include:

- Build an economy based on the principles of fair work, sustainability and the industries and services of the future.
- Build a stronger, greener economy as we make maximum progress towards decarbonisation.
- Embed our response to the climate and nature emergency in everything we do.

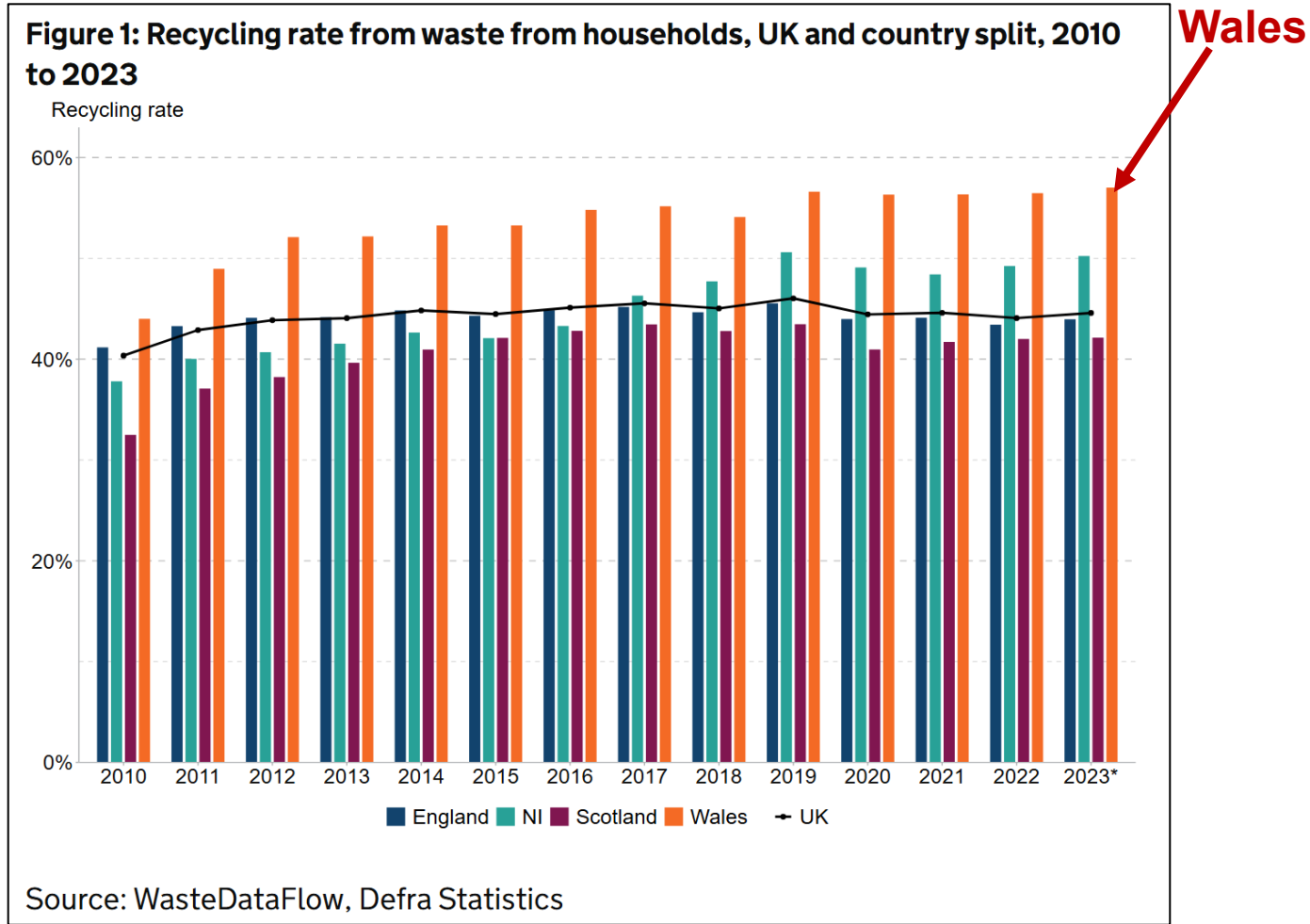
Recycling – Wales: 1st in the UK, 2nd in the World

The World

Nation	Adjusted Municipal Waste Recycling Rate	
	Rank	Recycling Rate
Austria	1	59%
Wales	2	59%
Taiwan	3	53%
Germany	4	52%
Belgium	5	52%
Netherlands	6	51%
Denmark	7	51%
Slovenia	8	50%
Northern Ireland	9	45%
South Korea	10	45%



UK



Recycling data has to be reported accurately in Wales, by law

The Recycling, Preparation for Re-use and Composting Targets (Monitoring and Penalties) (Wales) Regulations 2011

4.—(1) *A local authority must make arrangements for the collection of information that will allow the authority to comply with its requirements to maintain records under this regulation.*

(2) *[Data to be reported]:*

(a) *the total amount of its municipal waste(5);*

(b) *the total amount of municipal waste sent to each and every waste facility by the local authority;*

(c) *the amount of material rejected at each successive stage of sorting of the municipal waste, at any and all waste facilities; and*

(d) *the amount of material rejected under paragraph (c) that is disposed of by the local authority, or by a waste facility.*

5.—(2) *Each return must—*

(c) *be submitted using the WasteDataFlow system.*



Wales waste strategy – key policy initiatives since 2002 for municipal waste recycling

- Legislation:
 - Statutory Local Authority recycling targets under the Waste (Wales) Measure [Act] 2010 – 70% for 2025
- Funding & support:
 - c.£1 billion additional funding to Local Authorities since 2002
 - Collaborative Change Programme supporting performance improvement & service change
- Behaviour change
 - Regular behavioural insight recycling tracker surveys of householders
 - Waste Awareness Wales ('It's our future, don't throw it away' TV adverts - £3 million)
 - Wales Recycles ('Be Mighty' TV adverts - £1 million)
- Empowering Local Authorities to use all available tools
 - Enforcement (s46 EPA 90)
 - 3/4 weekly residual collection

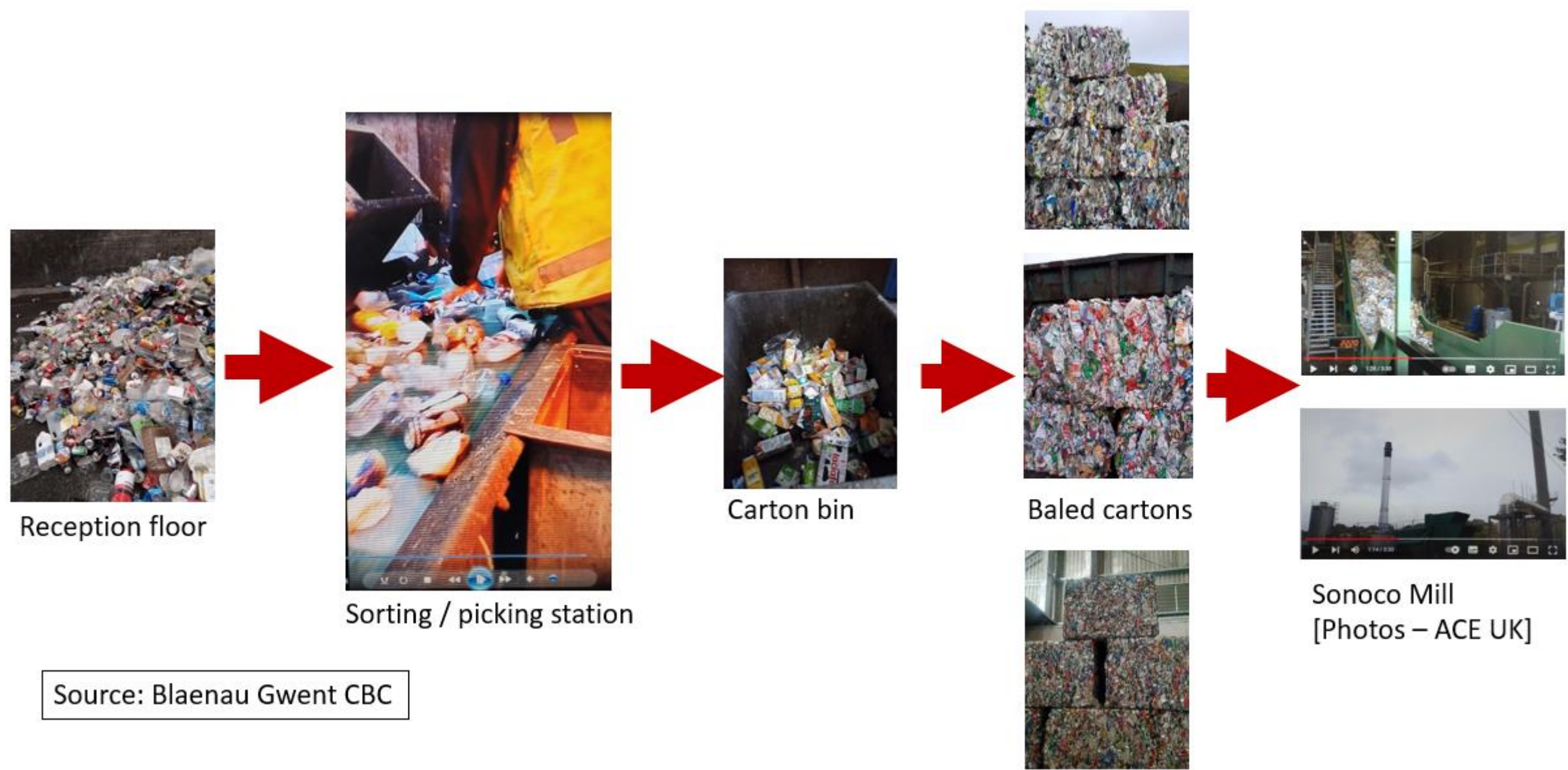


Collections Blueprint 2025 for Wales

- Weekly separate collections of:
 - Dry recyclables using kerbside sort (3 boxes or bags / stacker box)
 - i) paper/cardboard
 - ii) plastic bottles pots/tubs/trays, metal cans & aerosols, foil, cartons & other FBC
 - iii) glass jars/bottles
 - Food waste
- Fortnightly collections of:
 - Garden waste
- Three or four weekly collections of:
 - Residual waste with capacity equivalent to 60 litres, or less, per week
- Active enforcement
- ULEV resource recovery vehicles - 9 compartments – single pass collection (all dry recyclables and food)
- HRRCs – Minimum of 85% recycling and reuse
- **Not mandatory**



Local Authority waste transfer station sorting of the metal/plastic bottles, pots, tubs and trays/carton stream



Collections Blueprint for Wales (2025) – Good practice case studies – WRAP Cymru

CASE STUDIES - RECYCLING AT HOME

 Effective communication of waste collection service changes in Cardiff	 Transitioning to a more circular economy in Carmarthenshire	 Reducing contamination in Ceredigion with it's A to Z recycling guide
 Household battery recycling in Conwy	 Safer and easier disposal of electrical and electronic equipment in Denbighshire	 Reducing residual waste capacity in Newport

 Phasing out commingled collections in Pembrokeshire	 Improving recycling services for businesses in rural Powys	 A decade of nappy recycling in Rhondda Cynon Taf
 The impact of separate collections in Torfaen	 Blueprint collections in the Vale of Glamorgan	 Charging for garden waste collections in the Vale of Glamorgan



Transforming recycling for students in Wrexham flats

Collections Blueprint for Wales (2025) – Good practice case studies – WRAP Cymru

CASE STUDIES - EDUCATION AND ENFORCEMENT



'Are you keeping up with the Joneses?' in Blaenau Gwent



Neath Port Talbot's community engagement and education programme



Communal residual waste collections in Newport

CASE STUDIES - BEYOND RECYCLING



Encouraging reuse and recycling in Blaenau Gwent



Bridgend County Borough Council's Initiatives in Promoting Repair and Reuse



Reuse and repair in Caerphilly



Reusable nappies and period products in Merthyr Tydfil



Open windrow composting in Flintshire



Fitness and wellbeing pilot project in Gwynedd

CASE STUDIES - AT THE RECYCLING CENTRE



Reducing residual waste at Anglesey's reuse and recycling centres



Supporting businesses in Merthyr Tydfil to recycle more



Disposal of DIY waste in Pembrokeshire

The common sense of multi-stream separate recycling

- It's more cost effective than single stream co-mingling
- Keeping recyclable materials separate results in reduced contamination, higher rates of recycling and higher quality recycling that can go back into the Welsh & UK economy.
- Separate collection increases flexibility to collect new 'harder to recycle' materials (e.g. cartons and plastic film) that are difficult to separate effectively in a co-mingled material recycling facility (MRF) – “future proofing”
- Higher quality recycled materials substitution for virgin raw materials reduces carbon emissions and reliance on extracting raw materials thereby avoiding the environmental damage resource extraction causes globally.
- Less likelihood of poor quality recyclate having to be exported, reducing environmental damage in other countries – reduced risk of reputational damage
- **It's TEEP in Wales – everywhere!**



A very recent (2024) further analysis of collections

“Impacts of the collection and treatment of dry recyclables - Commingling practices and their environmental and economic impacts: an analysis based on life-cycle assessment and life-cycle costing”



Main conclusions include:

- Systems with a degree of separation of three streams or four streams in general perform significantly better than systems with a lower degree of separation (or higher degree of commingling, i.e. single- or dual-stream systems) from a climate change perspective.
- Single-stream [co-mingled] collection of dry recyclables achieves the worst environmental performance across all the impact categories considered in the assessment
- Systems with three and four streams incur higher collection, sorting and transport costs but less overall costs at a system-wide level relative to single-stream systems, thanks to the revenues from secondary materials. The same applies to the full environmental costs.

Glass – separately collected v co-mingled – example of Recresco: Cwmbran

Source separated feedstock

- 98% recovered, all into re-melt
- 40% of production into local applications

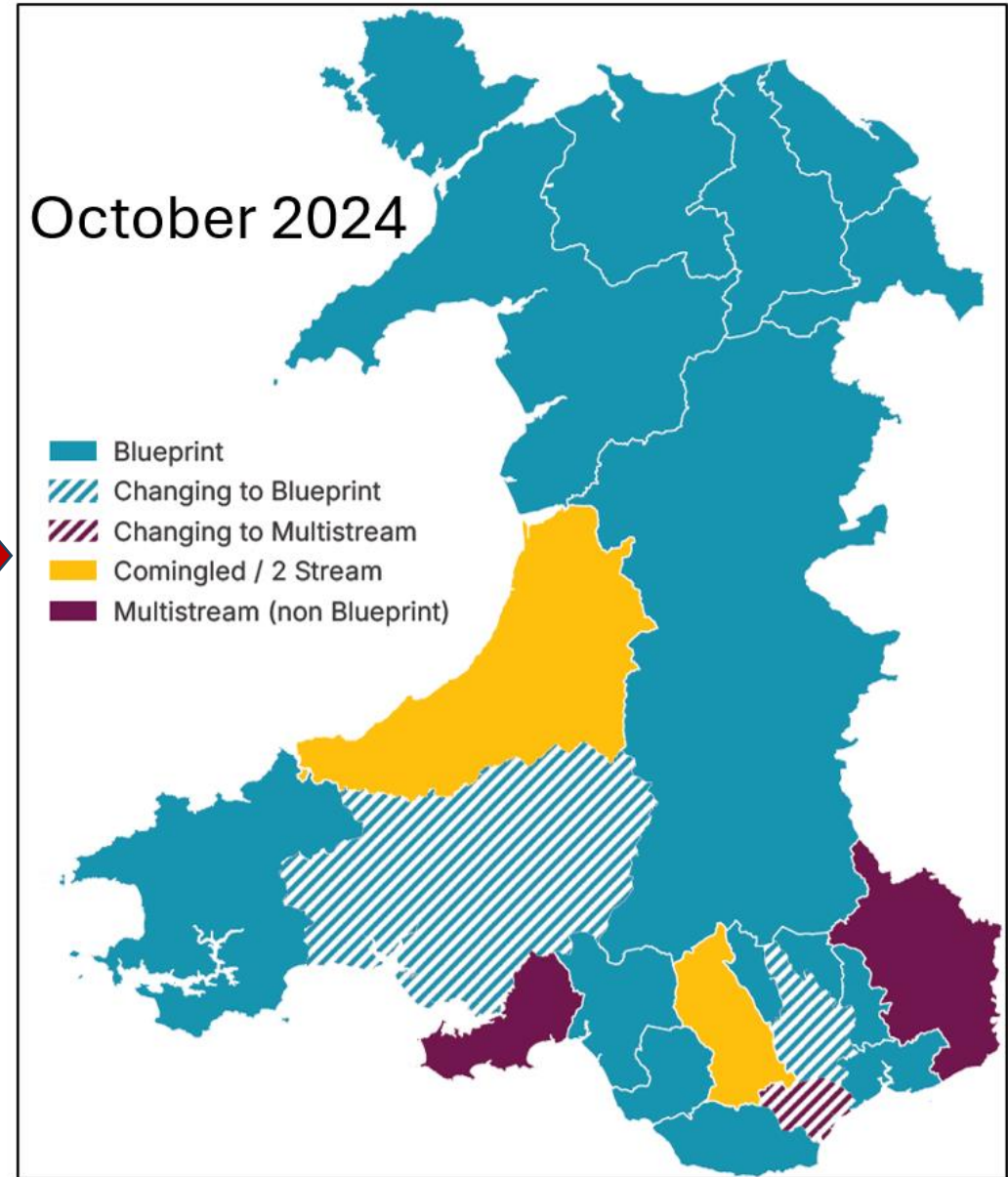
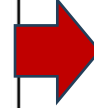
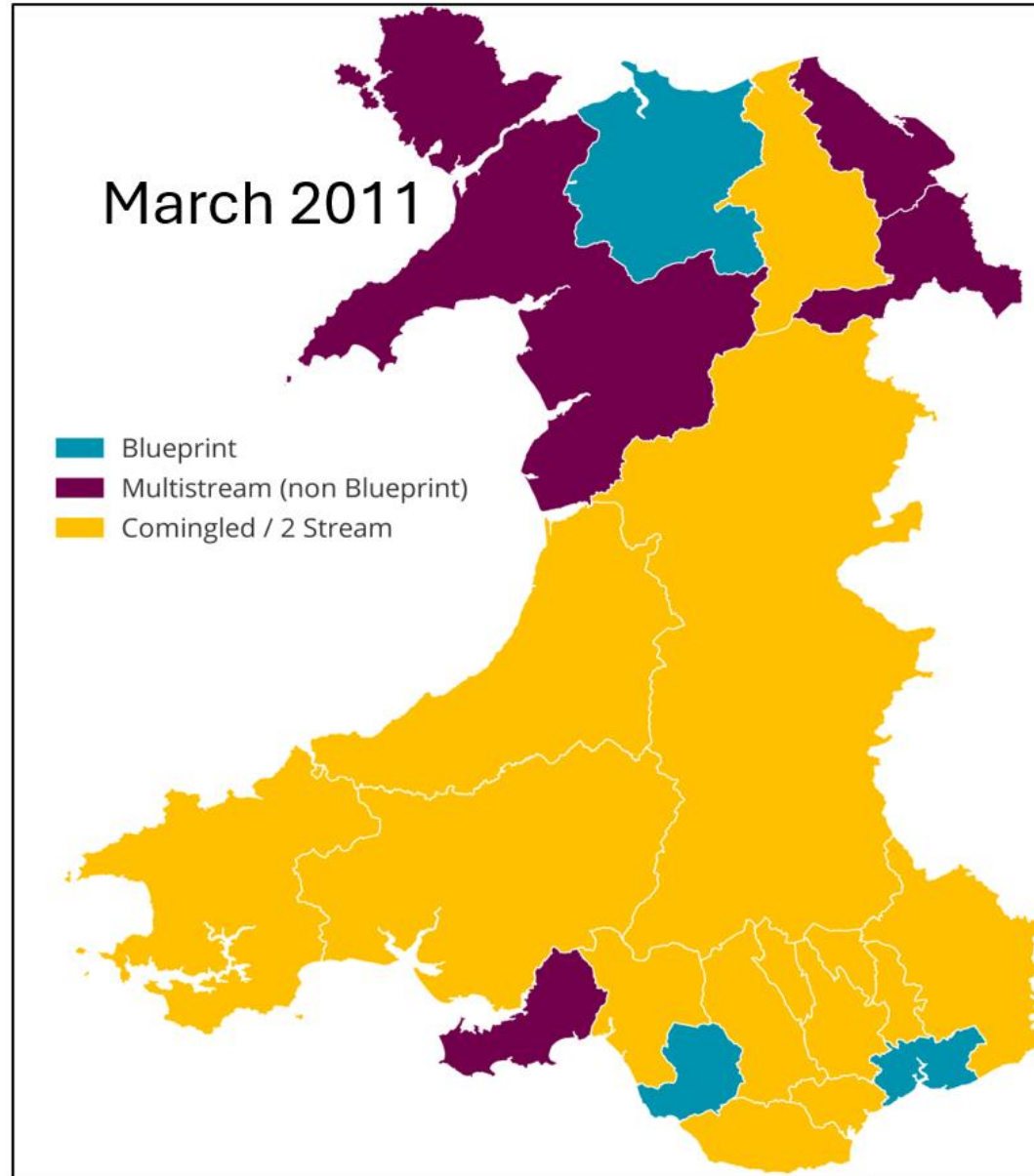


Co-mingled feedstock

- Up to 25% non-glass content
- High percentage of small pieces
- Lower yield:
 - 80% to remelt
 - 20% to aggregate



Consistency: Kerbside Collection Method for Household Recycling in Wales per Local Authority – 2011 & 2024



Performance comparisons for waste-from-households recycling rates for our 22 Local Authorities

Local Authority	WfH recycling rate 2022-23	Collection system
1	66.4%	Kerbside sort
2	65.6%	Multi-stream
3	63.9%	Kerbside sort
4	63.7%	Kerbside sort
5	63.2%	Kerbside sort
6	62.6%	Multi-stream
7	60.2%	Twin-stream
8	59.1%	Kerbside sort
9	58.1%	Kerbside sort
10	57.6%	Co-mingled
11	57.0%	Kerbside sort
12	55.9%	Kerbside sort
13	55.8%	Co-mingled
14	55.2%	Co-mingled
15	55.2%	Kerbside sort
16	54.7%	Co-mingled
17	54.0%	Kerbside sort
18	52.4%	Kerbside sort
19	52.2%	Kerbside sort
20	51.5%	Kerbside sort
21	49.7%	Kerbside sort
22	45.3%	Co-mingled
Wales	56.9%	

Source: Natural Resources Wales/ WasteDataFlow (unpublished)

Comparing satisfaction in Wales with the UK average



Figure 2: Satisfaction with aspects of the waste and recycling services

Q. Please rate your recycling and waste collection on a scale from 0-10 on the following aspects.
Base: 1,041 adults in Wales with responsibility for dealing with the rubbish and recycling. Nov 2022



Multi-stream collections – slaying the myths

Myth	Our response
“You get higher recycling rates with single stream co-mingling”	That’s not our experience in Wales
“People are happier with a single bin for dry mixed recycling”	That’s not our experience in Wales
“Co-mingling is cheaper than multi-stream collections”	That’s not our experience in Wales
“Co-collecting garden and food waste is ok”	Over time all (100%) of our 22 Local Authorities decided it is better to collect food waste separately from garden (yard) waste
“Multi-stream collections require multiple vehicles”	Not necessarily, all the materials can be collected in a multi-compartment vehicle on a single pass

Improving recyclate collection effectiveness (and efficiency) in Wales

Capture rates of the main kerbside collected recycling materials – comparing 2022 with 2015

Category	2015	2022
Recyclable paper	80%	75%
Recyclable card	73%	87%
Dense plastic	66%	78%
Glass	87%	92%
Ferrous metal	74%	84%
Non-ferrous metal	49%	70%
Total dry recyclables	72%	84%
Food	47%	56%



Common steps to improve the effectiveness of dry recycling capture in Wales



Obviously the first step is to make sure the service collects the requisite materials (recyclable sub-fractions) from at least households and non-domestic premises, and ideally also from other sources – eg. HWRCs, litter bins and litter ground clearance.

Then the capture rate needs to be increased. This can be done through a range of activities, often all of them, eg.

- 1) Restricting residual – frequency, size of bin, number of sacks etc
- 2) Weekly collection of dry recyclables.
- 3) Communication campaigns to exhort people to recycle the right things – including from all areas around the house.
- 4) Door knocking on those who don't recycle (often the first part of 4)).
- 5) Enforcement on those who don't recycle or who don't recycle properly [Welsh LAs have the power to do this]
- 6) Improving recycling at HRRCs – Aim for 85% plus recycling. Require inspection of black bags.
- 7) Improving recycling of litter.
- 8) Improve recycling of trade waste – made easier by the separation requirements brought in on 6 April 2024 under the Workplace Recycling Regulations



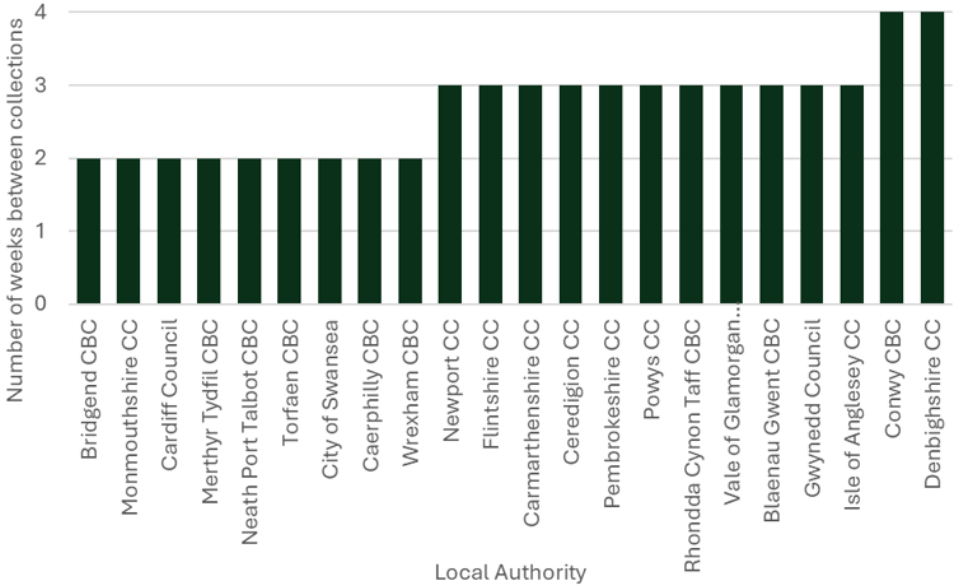
Common steps to improve food waste capture in Wales



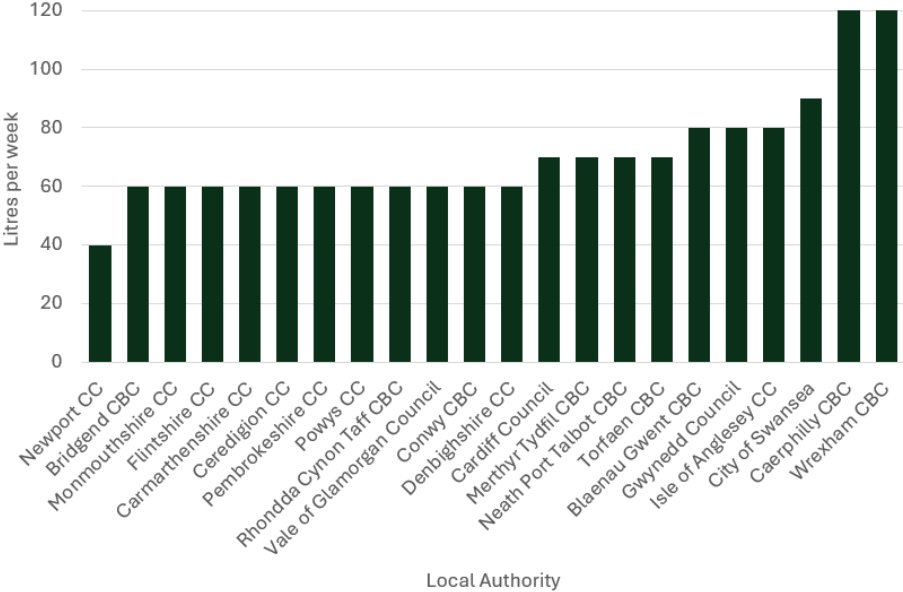
- Weekly separate collections of food waste (NOT co-collected with garden waste)
- Universal provision (c100% coverage since 2014)
- All residents provided with kitchen caddies
- Most provided with free liners
- Residual restrictions – reduced frequency (all 2 weekly or less), smaller bins or restriction on number of bags
- Stickers on residual bins – ‘no food waste’
- Intensive communication campaigns
- Door knocking
- Enforcement (s46 EPA 90)

Residual waste collection restrictions by local authority

Residual waste frequency per local authority - number of weeks between collections – 41% on 2 weekly, 50% on 3 weekly, and 9% on 4 weekly.



Residual waste weekly capacity (litres) in Wales 4% with 40 litres, 50% with 60 litres, 18% with 70 litres, 14% with 80 litres, 4% with 90 litres, and 9% with 120 litres.



Newport Council in SE Wales introduced a three-weekly non-recyclable waste collections service in June 2023. This decision followed a detailed modelling exercise that quantified the expected impact of both three-weekly and four-weekly collection cycles. The new three-weekly schedule reduced residual waste capacity for each household to 40L per week, whilst retaining the existing 120L bin.

<https://www.wrap.ngo/resources/case-study/welsh-government-collections-blueprint-2025/reducing-residual-waste-capacity-newport>

Communication and Behaviour Change – a local example

Pembrokeshire County Council
Cyngor Sir Penfro



Consistent branding and message

- Love Pembrokeshire.... Love Recycling Campaign
- Literature, Website & Social Media
- Video's – instructional and viral hits (Elvis and Queen parody's)
- Local Environment Advisors & Compliance Model – “Keeping up with the Jones”
- Facebook Live's, Roadshows and County Show
- Community Groups and Schools

And also:

- Calendars & My Account “Notify” email collection reminder
- WRC booking system
- Pembrokeshire Recycles linked to national campaigns Wales Recycles.
- Contamination tags and side waste stickers
- Education Centre



<https://www.youtube.com/watch?v=ryVGjh7dlkU>



National 2023-26 Campaigns – Food waste focus

Food waste is the most significant recyclable material found in the rubbish bin, with most of it being edible food. Saving food from the rubbish offer the greatest opportunity for impact. The most recent wave saw the campaign successfully evolve from food waste recycling focus, to an integrated food waste prevention and recycling campaign. Bursts 6 and 7 will continue to build on this momentum to elevate and further embed behaviours.



Burst 1

Feb 2023 –

Food recycling focus

A focus on food waste recycling only with an emphasis on energy creation and tackling the “yuck factor”.



Burst 2

Sept 2023 –

Introducing prevention

Planting the seed for prevention through specific comms such as influencers, the PR, blogs and a new video.



Burst 3

March 2024 – Fully integrated campaign

Shaped by valuable insights, we developed & delivered a 1-month campaign targeting both behaviours equally with a new visual style.



Burst 4

Oct 2024 – Fully integrated campaign

Building on burst 3 and emphasising Wales position as No.2 recycler with a pledge and competition, launching in Recycle Week.



Burst 5

March 2025 – Fully integrated campaign

Capitalising on springtime and all the celebrations and national events taking place during March.

**Consistent recycling
where-ever anyone works,
rests or plays in Wales**

**The Workplace Recycling
Reforms 2023**

In force from 6 April 2024

The separation requirements for occupiers of non-domestic premises and those who collect and handle such wastes

The recyclable materials specified to be presented separately for collection, collected separately, and kept separate post collection, are:

- glass
- paper and card
- metal, plastic, and cartons and other fibre-plastic composite packaging of a similar composition
- food waste from premises producing 5kg of food waste and more/week
- unsold small waste electrical and electronic equipment (sWEEE) (all sWEEE from April 2026)
- unsold textiles

Important:

- Covers typical household-waste-like wastes (only specified 'sub-fractions of each material')
- Single stream co-mingling/dry mixed recycling will not be allowed
- There are no 'TEEP' provisions (other than mixing of metal, plastic and cartons is allowed)
- Hospitals to comply from April 2026.



Workplace recycling communications (social and broadcast media) campaign visuals



Support and info available – case study videos

Includes:

Bluestone
Sinclair Used Cars
Canton Fruit Market
Cardiff University
Ysgol Rhiw-Bechan
Mermaid Quay
Three Cliffs Café
South Wales
Touring Caravan Park
Hay Festival
Care home
Hospital
(364) Workplace Recycling Case Study Films - YouTube



From trash to landfill, to treasure to manufacturers – our 25 year recycling journey



95% landfill / 5% recycling



<1% landfill / 67% recycling

Diolch / Thank you



Gweithredu ar
Hinsawdd Cymru

Climate
Action Wales



reduce arbed
reuse ailddefnyddio
recycle ailgylchu