INTERNATIONAL FORUM ON MUNICIPAL WASTE MANAGEMENT

GIRONA 08/02/2017

GIRONA TRADE FAIR
INTERNATIONAL FORUM

Recycling - Waste In Progress

CITY OF CARDIFF COUNCIL

Cllr Bob Derbyshire &

Tara King- Assistant Director





Where is Cardiff?





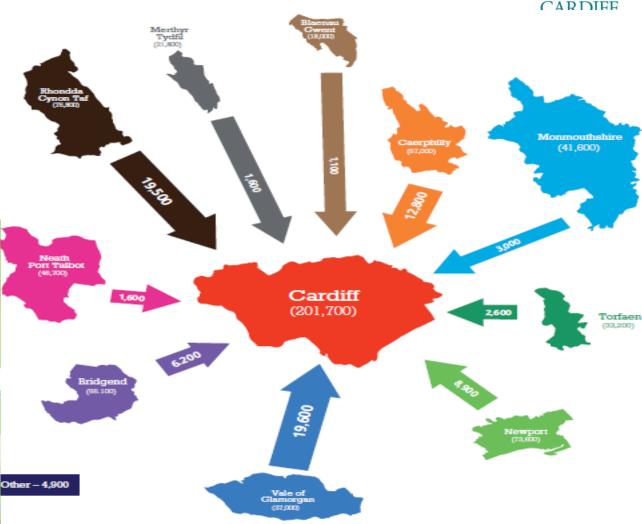


Cardiff City Region



80,000 Commuters











Who you might know....















difference wahaniaeth

Birth of a city









A City Reborn











Sporting Fan Zones









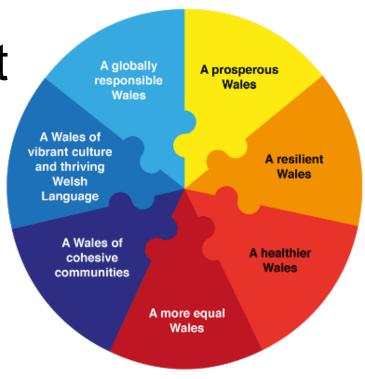




A small capital with sustainability at its heart

Future Generations Act

Local Government in Wales has a legal duty to plan for the long term and follow a balanced approach to development.







Future Generations Act



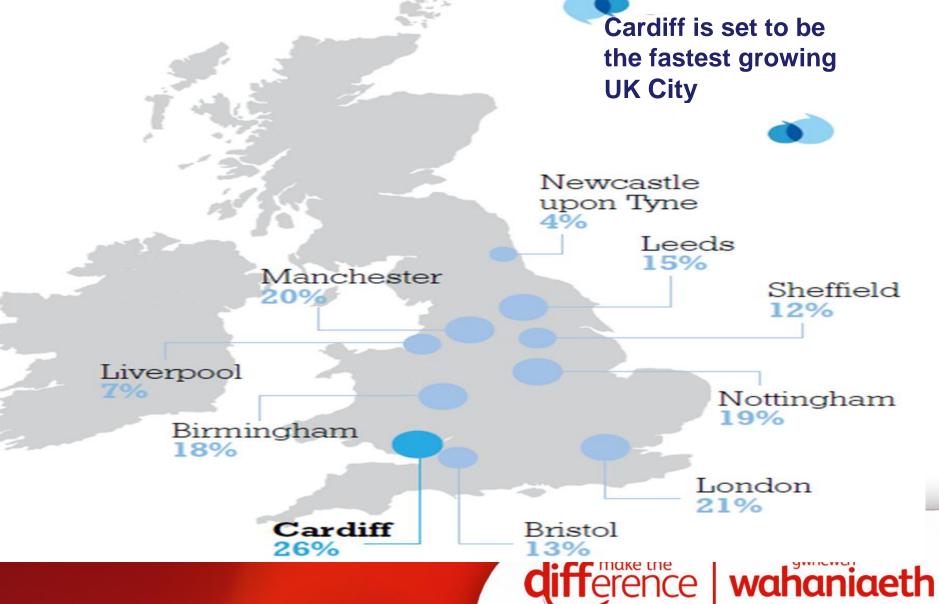
"What Wales is doing today the world will do tomorrow" – United Nations



The Challenge of Growth

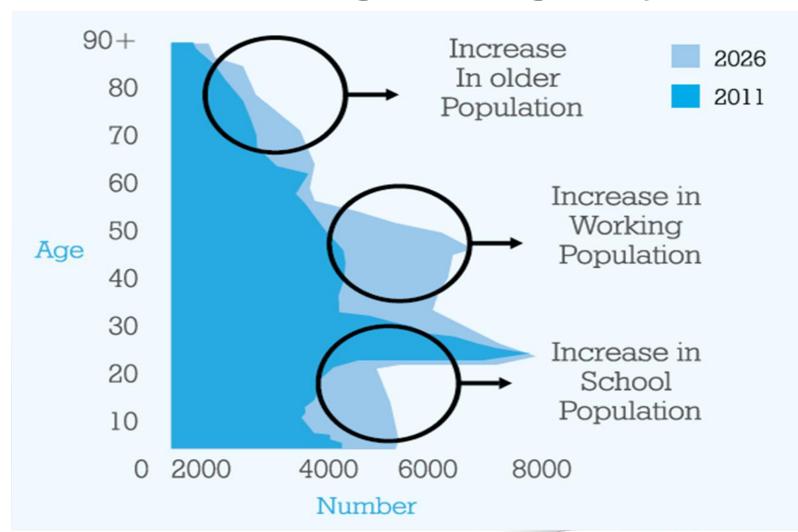
Fastest growing City in the UK





Impacts of a growing City







The Challenge of a Diverse City

• 354,294 residents (2014)



- 153,351 households
- 2,465 people per square kilometre
- Students population making up 20% of City
- Busy city centre, 24/7 city
- Major events
- Cultural Diversity

















The Challenge of Legislation:

Tough Targets!

- Strong Welsh legislative drivers and statutory recycling targets which exceed that of the EU.
- MSW includes domestic, commercial, rubble and street cleansing.
 - Does not include tonnages to energy from waste
 - Includes Recycled bottom ash







The Cardiff Recycling Journey

In year 2001 we only recycled 4%

In house treatment and landfill



The Start of the Journey



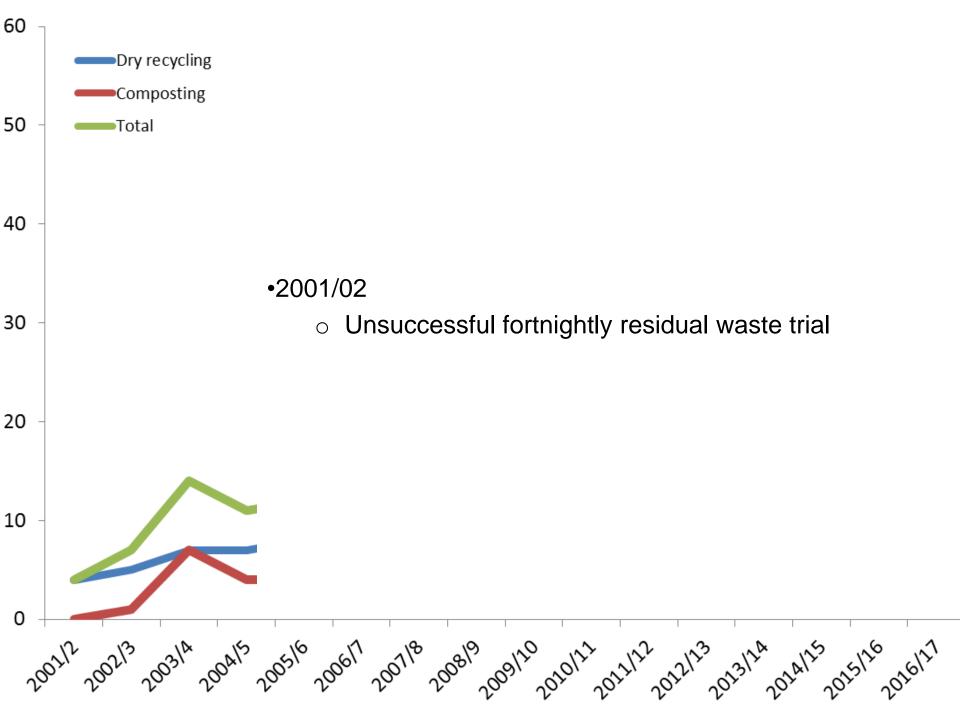
1990 +

- "green bag" dry recycling service £1 per roll of 10 bags, fortnightly collection, opt in service 50% coverage of the city.
- Small Materials Recovery Facility.

2000/01

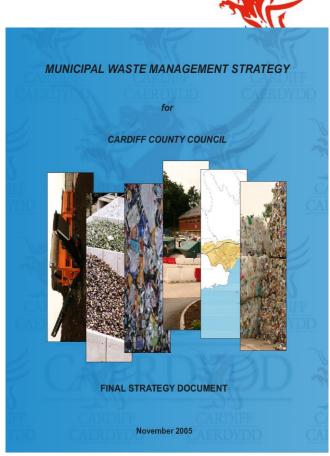
- Welsh Government preferred policy (Towards zero Waste).
- Landfill Tax increasing £8 per year, every year going forwards.
- Cardiff Council 4% recycling, limited dry recycling coverage, green waste and metal recycling at Household Recycling Centres.





Building Momentum

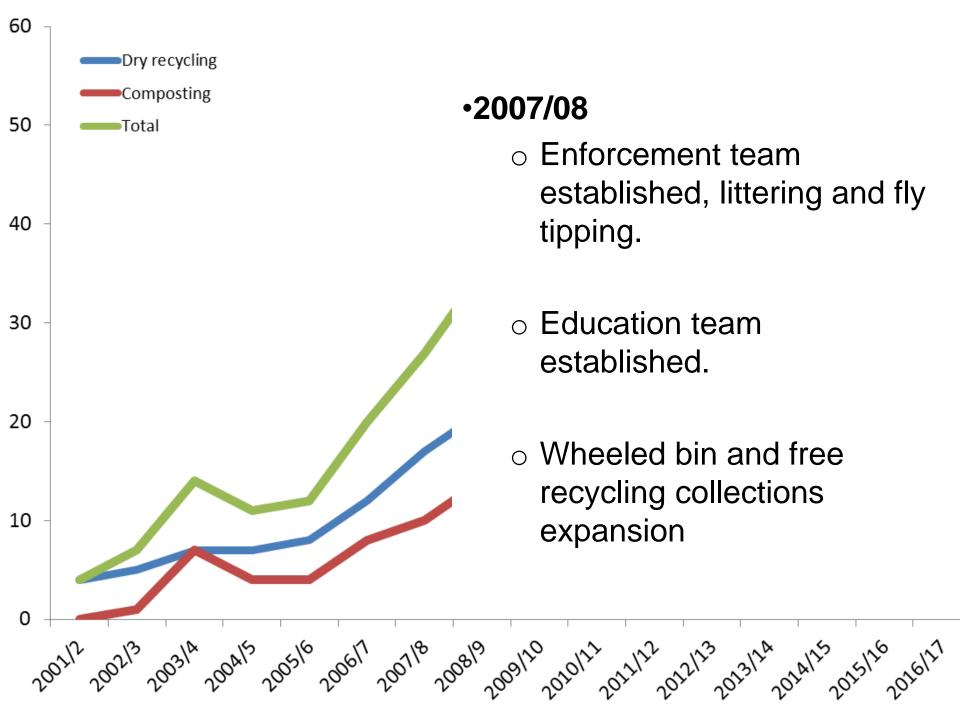
- 2005/06
 - First waste strategy published
 - Wheeled bin and free recycling collections expansion.
- 2006/07
 - Residual waste partnership agreed
 - Discussions on statutory recycling targets and potential fines for failure (£200/tonne).
 - Wheeled bin and free recycling collections expansion.











Tackling the Problem

CARDIFF

2008/09

- Build waste transfer station.
- Extended MRF to 35,000t.pa.
- Weekly co-mingled green waste and food waste collections.
- Double shifting of collection fleet.

· 2010/11

- WG set Statutory recycling and Landfill Allowances Limits also at £200 per tonne if exceeded.
- Enforcement team widens powers.





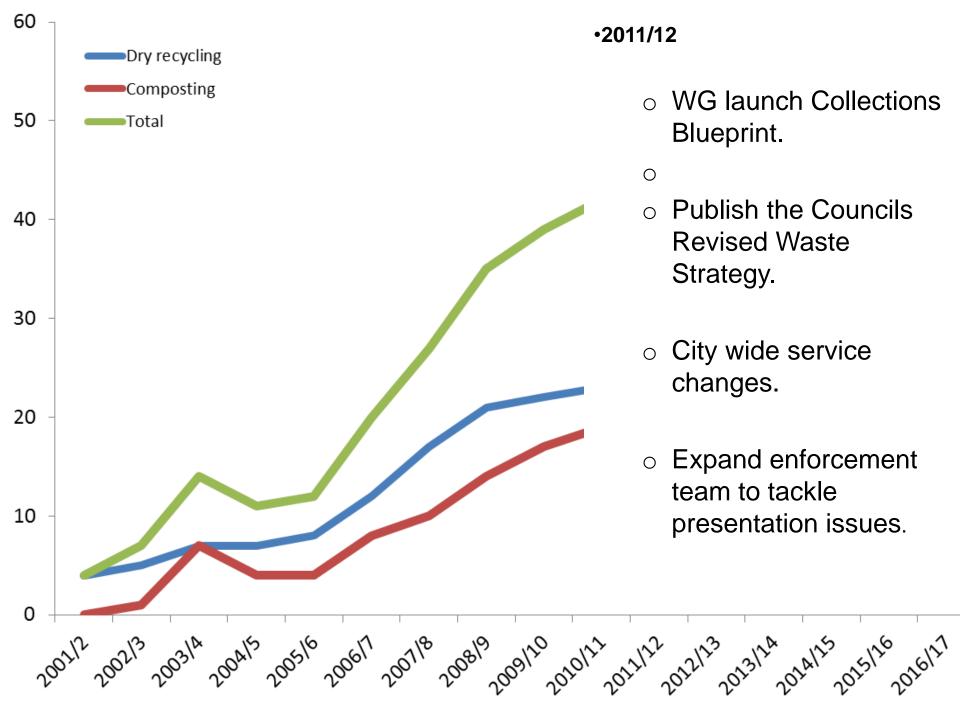


Tackling the Problem









Some Big Challenges



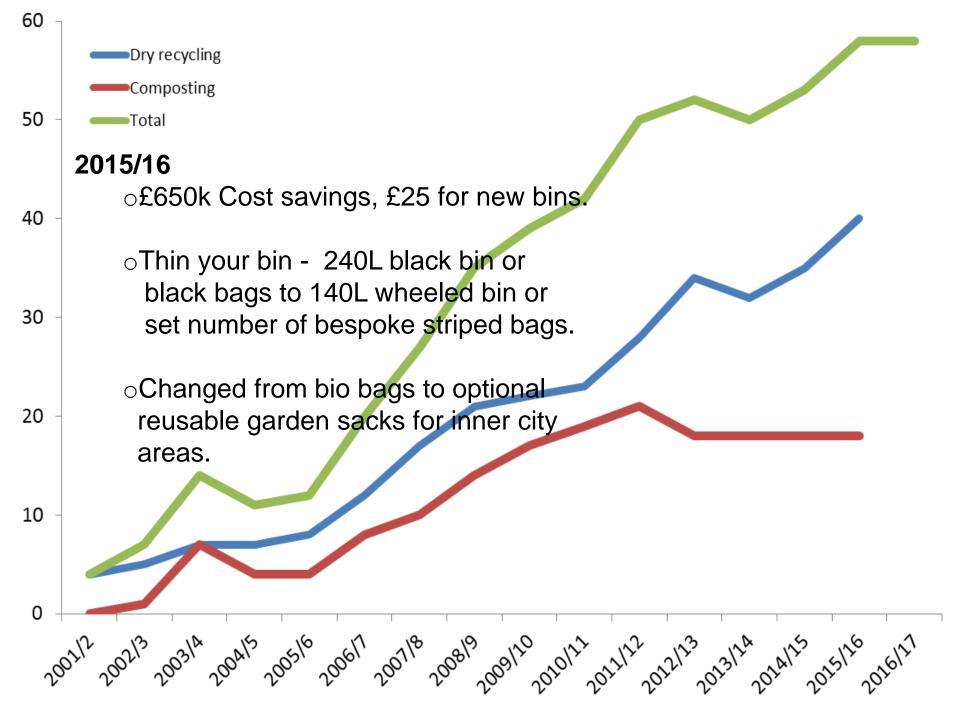
2013/14

- Failed the statutory target
- Seasonal green waste collections (monthly between October and March).
- Post sorting to secure recycling performance.

2014/15

- Closure of Waungron Road Household Recycling Centre.
- Commencement of Prosiect Gwyrdd Contract with Viridor.





The ongoing projects



2016/17

- o Building a new Household Recycling Centre.
- Mattress recycling.
- Commissioning of food treatment facility in partnership with Vale of Glamorgan.
- Some secondary sorting.
- Free recycling & reuse bulky collection service.

2017/18

- Reuse outlets
- Carpet & hard plastics recycling.
- Nappy recycling.
- Materials Reclamation Facility (MRF) expansion.







Headlines



Cllr Bob Derbyshire should beUnreal BobDerbyshire @banbobsbins



'In Bin Gate you have to tread more carefully than if you were picking your way through a landfill with bare feet'

Cardiff Councillor and Cabinet Member with special (ir)responsibility for the Environment. Serial purchaser of Wheelie Bins. Parody Account.

Cardiff Against the Incinerator



Warnings for Cardiff residents putting out wrong waste

Cardiff residents return 'waste of money' wheelie bins

Waste from across Wales could be brought to a **Cardiff incinerator**

The #bingate controversy raged on this week with the council beginning its new waste collection regime

Cardiff's seagulls must be plotting their revenge on the council over 'bin-gate'





Where are we now and where do we want to get to?

Municipal Solid Waste Targets

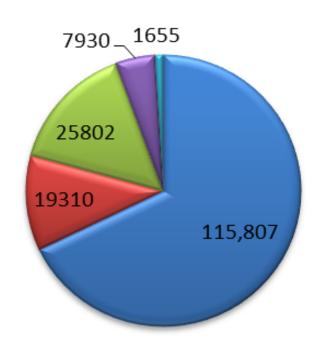


Target on waste collected by Local Authorities	2014/15	2015/16	2019/20	2024/25
Minimum overall recycling	52%	58%	64%	70%
Maximum level of landfill	-	-	10%	5%
Maximum level of energy from waste	-	42%	36%	30%
Biodegradable Landfill Allowance	43729t	41692t	33557t	-



MSW recorded from 2015/16

Total Waste Generated by Operational Area 2015/16 (Tonnes)



■ Domestic

■ Commercial

■ HWRC

Street Cleansing, litter, fly tipping DYDD

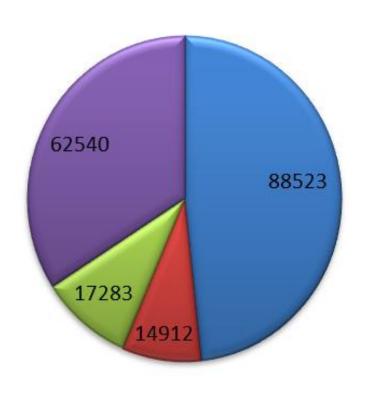
■ Other



MSW Treated in 2015/16



Waste Processing 2015/16



- Residual landfill, EFW, including MRF reject
- AD
- Compost
- Recycling

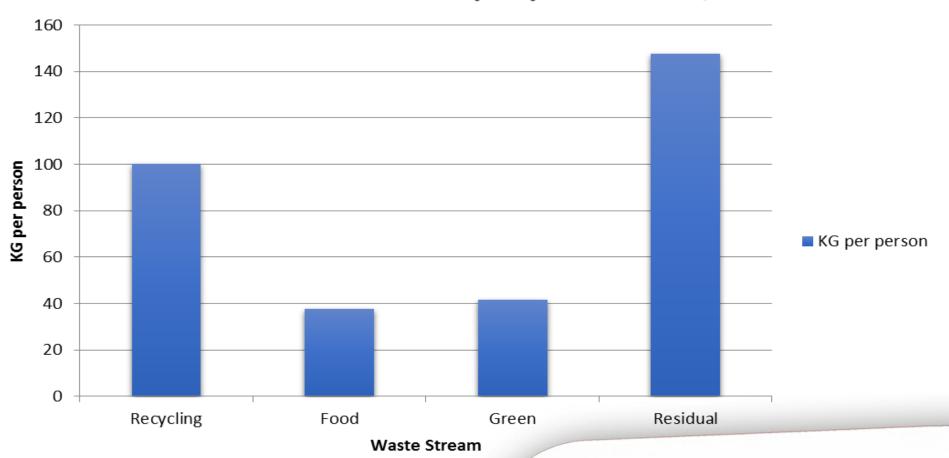




waste collected for 2015/16



Domestic waste - KG per person 2015/16



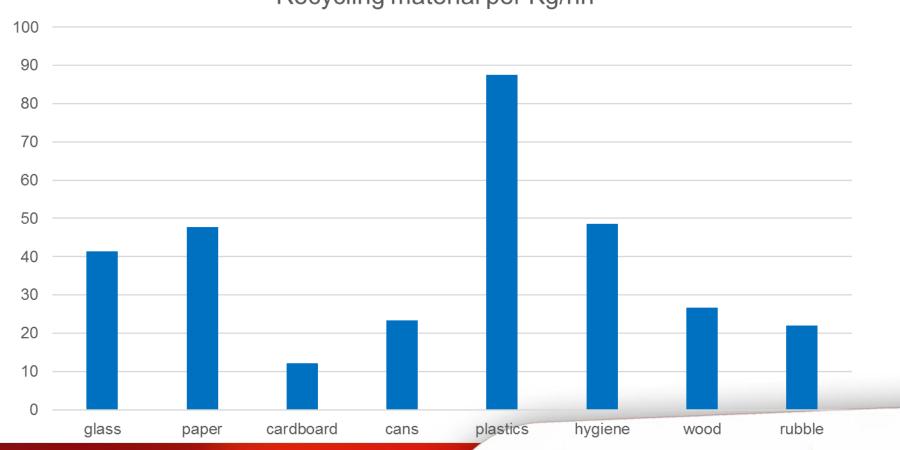




Dry Recycling



Recycling material per Kg/hh





What are we doing?

How recycling changes in Cardiff will affect you

MAIN AIMS

Increase recycling and composting rates by reducing black bag/bin waste to hit Welsh Government's recycling targets. For every 1% we miss we face a £400k fine

RECYCLING TARGETS

2014/15 recycling target 2015/16 recycling target Welsh Government recycling target by 2025



& MORE

MAIN WASTE COLLECTION CHANGES

To help you do this we are making these changes

In bag areas around the city

HOW WE COLLECT NOW











HOW WE COLLECT NOW









Reduce waste

Recycle more

Compost more Compost more

Recycle more

Compost more Compost more

HOW WE WILL COLLECT IN FUTURE



ach household will setve Council issued etriped bags, twice a ir, for general waste. other types of bag will e collected. You will eive enough bags to ut out 3 or less per fortnight.



Green recycling bags will continue to be collected as normal every week



your brown kerbstde caddy for your food waste every week



Continue using Biobags for garden waste will be replaced with reusable sacks, collected as normal

Reduce waste

HOW WE WILL COLLECT IN FUTURE



Around 90,000 households with 240L black bins will have those exchanged for smaller 140L bins. collected every fortnight



Green recycling bags will continue to be collected as normal every week



Continue using your brown kerbside caddy for your food waste every week



Continue to use your green bins for garden waste as normal



Around 5,500 households to have a new 140L black bin and reusable garden sacks - this accommodates properties that cannot store a 240L green bin



Around 4,500 households which currently use black bags will receive a new 140L black bin and a 240L green garden waste bin, instead of red-striped bags

Registered larger families will have additional support. The hygeine collection service will continue.



Residual Waste

- Collected weekly in either 140 bin or red striped bag
- Restrictions in place for bag properties (up to 3 per fortnight)
- Larger bins provided on assessment of family size







Recycling

- Weekly collection in
- Co-mingled in single use green bags
- Unlimited use of semi-transparent green bags

 Roll of 26 bags supplied from, public buildings, order online, phone or request sticker on the last bag.
 Crews carry stock







Food Waste

- Collected weekly
- Provide 35l kerbside caddy, 7l kitchen caddy and caddy liners free of charge
- Collect roll of 12 liners from approved stockist, order online or phone.
 Replacement tag for crews to be introduced. Crews carry stock.
- Use regional or national frameworks
- Provide food liners for free
- Biodegradable corn starch
- Encourage usage







Garden Waste

- Fortnightly in summer, monthly in winter
- 240l, 140l wheeled bin or opt in reusable garden sack







Hygiene Collection

- Collected on opposite week to residual waste
- Yellow and black 'tiger bags'.

Flats

- As above but residual waste and recycling collected in larger 660/1100 litre containers
- Food waste collected in 240 litre bins
- Universal locks on communal bins







- In addition...
 - £25 replacement charge for all lost or stolen wheeled bins.
 - Six month supply of bespoke bags delivered every six months (free)
 - Garden sacks £2 for those that choose to opt in.
 Lost/stolen sacks are also chargeable.
 - Additional waste collected for a fee. £10 for up to 5 bags,
 6 bags or more, £1.85 each.
 - Enforcement activity on presentation windows
 - Assisted lift collections for disabled, elderly



Commercial Waste Services

- **CARDIFF** CAERDYDE
- √ 7 day a week service, flexible enough to support SMEs as well as multi-million pound contracts.
- ✓ Contracts with over 4,000 businesses in the area.
- ✓ On-board weighing systems.
- ✓ In cab device and real time route optimisation.

The service:

- Residual Waste
 - o 60l sack, 240/660/1100 litre bins
- Recycling
 - o 60l sack, 240/660/1100 litre bins
 - Separate glass 240l wheeled bin
 - Cardboard bundle labels
- Food
 - 35l Kerbside caddies
 - o 140l or 240l wheeled bins















Street cleansing

- Specialist City Centre team, additional resources called in for high profile events.
- 7 day/week operation.
- +2500 litter bins
- Needs based cleansing demand, rather than a rota.







Customer engagement

- Direct mailings
- Radio adverts
- Social media
- InCardiff (local newspaper)
- Screen advertising in City Centre
- Vehicle livery
- Press releases
- Literature and leaflets
- Outreach events
- Door knocking
- Forming partnerships Students Union, Community Councils etc.
- Volunteer groups















Recycle Week 2016

reduce







GARDEN WASTE WINTER COLLECTION DATES DYDDIADAU CASGLIADAU GAEAF **GWASTRAFF GARDD**

aste is collected less often in the winter. Cesglir gwastraff gardd yn llai aml yn y gaeaf.

MONDAY	GARDEN WASTE / GWASTRAFF GARDD	DYDD LLUN
Caerau	14/11/16 28/11/16 26/12/16 23/01/17 20/02/17 20/03/17	Caerau
Ely 🗼 🕁	14/11/16 12/12/16 09/01/17 06/02/17 06/03/17 03/04/17	Trelá
Creigiau Fairwater St Fagans	07/11/16 21/11/16 19/12/16 16/01/17 13/02/17 13/03/17	Creigiau Y Tyllgoed Sain Ffagan
Radyr, Pentyrch Morganstown Tongwynlais	07/11/1/6 05/12/16 02/01/17 30/01/17 27/02/17 27/03/17	Radur, Pentyrch Pentre-poeth Thongwynlais

Canton	08/11/16 22/11/16 20/12/16 17/01/17 14/02/17 14/03/17	Treg
Butetown Grangetown	15/11/16 29/11/16 27/12/16 24/01/17 21/02/17 21/03/17	But Grange
Riverside	15/11/16 13/12/16 10/01/17 07/02/17 07/03/17 04/04/17	Glan-y
Llandaff North Llandaff Velindre	08/11/16 06/12/16 03/01/17 31/01/17 28/02/17 28/03/17	Ystu Ll Fe







19 20 21 22 23

19 20 21 22 2



Pay as you Throw



- Businesses pay for their collection and disposal.
- Domestic is free within set capacity.
- Additional waste is chargeable, but not encouraged.
- Bulky items can be chargeable, £12.50 for 2 items that can't be recycled.
- Green waste can be chargeable, but free in Cardiff.
- No policy on pay as you throw for weekly collections from Welsh Government.
- Future consideration.



NEIGHBOURHOOD SERVICES - ENFORCEMENT INVESTIGATION 🜋 GWASANAETHAU CYMDOGAETH - YMCHWILIAD GORFODAETH 🖊

Supplementary teams

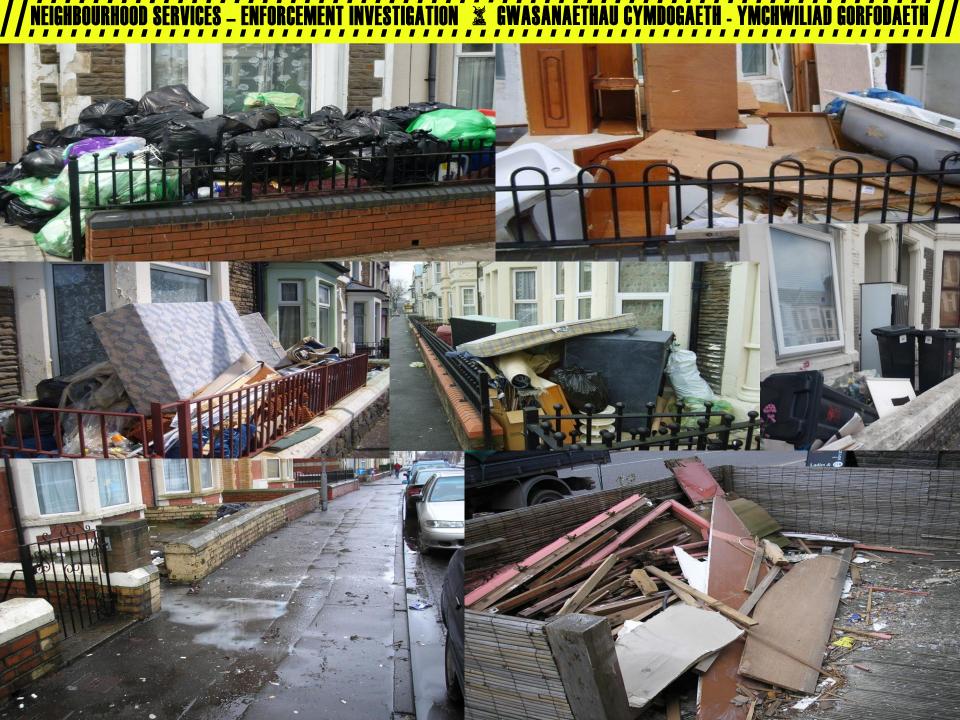
Enforcement team

- Domestic and commercial waste presentation, fines £100
- Littering and dog fouling, fines £80
- Fly tipping, prosecutions
- Duty of care waste transfer notes, fines £300
- Frontages and waste accumulations, works in default
- Enforcement activity on presentation windows









Operations & service delivery

- 20 x 26Tonne (T) Refuse Collection Vehicles (RCV)
- 12 x 18T RCV
- 1 x 15t RCV for country lanes
- 1 x 7.5T RCV for country lanes
- 3 x RCT service reserves
- 68 Drivers, 154 loaders
- Bag areas typically driver plus three
- Bins area typically driver plus two
- Collection window for residents is 6am to 10pm two shifts;
 - o 6am to 2pm
 - o 2pm to 10pm
 - Monday to Friday





Monitoring and evaluation of the collection system



Strengths

- Flexible vehicle usage as co-mingled
- Public support as shown in annual surveys
- +65% participation
- Co-mingled simple system for residents
- Regional working and procurement

Weaknesses

- Tackling flats (25% of housing type)
- Overcoming Language barriers
- Poor recycling and waste presentation in bag areas
- Reducing budgets



Monitoring and evaluation of the collection system



Opportunities

- Charge for green waste or opt in services
- In-cab technologies
- Separate glass collections
- Commercial growth

Threats

- Co-mingled not in line with Welsh Government policy
- Contamination levels
- Buy in from residents for further changes
- Fast growing city
- Global markets



Start up and awareness raising campaigns

- School campaigns
- Student campaigns
- Community litter picks
- Web





- Social Media
- City wide recycling campaigns collection/service changes
- Reminder services app, text, email
- In Cardiff newspaper and web pages
- Literature in different languages and formats





OF THE BLACK



Challenges

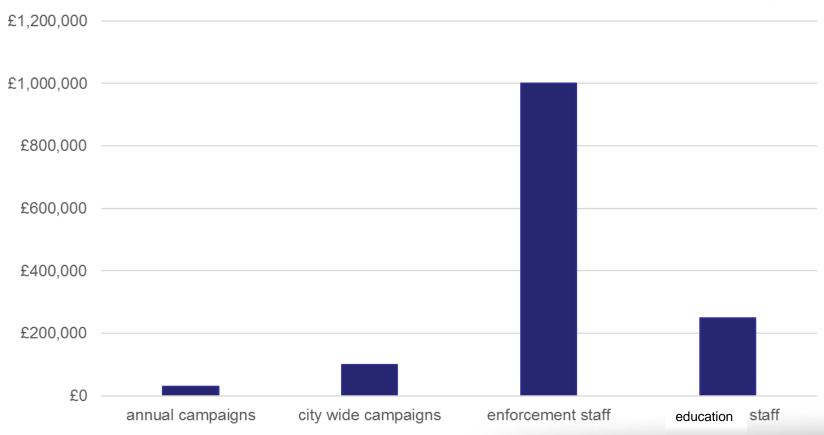


- High student population and transient population
- Houses of Multiple Occupancy additional licensing
- 25% of housing stock are flats difficult to reach
- Multi cultural city language challenges
- Growing customer expectations and standards
- Internal challenges
 - Conflicting priorities budgets v recycling performance
 - Workfirce planning and youth employment



Costs of Changing Attitudes







Future



- Investment in auto sorting technology.
- New technologies
- Staff training and development.
- Third sector partners
- New materials carpets, hygiene waste.
- Increased regional working.
- Looking to best practise to identify solutions.





Diolch Am Wrando Thanks for listening

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