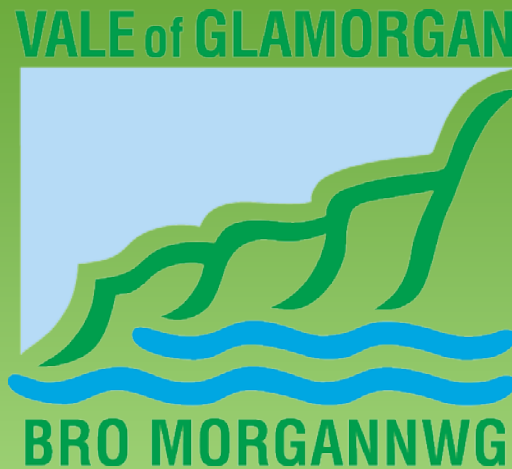


WASTE MANAGEMENT UPDATE



**By Colin Smith – Operational Manager
Neighbourhood Services [Operations]**



**Bro Morgannwg yn ailgylchu
Vale of Glamorgan recycles**

WASTE MANAGEMENT UPDATE

- Explanation how we treat, recycle and dispose of recycling and waste
- Recycling rates
- Future service changes
- Performance of service changes to date
- Our aims as a country
- HWRC Llandow



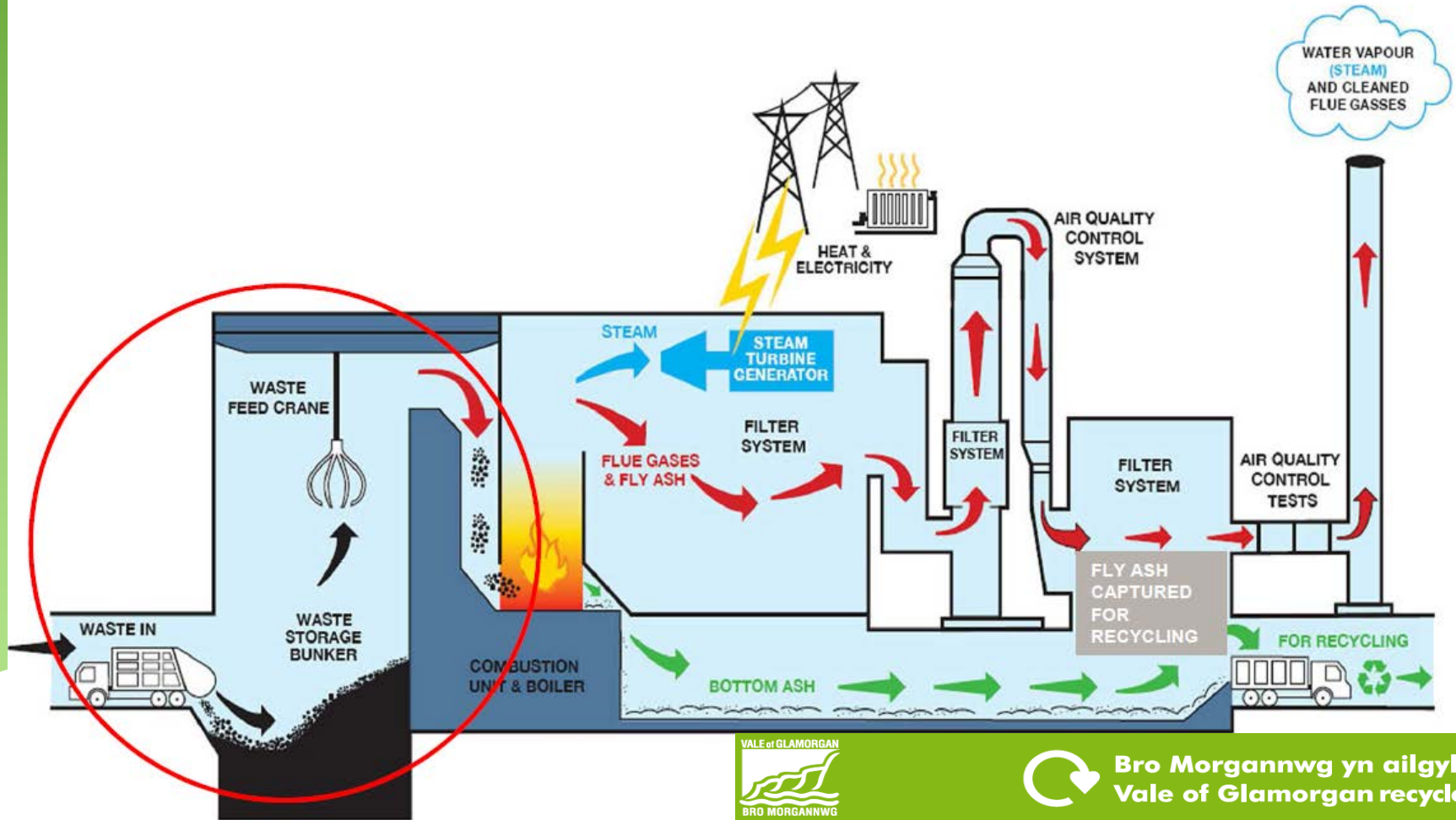
Waste Disposal

- Treated at Viridor's Energy Recovery Facility (ERF) as part of the Prosiect Gwyrdd (PG) Initiative
- A 25 year contract (as of 1st April 2016) with Cardiff, Newport, Caerphilly, Monmouthshire and VoG
- Treats black bag waste from collections, street cleaning, HWRC's and bulky waste (ex. metals)
- 350,000 tonne pa facility and largest ERF in Wales (expanding up to 420,000 tonnes)
- A facility that can generate enough energy to power over 50,000 homes



Trident Park ERF

ERF Process - *Delivery*



Bro Morgannwg yn ailgylchu
Vale of Glamorgan recycles

Organic Waste (Food & Green)

- Two new facilities procured jointly with Cardiff City Council
- 15-year contract as part of Welsh Government's (WG) Food Waste Treatment Programme
- Food waste treated at a new Anaerobic Digestion facility (AD) located in Cardiff and has energy recovery
- A green waste Open Windrowed Compost (OWC) facility at Cardiff City Council's Lamby Way Depot
- Both built by Kelda Organic Energy (Cardiff) now owned by Welsh Water
- Cardiff host authority and Vale has an IAA with Cardiff Council

Food Waste - AD Facility

- Anaerobic Digestion (AD) to process food waste
- 35,000 tonne facility
- OUTPUT – methane-rich biogas and separated digestate for agricultural use
- Produces enough energy to power 4,000 homes
- Reduces the release of harmful landfill gases into the atmosphere
- Zero waste to landfill



Green Waste - Open Windrow Composting (OWC)

- Collected, shredded and stored in rows
- Rows are turned to improve oxygen content, mix in or remove moisture, and to redistribute cooler and hotter portions of the pile
- Output - compost



DRY RECYCLING

- Paper, metals, glass, plastics, cardboard
- Recycling bulked in Cowbridge
- Collected by Casepak Ltd and transported to Leicester
- Contract with Casepak Ltd to process and sort materials (expires April 2019) through a Materials Recovery Facility (MRF)
- Alternative site for interim arrangement currently being procured



Where does our recycling end up?

Material	% of MRF Output	Destination
OCC (Old Corrugated Cardboard)	1.24	China 76% / India 14% / Indonesia 10%
Mixed Papers	40.42	India 54% / Indonesia 26% / UK 11% / Germany 9%
HDPE Plastic (High Density Polyethylene) <i>Milk jugs, cleaning agents, shampoo bottles etc..</i>	0.63	100% UK
PET Plastic <i>Water bottles, cooking oil bottles etc..</i>	2.74	France 39% / Turkey 36% / UK 25%
Mixed Plastics <i>Mixed pots, tubs, trays</i>	6.98	France 47% / UK 37% / Belgium 7% / Spain 6% / Turkey 3%
Film	7.76	Turkey 84% / Poland 14% / UK 2%
Glass (0-10mm)	2.21	UK 100%
Glass (10-40mm)	26.07	UK 100%
Steel	4.74	UK 100%
Aluminium	1.2	UK 67% / Germany 33%
Post-Sort Residue	6.01	Holland 89% / UK 11%
<i>Note: Casepak plant output</i>	100%	



Recycling rates

- **Current recycling target set by WG is 58% (2015/16)**
- **Targets now statutory within Wales Waste Measure 2010**
- **Next statutory target is 64% 2019/20 and 70% by 2024/25**
- **Our performance (recycling rate) for 2018/19 will be approximately 64%**
- **Black bag restrictions introduced September will increase performance during target year**
- **Failing to achieve statutory recycling targets = £200 per tonne fines**

Future service changes

- Next service change is to implement a source separated recycling collection service (2019/20)
- Necessary as a result of implementing Article 11 of the EU Revised Waste Framework Directive (January 15) through Waste Regulations (England and Wales) 2011 (amended 2012)
- Places a duty to collect separately at least paper, metal, glass and plastics
- If comingled a necessity test and TEEP assessment must be undertaken. Must achieve high quality recycling and no worse of than collecting separately
- Time is right for VoG to change to capture financial support
- Only compliant Council's considered for WG's collaborative change funding (CCP)
- Source separated recycling benefits – Lower revenue costs, reduced carbon footprint, higher quality material, minimal contamination, captures local/UK markets, adds to the circular economy agenda, resource orientated (creates jobs), compliant with current guidance/legislation
- VoG secured capital funding of £3.5m for 2018/19 to introduce service change
- VoG prioritised for further funding 2019/20

Future Waste Changes

- Implementation of the 'Collections blueprint'
- Collections from late summer 2019 in the Vale (TBC)
- Spring 2020 for Barry and late summer 2020 for Penarth (TBC)
- WTS being developed, containers and vehicles selected



Waste Transfer Station (WTS)

- Interim site for service roll out secured in Cowbridge
- Design and remedial works required to accommodate sorting
- Draft design for permanent site completed
- Securing site, ground investigations and detail design in progress



Performance of Service Changes to date

- 30% decrease of residual waste from kerbside collections
- 59% decrease of residual waste at HWRC's
- 26% increase in food waste recycling
- 20% increase in dry recycling

Source: WDF quarter 3 - 2018/19



**Dros y cyfyngiad 2 fag du
2 black bag limit exceeded**

Ewch â'ch bag(iau)
ychwanegol i mewn a
gwaredu unrhyw
ddeunydd ailgylchadwy.

Please take your
extra bag(s) in and
remove any
recyclable materials.



www.valeofglamorgan.gov.uk/bagiadu
www.valeofglamorgan.gov.uk/blackbags
CIV@valeofglamorgan.gov.uk
01446 721536



Our aims as a country

2025: Towards Zero Waste

Significant waste reduction (including reuse) (27% reduction)

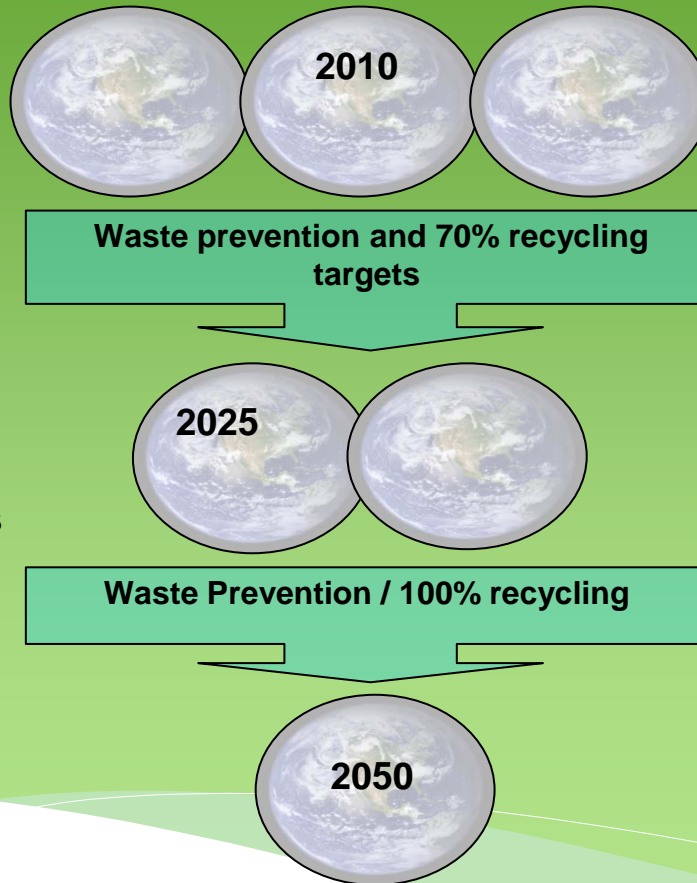
Recycling rate of at least **70%**

AD food waste priority

'Closed loop recycling' systems (high quality, separate collection)

Residual waste to high efficiency EfW

As close to **zero** landfill as possible



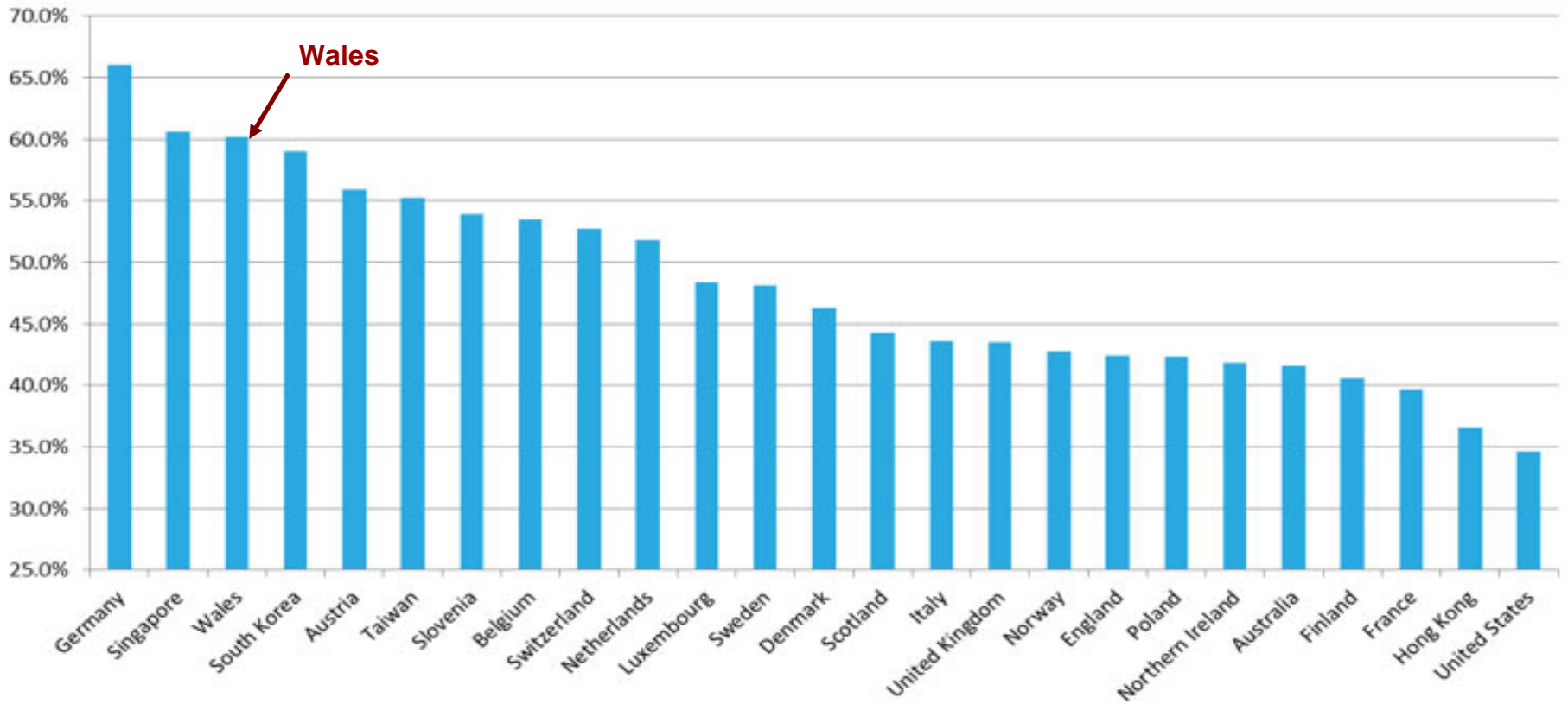
2050: Achieving Zero Waste

Reduce our share of Wales' ecological footprint to 'one Wales: one planet' levels by 2050 (**65%** reduction of waste)

Produce no residual waste, through more sustainable consumption and production - any waste that is produced is re-used/ recycled (at **100%**).

Our performance as a country

Reported Recycling Rate



Source: Eunomia Consulting 2017



Bro Morgannwg yn ailgylchu
Vale of Glamorgan recycles

HWRC Llandow

- Lease expires December 2019
- Current site not suitable for another long term arrangement
- Efforts to improve current site unsuccessful
- Future options being considered
- Relocation on existing site and an alternative location possible
- Intension to invite expressions of interest from land owners



Any questions?



Bro Morgannwg yn ailgylchu
Vale of Glamorgan recycles