

RECYCLING AND WASTE RESTRICTING PROGRAMME

REPORT OF DIRECTOR OF ENVIRONMENT

AGENDA ITEM: 7

PORTFOLIO: ENVIRONMENT (COUNCILLOR BOB DERBYSHIRE)

Reason for this Report

1. The report builds on the draft 'Outline Waste Strategy 2015 to 2018' that was approved for consultation October 2014.
2. This report seeks approval of the Draft Recycling Waste Management Strategy 2015; the required household recycling and waste collection changes for 2015 (Implementation Phase 1,); it updates the service provision for the household waste recycling centres and reuse of unwanted goods (Implementation Phase 2,) and; sets out further steps necessary to deliver longer term statutory targets such as amendments to kerbside recycling (Implementation Phase 3). The immediate service changes in the Draft Recycling Waste Management Strategy 2015 – 'Implementation Phase 1 - Residual Waste Restriction Programme' are required to support achievement of the statutory recycling target of 58% by the end of March 2016 and also to deliver the savings that were approved in the February Budget setting for 2015/16.
3. The report sets out the above recycling programme as well as its governance arrangements that are proposed to ensure that Cardiff Council meets its obligations under the Waste (England and Wales) (Amendment) regulations 2012 and the subsequent statutory guidance on the separate collection of waste paper, metal, plastic and glass.
4. This report also seeks agreement for the partnership with Welsh Government and other local authorities to support the feasibility assessment and potential progression for regional recycling infrastructure.

Background

5. The Council is bound by a growing umbrella of recycling, waste treatment and disposal legislation to drive forwards waste minimisation, increase recycling and to meet statutory obligations under:
 - a. Waste (England and Wales) (Amendment) regulations 2012

- b. The Landfill Allowances Scheme (Wales) Regulations 2004 for the disposal of biodegradable waste.
 - c. Waste (Wales) Measure 2010
 - d. Recycling, Preparation for Re-use and Composting Targets (Definitions) (Wales) Order 2011 and Regulations 4 and 5 of The Recycling, Preparation for Re-use and Composting Targets (Monitoring and Penalties) (Wales) Regulations 2011 for recycling performance targets.
6. This means that the Council must continue to take preventative measures to ensure future recycling targets are secured and cost efficiencies maximised. In addition compliance with the duties to collect recyclable materials separately and obtain high quality recycling must be tested. This reports outlines the steps that Council are taking to:
- a. Meet the recycling targets and saving requirements for 15/16 through restricting general waste and delivering the approved Household recycling centre changes
 - b. Outline the future position on the recycling collections methodology.
 - c. Seek cost reductions and deliver the most cost effective recycling approach for Cardiff
 - d. Secure high quality recycling
 - e. Reduce our Carbon footprint
 - f. Secure long term regional working and partnerships for recycling.
7. The Welsh Government is working closely with Cardiff to explore the best solution for the Authority under the Waste (England and Wales) (Amendment) Regulations and the current summary of the Council's position can be found in appendix 1F of the recycling waste Management Strategy.
8. Building on this work and the results of the public consultation on the Outline strategy published in December 2014, the Council has been working with the Welsh Government's (WG) Collaborate Change Programme (CCP). The programme was established to support authorities to ensure legislative compliance and to ensure plans are in place to achieve the Statutory Recycling Target of 70% by 2024/25.
9. The strategic review identifies gaps in the regional recycling infrastructure and also recognises the potential to seek new regional partnerships for dry recycling. The success of joint working infrastructure projects, such as Prosiect Gwyrdd and the Organics procurement have clearly been evidenced as viable and cost effective.
10. In summary, the updated draft Recycling Waste Management Strategy 2015 (attached as appendix 1,) will be broken down into main implementation phases. Each phase will be subject to a detailed business planning and budget approval.

Phase 1: Residual waste restriction programme. Summer 2015, provides an additional 5000 tonnes of recycling, £622k savings:

- Move to smaller capacity for residual waste across the City; through smaller wheeled bins (140L) or the equivalent volume of bespoke bags
- Expand the number of properties onto wheeled bins to contain waste better;
- Increase controls on issuing green bag and food liners, to reduce wastage and to only provide them to Cardiff residents for use for recycling.

Phase 2: HWRCs, new markets and reuse options, 2015/16, to deliver an additional 5000 tonnes of recycle;

- Implement the two HWRCs sites; with stronger controls for cross boundary visitors; van users and reallocated resource to provide assistance the public to recycle more;
- Increased reuse potential at the HWRCs and across the service;
- Secure new recycling markets such as carpets; mattresses & hygiene waste to recycling.

Phase 3: Recycling collections change requirements, 2016/17

- Deliver the outcome of a detailed business case and assessment for dry recycling for potentially kerbside sort; or twin stream and reusable recycling containers to ensure the Council are legally compliant with the new legislation and WG guidance;
- Specific changes to flats and larger multiple occupancy houses;
- This work will be supported by Local Partnerships and funded by WG.

Phase 4: Recycling infrastructure; 2016/17

- Commence delivery programme of regional facilities to sort recycling, subject to a feasibility assessment and outline business plan.
- Material Reclamation Facility changes and or inclusion into the regional infrastructure may be required

Phase 5: Additional recycling performance; commercial, cleansing 2017/18

- Increasing household performance continued education;
- Looking at the smaller waste streams for recycling potential such as the remaining cleansing waste.

Issues

11. The need to drive operational efficiencies and reduce service costs is evident and was captured in the approved budget set by Council in February 2015. Equally as critical, is the need to increase recycling to avoid fiscal fines. Statutory recycling targets are in place and each target carries a £200 per tonne penalty for failure. As a result of Cardiff's recycling performance in 2013/14, the Council could still face fines in excess of £800,000. The outline strategy highlighted that if the Council

does not increase the recycling performance year on year, the fines could quickly escalate to excess of £2 million by 2015/16, as the recycling target increases from 52% to 58%, with fines potentially growing to £21m by 2020. Staying the same is not an option and it is imperative that the Council takes steps to improve its recycling performance and meet the minimum target of 58% in 2015/16.

Stakeholder engagement

12. In parallel to the Council's 2015/16 budget stakeholder events and consultation, a separate consultation took place regarding recycling and waste services. The consultation included a number of key stakeholders such as community groups, waste teams and crews, Councillors, contractors and a random postal survey of 3000 residents.
13. A total number of 1443 responses were received. The headline results are as follows;
 - Residents support the need to recycle in order to reduce costs and avoid fines
 - They support reducing the impacts on our environment through waste minimisation and recycling
 - The same service across the city was important to them
 - A smaller bin or bespoke bags was the most popular choice of restricting the general waste.
 - The council should do more to encourage recycling and take enforcement action where residents don't recycle.
 - Less than one fifth of respondents used local brings sites
 - There was general support for more wheeled bins, reusable sacks and continuation of the green bag scheme.
 - Having simple schemes that don't cause clutter on the streets was important to residents.
 - The most popular days for using the HWRC sites were Friday to Monday and predominantly in the evenings or weekends.
 - The existing Wedal Road site was the most used by residents that completed the survey.
14. A summary of the results can be found in Appendix E of the Recycling Waste Management Strategy, and the full consultation report is attached as Appendix 4.

Phase 1: Residual waste restricting programme for 2015.

15. Since the publication of the 2011 Waste Strategy the need for further restricting residual waste has been highlighted. Analysis of the residual waste clearly shows that a high proportion of recycling and food waste remain in the waste stream. If the Council is to achieve 58% recycling in 2015/16 and change people's habits towards waste minimisation and recycling, a consistent restricting programme is required city wide
16. The Welsh Government's preferred collection blue print sets out the introduction of 140 litre bins as best practice. As the recycling targets

increase to 58% next year, more Local Authorities are changing to smaller wheeled bins or reducing the frequency to three weekly collections with some considering four weekly collections.

17. Further research and the public consultation conducted have clarified that the preferred method of restricting residual waste in Cardiff is moving towards a smaller bin and the equivalent bag provision in the remaining bag areas. These changes must be implemented as soon as possible in 2015/16 if the Council is to avoid fiscal fines, reduce service costs and drive forward our recycling.
18. On the whole the kerbside collection services will not be changed for residents. Therefore, the service provision from July 2015 will remain as follows
 - Dry recycling will continue to be weekly via the freely provided green bags.
 - Food waste will continue to be weekly via the kerbside caddies.
 - Garden waste collections will remain fortnightly in the summer and monthly over the winter period.
 - General waste collections will remain fortnightly.
 - Customer supporting services will remain such as the Hygiene Service and assisted lifts.
 - Green bags and food caddy liners will remain free to Cardiff residents only
19. Areas of change are:
 - In order to ensure services remain efficient as the city grows, the collection days and week of collection has been reviewed. To accommodate the service changes and city growth collection day changes are required in 4 wards. Details of these changes are attached in Appendix 2A & 2B. The number of vehicles and operatives has been carefully balanced to maximise efficiencies. The collection days will be kept under review and further changes may be implemented in the light of operational experience with the objective of maximising efficiencies and minimising operational costs.
 - A wheeled bin expansion programme for suitable households across the city receiving wheeled bins for residual waste (details in Appendix 2B) will be implemented. A new smaller (140L) black wheeled bin will be provided to just over 12,000 households. In addition just over 4000 of these properties will also be provided with 240L green garden wheeled bin. The expansion programme has primarily given consideration to operational efficiencies; improvements to street litter and also to the conservation areas. There is no planning or legal basis to exclude conservation areas from the expansion programme. Considerations have been made for some conservation areas and an agreed position has been obtained between waste and planning officers, on how the impacts of the expansion programme can be minimised.

- All households that have a standard (240L) black wheeled bin will have their bin replaced with a 140L bin. The exchange programme will begin July 2015 and continue over the summer period. The old wheeled bins will be removed and recycled into new bins. The new wheeled bin provision will assist in driving up recycling rate and will also secure the city's wheeled bin assets as they are currently coming towards the end of their nature life expectancy and will require replacement.
- Those properties that remain on a bag collection will be provided with a limited number of bespoke bags that are equivalent to three black bags per fortnight (Appendix 2C). This will bring the bag area households in line with the rest of the city, so that they can only put out on the pavement an equivalent quantity of waste. These bespoke bags will be delivered twice a year.
- Flats with communal bin collections will remain with their current provision. Work will be undertaken on a block by block basis to make specific recycling improvements and review residual waste capacity.
- Waste presented in black bags or shopping bags etc. will not be collected. Those householders presenting non-compliant issued bags will be subject to an £80 fine. Additional education and enforcement resource will support the changes to ensure that residents take responsibility for their waste and recycle as much as possible.
- To improve and make the service more sustainable, households that are not provided with a green garden wheeled bin will be provided with reusable garden sacks to present their garden waste in. A free provision will be provided and if subsequent sacks are required they can be purchased for a small fee. These sacks will be available via a ring and request service or at bespoke Council buildings only. The supply of bio-bags for green garden waste will be removed once the reusable garden sacks have been distributed.
- To ensure consistency across the city a charge will be applied to households requiring an extra green garden wheeled bin (appendix 2C). In addition, a charge will be introduced for any replacement, lost or stolen black or green wheeled bins.
- Green bags and food liners will continue to be provided freely to Cardiff only residents. These can be accessed through the existing Council outlets, the ring and request service or online ordering.
- Existing services such as the hygiene service, assisted lifts to support infirm and unsupported householders, bulky services; household recycling centres; larger family policy and additional

waste collection paid services will remain. Details of these services are outlined in appendix 2C.

- The introduction of charges for green garden waste is not currently planned due to the current strong public feedback and potential risk of a significant loss of recyclate that such a charge may bring.
20. As with any change to service provision a period of disruption is to be expected whilst operatives and residents become familiar with the changes. It is anticipated that disruption as a result of changes to residual waste collection will be resolved within 3 months of the changes in an area by area basis. Additional resources will be provided to Connect 2 Cardiff as well as within waste management to support residents through the change. More Waste Officers will be in place to provide education on recycling, support the changes and to provide strong enforcement for those that place their waste incorrectly or non-compliantly for collection. This additional resource was supported by 73% of the consultation respondents.
 21. A strong communication plan will support the changes (Appendix 2D) ensuring all residents are made aware of the changes and the support services that are available.
 22. The existing Equality Impact Assessments as well as the statutory screening tool have been reviewed against the consultation comments, to ensure the changes support all residents.

Phase 2: Household Waste Recycling Centre (HWRC) and reuse 2015/16

23. In 2014/15 the decision was taken to move from four to two household waste recycling centres, based on usage and the infrastructure space available to service the future recycling needs. This process began with the closure of Waungron road in April 2014 and the site closure has improved recycling performance and diverted costs from waste treatment to deliver savings. The decision to move to two supersites needs to be fully implemented in 2015/16 in order to deliver further savings and also drive up the remaining sites' recycling performance from just below 70% to over 80%.
24. The next phase is to deliver the second super site and close the current Wedal Road site. The current Wedal Road site remains too small for overall demand and future recycling requirements. A full feasibility study is being completed on the current assets, traffic flows, public consultation comments and also the financial profile. Full details of the implementation plan will be presented in a further report.
25. 76% of the consultation respondents supported the need for a reuse facility therefore supporting the proposal to engage a community partner to lease, manage and run a reuse facilities. This social enterprise will accept donations of household items, repair and sell items back to the community. As well as supporting the reuse agenda they will provide local jobs and training. This will continue to build on existing reuse

systems and there is a strong commitment to continue to build on using discarded items as a valuable resource for others throughout the strategy phases.

26. Furthermore an independent study undertaken in 2014 to establish cross boundary movements of the Household waste recycling centre users, found that Cardiff is affected by a cross boundary influx of material from neighbouring authorities. However neighbouring authorities do not receive similar quantities from Cardiff residents. 11% of the material received through Cardiff's HWRC sites is from outside our borders, with 17% of the tonnages received at Bessemer Close being from elsewhere. The compound impact of tonnages on our recycling performance of residual waste received and the operational processing cost burden of both recycling and waste received equates to an additional estimated £430,000 each year.
27. Following discussions with regional colleagues the preferred solution is for each authority to control their own waste flows directly, rather than a partnership or recharging approach. The proposed solution is to provide the service for Cardiff residents only through household confirmation checks and where a Cardiff address cannot be evidenced the customer will be directed to the chargeable weighbridge. This approach was supported through the consultation exercise as only 25% of respondents supported Cardiff facilities being free for all users, regardless of where they came from. Full proposals will be provided in the Implementation Phase 2 delivery plans.

Phase 3: Dry Recycling Collection Change 2016/17

28. Although work to date has made significant progress on future kerbside recycling collection methods, a number of aspects remain that need to be finalised before a full business case can be developed for any kerbside recycling collection changes. The final dry recycling solution for Cardiff will be greatly influenced by the impacts of the restricting of general waste in 2015 and data from the newly introduced materials recycling facility regulations (more details can be found in appendix 1F).
29. Cardiff recognises the importance of delivering cost effective recycling collections that yield high quality materials, based on robust evidence. Therefore over the next year, in partnership with Welsh Government and support from Local Partnership (funded by Welsh Government) the following work will be undertaken:
 - Assessment of necessity to change – following evidence from the data collection from MRF regulations; from data collection from the restricting project and further processing and market income potential.
 - Finalising the cost of options for collections, and detailed long term financial profile to proceed to full business case.
 - Timeline for change, considering vehicle changes and existing infrastructure requirements and lifespans.

30. A programme board has been established, supported by Cardiff's Chief Executive, corporate governance and assurance processes and consists of Cardiff Officers and Welsh Government with support from Local Partnerships. The programme is overseeing the development of options and proposals for the future recycling collection method which will be presented in 2016 once the detailed analysis has been completed.

Phase 4: Recycling infrastructure; 2016/17

31. The benefits to Cardiff through regional working and joint procurements have been well evidenced with the success of projects such as the Project Gwyrdd, the Cardiff and Vale organics procurement and regional procurement contracts such as electrical items, wood, textiles and sweepings. By combining resource costs will be shared and better gates fees can be secured through economies of scale. Equally Welsh Government is keen to see more regional working to secure longer term cost savings.
32. Regional approaches have been tried and tested for residual waste, food and green waste facilities across Wales, however there remains a gap in the market for recyclable materials. To varying degrees all local authorities' process paper, card, plastics, glass, and metals from the kerbside as well as larger materials such as furniture, wood, rubble, oils, batteries, textiles and other bulkier items from household waste collections.
33. Regardless of the collection method for dry recycling it is clear that the best market prices and quality can be obtained by further sorting materials ready for market (e.g glass into different colours, plastics into different types,; metals into steel and aluminium and also depending on market condition paper into different grades). There are a range of small local facilities across Wales, including our own Materials Recycling Facility, but no large scale facilities exist in Wales and a proportion of Wales' recycling is processed across the UK.
34. It is proposed, through partnerships with Welsh Government and with support from Local Partnerships (funded by Welsh Government), that Cardiff with other local authorities will explore the feasibility of a regional recycling facility. The programme will initially seek expressions of interest from surrounding and regional Authorities, test the market appetite for such a facility and most importantly the type of materials end processes require in order to scope the facility requirements. The initial scope of materials under consideration will remain wide in order to maximise the potential of any such venture.
35. The main objectives of the facility will initially be:
 - Secure future recycling capacity for the region
 - Delivery high quality materials to the market place
 - Provide a flexible processing facility for dry recycling materials
 - Provide economies of scale to deliver cost effective processing and maximise income potential for the region.

Scrutiny Consideration

36. The Environmental Scrutiny Committee considered this issues on 10 March 2015. The Chair of Environmental Scrutiny has since written and sought further clarification on: authorities quoted for improved recycling waste restriction performance, the criteria by which charging for stolen bins would be applied and how enforcement action would be applied to bags/waste that is incorrectly presented for collection. The response to the committee's letter is attached as part of appendix 3.

Local Member consultation

37. City wide consultation has been undertaken as referred above.
38. Extensive engagement with local ward councillors that are impacted by the proposals in this paper will commence following approval of this report. These discussions will continue until the proposals are fully implemented.

Reason for Recommendations

39. The report seeks approval for the recycling waste management strategy 2015 and the required household residual waste collection changes for restriction 2015. These service changes and governance arrangements are required to support achievement of the statutory recycling target of 58% by March 2016 and also the savings that were agreed in the February Budget setting for 2015/16.
40. To acknowledge and support the recycling programme and governance arrangements that are proposed to ensure Cardiff meets its obligations under the Waste (England and Wales) (Amendment) regulations 2012 and the subsequent statutory guidance on the separate collection of paper, metal, plastic and glass.
41. To seek support to explore the feasibility study for regional recycling infrastructure with the Welsh Government

Financial Implications

42. This report outlines the specific phases and initiatives underpinning the Directorate's approach to increasing recycling. The statutory recycling target for 2015/16 will increase to 58%, up from 52% this year. Non-achievement of this target represents a significant financial and reputational risk to the Council. With potential fines of £200 per tonne no improvement in the Council's recycling performance could result in a potential fine of the order of £2 million. In this context the measures to improve recycling highlighted in this report will require intensive monitoring to identify that the required recycling improvement is being achieved within the available budget. Given the known risk in relation to fines as a result of not achieving the increased recycling target, the financial implications of phases 1 and 2 were a significant element of the 2015/16 Budget approved by Council on 26th February 2015.

43. Phase 1, the initiative to restrict residual waste, has been allocated 2015/16 revenue funding of £500,000 and capital funding of £2.4 million but would release a total of recurring savings of £622,000 including revised bag controls, in 2015/16 and additional recurring savings of £318,000 over the life of the Medium Term Financial Plan.
44. Phase 2, HWRC and additional recycling materials, has received revenue funding of £890,000 in 2015/16 and capital funding of £1.562 million with revenue savings of £42,000 each year from 2015/16. Both these initiatives will be key in driving up the Council's recycling performance.
45. The financial implications for phase 3 and onwards will need to be addressed as part of the process for the preparation of the 2016/17 Budget. Given the likely resource requirement for Regional Recycling Infrastructure, both for its procurement and its operation, it is anticipated that a further report to Cabinet will be required before the Council commits to establishing any potential regional facility.

Legal Implications

46. It is noted that the report makes reference to charging. The client department needs to satisfy itself as to making a charge, any amount to be charged (including any limitation) and how the proceeds can be used. In general the Environmental protection Act 1990 allows the Authority to specify receptacles for use and charge a fixed penalty of up to £100 (it can be lower) if residents are not using the right ones. In addition the Council may propose that receptacles be provided, if the occupier agrees, upon payment. The controlled waste regulations allow charges to be made for collection of green waste. With respect of the green waste the report sets out charges for replacement/additional sacks or green wheeled bins and replacement black wheeled bins.
47. Attached to this report are details of the consultation undertaken. Members should pay due regard to the results of that consultation in making their decision.
48. The Council has to satisfy its public sector duties under the Equalities Act 2010 (including specific Welsh public sector duties). Pursuant to these legal duties Councils must in making decisions have due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics
49. The report identifies that the existing Equality Impact Assessments have been reviewed and it is understood no changes are necessary. The purpose of the Equality Impact Assessment is to ensure that the Council has understood the potential impacts of the proposal in terms of equality so that it can ensure that it is making proportionate and rational decisions having due regard to its public sector equality duty.
Protected characteristics are:

- i. Age
- ii. Gender reassignment
- iii. Sex
- iv. Race – including ethnic or national origin, colour or nationality
- v. Disability
- vi. Pregnancy and maternity
- vii. Marriage and civil partnership
- viii. Sexual orientation
- ix. Religion or belief – including lack of belief

As such the decisions recommended in this report have to be made in the context of the Council's equality act public sector duties.

50. The decision maker must have due regard to the Equality Impact Assessment in making its decision.
51. The decision maker must also have regard to certain other matters when making its decision as outlined in the Statutory Screening tool. The decision maker is therefore referred to the Screening Tool attached to this report.

HR Implications

52. The detail within the report identifies that a number of new posts will be required to deliver these plans. The process of Trade Union consultation and approvals within Finance and HR for post creations will be required subsequent to agreement by Cabinet of the recommendations.

RECOMMENDATIONS

Cabinet is recommended to:

1. approve the Recycling Waste Management Strategy 2015 in light of the consultation responses, detailed plans for the household waste collections and subsequent proposed implementation phases in order to increase recycling performance to the required targets and deliver the accepted savings required for 2015/16.
2. agree the separate recycling collections and infrastructure programmes and governance arrangements that are proposed to ensure Cardiff meet their obligations under the Waste (England and Wales) (Amendment) regulations 2012 and the subsequent statutory guidance on the separate collection of waste paper, metal, plastic and glass.
3. agree the partnership proposed with Welsh Government to explore appropriate regional recycling infrastructure and explore the appetite of other authorities to jointly invest in appropriate recycling infrastructure.

JANE FORSHAW

Director

27 March 2015

The following appendices are attached:

Appendix 1- Recycling Waste Management strategy 2015

- A – Waste Management Strategy 2011, gap analysis
- B – Best Practise Review
- C – Collection options considered through KAT models
- D – Summary of the high level cost models
- E – Recycling Waste Management Strategy: consultation results summary
- F – Cardiff Councils position on compliance with the separate collections guidance and TEEP

Appendix 2 - Phase 1: recycling and restricting programme

- A: - Collection changes
- B: - Expansion and bin changes
- C: - Service Rules and Support Assistance
- D: - Education, Communications and Enforcement Plan
- E: - Financial Plans

Appendix 3 - Letter from Environmental Scrutiny and Response

Appendix 4 - Cardiff Recycling Waste Strategy Consultation

The following background papers have been taken into account

1. Statutory Guidance on the Separate Collections of Waste Paper, Metals, Plastics and Glass
2. October 2014, Cabinet Report “Waste Strategy Outline 2015 to 2018”
3. Regional HWRC survey

The City of Cardiff Council

Recycling Waste Management Strategy – 2015

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7. Stakeholder Engagement

Recycling Waste Management Strategy

1. Introduction
2. Legal Overview and update
3. Waste Management in Cardiff
4. Headline Policy & aims
5. Achieving high quality reuse, recycling & composting
6. Finance
7. Risk Management
8. Stakeholder Engagement

Appendix A – Waste Management Strategy 2011, gap analysis

Appendix B – Best Practise Review

Appendix C – Collection options considered through KAT models

Appendix D – Summary of the high level cost models

Appendix E – Recycling Waste Management Strategy: consultation results summary

Appendix F – Cardiff Councils position on compliance with the separate collections guidance and TEEP

ABBREVIATIONS

Term	Meaning / Definition
ACORN	A Classification of Residential Neighbourhoods
BAU	Business As Usual
BMW	Biodegradable Municipal Waste
C2C	Connect to Cardiff
CCP	Collaborative Change Programme
CO ₂	Carbon Dioxide
CO ₂ EQ	Carbon Dioxide Equivalent
CRR	Campaign for Real Recycling
DEFRA	Department of Environment, Food and Rural Affairs
DIY	Do It Yourself
EfW	Energy from Waste
EU	European Union
FYE	Full Year Effect
HH	Household
HH Waste	Household Waste
HMO	Houses of Multiple Occupancy
HWRC	Household Waste Recycling Centre
IVC	In Vessel Composting
KAT	Kerbside analysis tool
KSV	Kerbside Sort Vehicle
LA	Local Authority
LART	Local Authority Recycling Target
LAS	Landfill Allowance Scheme
MPG	Miles per Gallon
MRF	Material Recycling Facility
MSW	Municipal Solid Waste
NRW	Natural Resources Wales (previously Environment Agency)
Prosiect Gwyrdd	(Project Green) - Residual Waste Treatment Partnership
RCV	Refuse Collection Vehicle
rWFD	Revised Waste Framework Directive

Term	Meaning / Definition
SWOT Analysis	Strengths Weaknesses Opportunities Threats Analysis
SWMG	Sustainable Waste Management Grant
TAN21	Technical Advice Note 21
TEEP	Technically, Environmental and Economically Practicable
tpa	Tonne per annum
TSO	Third Sector Organisation
TZW	Towards Zero Waste
UK	United Kingdom
WG	Welsh Government
WDF	Waste Data Flow
WEEE	Waste Electrical and Electronic Equipment
WMT	Waste Management Target
WRAP	Waste and Resources Action Programme
WRATE	Waste Resources Assessment Tool for the Environment

Executive Summary

1. Background

The Council is bound by a growing umbrella of recycling, waste treatment and disposal legislation; to drive forwards waste minimisation, increase recycling and to meet statutory obligations under:

- Waste (England and Wales) (Amendment) regulations 2012
- The Landfill Allowances Scheme (Wales) Regulations 2004 for the disposal of biodegradable waste.
- Waste (Wales) Measure 2010
- Recycling, Preparation for Re-use and Composting Targets (Definitions) (Wales) Order 2011 and Regulations 4 and 5 of The Recycling, Preparation for Re-use and Composting Targets (Monitoring and Penalties) (Wales) Regulations 2011 for recycling performance targets.

Cardiff's Waste Management Strategy 2011 the resulted overall recycling, re-use and composting rate rise from 39% in 2009/10 to 52% in 2012/13. However, the 2013/14 period saw the city only achieving 50% due to delays in processing contracts and required operational services. It is predicted that this will be above 52% for 2014/15.

This means that the Council must continue to take preventative measures to ensure future recycling targets are secured and cost efficiencies maximised. In addition we must test our compliance with the duties to collect recyclable materials separately and obtain high quality recycling.

The WG has imposed statutory targets for the recycling and diversion of waste from landfill and failure to achieve these carries a £200 per tonne penalty. The statutory targets for Cardiff are;

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	-

As targets were not met(circa £800,000 for 2013/14); this exposes the Council to the risk of fines more importantly performance needs to improve year on year in order to avoid the risk of larger fines up to the year 2019/20 and beyond. The fines could quickly escalate to excess of £2 million by 2016 and grows to £21m by 2020. Staying the same is not an option, it is imperative that the council takes steps to improve its recycling performance and meet a minimum of 58% in 2015/16 and up to 70% by 2024/25.

In addition to statutory targets, there has been a change to EU legislation that impacts the way recycled materials should be collected with the aim of improving the quality of the material recycled and as a consequence its market value. The Waste (England and Wales) (Amendment) Regulations 2012 requires the separate collection of waste paper, metal, plastic or glass, by January 2015. Councils who seek an alternative system must have a robust evidence base to demonstrate their collection methods can achieve high quality recycling, whilst also being the best technical, environmental and economically practicable solution (TEEP) compared to separate collection.

The Welsh Government supports the new legislation and have also set out their preferred approaches in the “collections blue print”. Failure to adhere to this blueprint could result in loss of grant funding worth currently just over £7.2m per annum.

This means that the Council continue to take preventative measures to ensure future recycling targets are secured and cost efficiencies maximised. In addition we must test our compliance with the duties to collect recyclable materials separately and obtain high quality recycling. This report outlines the steps that Council are taking to;

- a. Meet the recycling targets for 15/16 and up to 70% by 2024/25.
- b. Outline the future position on the recycling collections methodology.
- c. Seek cost reductions and deliver the most cost effective recycling approach for Cardiff
- d. Secure high quality recycling
- e. Reduce our Carbon footprint
- f. Secure long term regional working and partnerships for recycling
- g. All of the above are under pinned with waste minimisation, education and enforcement activities

2. Recycling potential

A review of our current recycling rates and how each element of the waste could, and do performance, shows that there is more we can do across all areas of the waste streams.

Operational Area waste arising & recycling rate 2013/14

Operational Area	Tonnes of waste collected	Proportion of the total waste arising	Current recycling rates (%)	Recycling potential
Household kerbside collections & bring sites	111593	64%	56%	+70%
Household Waste Recycling Centres	30429	18%	60%	+85%
Commercial waste collections	15905	9%	33%	+60%
Street cleansing (incl. sweepings, fly-tipping and litter)	9527	5%	< 1%	+60%
Other (parks/highways)	6074	4%	99%	100%

3. Headline Policy & aims

The fundamental aims from the previous the waste management strategy 2011 have been updated and summaries in seven core objectives that underline all decisions and service changes. These are;

Headline Policy	Aim
Waste Minimisation	To inhibit the growth of MSW per capita by promoting waste minimisation initiatives with a long term aim of reducing growth to zero
Underpinning Awareness and Education	To raise awareness with the public and the Council of the need to enhance re-use, high quality recycling and composting throughout the city through comprehensive stakeholder engagement
Maximise high quality Reuse, Recycling and Recovery	To ensure compliance with all legislation and guidance produced, with the ultimate aim of achieving 70% re-use/recycling/compositing rate by 2024/25
Minimising Waste to Disposal	To minimise the amount of MSW sent for disposal, by not exceeding the maximum amount of waste to landfill/energy from waste facility targets set by Welsh Government
Partnering	To work with local partner organisations, where practicable, to deliver local, regional and national benefits.
Cost Efficient Service	To provide a value for money waste management service which is cost effective and efficient
Sustainable Management	To offer waste management services that offer substantially improved sustainability and much reduced carbon emissions

4. Achieving high quality reuse, recycling & composting

To deliver the aims of the strategy and provide steps changes to our recycling performance the Recycling Waste Management Strategy 2015 will be broken down into implementation phases. Each phase will be subject to a detailed business planning and budget approval.

Phase 1: Residual waste restriction programme. Summer 2015, provides an additional 5000 tonnes of recycling, £622k savings;

- move to smaller capacity for residual waste across the City; through smaller wheeled bins (140L) or the equivalent volume of bespoke bags
- Expand the number of properties onto wheeled bins ;
- Increase controls on issuing green bag and food liners, to reduce wastage and to only provide them to Cardiff residents for use for recycling.

Phase 2: HWRCs, new markets and reuse options, 2015/16, to deliver an additional 5000 tonnes of recyclate;

- implement the two HWRCs sites; with stronger controls for cross boundary visitors; van users and reallocated resource to provide assistance the public to recycle more
- increased reuse potential at the HWRCs and across the service
- secure new recycling markets such as carpets; mattresses & hygiene waste to recycling

Phase 3: Recycling collections change requirements, 2016/17

- Deliver the outcome of a detailed business case and assessment for dry recycling for potentially kerbside sort; or twin stream and reusable recycling containers to ensure the Council are legally compliant with the new legislation and WG guidance
- specific changes to flats and larger multiple occupancy houses
- This work will be supported by Local Partnerships and funded by WG

Phase 4: Recycling infrastructure; 2016/17

- Commence delivery programme of regional facilities to sort recycling, subject to a feasibility assessment and outline business plan.
- Material Reclamation Facility changes and or inclusion into the regional infrastructure may be required

Phase 5: Additional recycling performance; commercial, cleansing 2017/18

- increasing household performance continued education,
- looking at the smaller waste streams for recycling potential such as the remaining cleansing waste

Each one of these phases will be presented in a detailed business implementation plan.

5. Finance

All financial decisions relating to recycling and waste must be carefully considered and balanced against the consequences to the statutory fines or loss of the sustainable waste management grant.

Do nothing option from 50% performance

Do Nothing option based on 13/14 performance	LART Target	Recycling Tonnage defecate	Annual Fine value
2014/15	52%	4365t	£0.8m
2015/16	58%	15,900t	£3.2m
2016/17	58%	17,113t	£3.4m
2017/18	58%	18,341t	£3.7m
2018/19	58%	19,584t	£3.9m
2019/20	64%	31,812t	£6.4m
		Total	£21.4m

We must recognise the importance of the synergy that should exist between directorate priorities and service and financial planning, along with timely performance management that will integrate financial and service performance.

6. Risk Management

The recycling waste management strategy 2015 is required to mitigate significant risks that the Council face if we fail to deliver the required steps changes;

Funding:

- The SWMG funding may be at risk for schemes that do not adopt their preferred methodology.
- Obtaining high quality recycling markets will increase the income to the council and secures the best market prices.

Failure to reach targets:

- If unchecked the fines could potential equate to more than £21m by 2020.

Public participation:

- Without support from the public costs will increase and recycling performance will reduce.

Future changes to legislation:

- Legislative change is always a risk, and will always need to be taken into consideration; hence this strategy focuses on the next three years only.

Risk of Change

- Recycling markets and how they change on a global scale, needs to be considered
- The asset value of the MRF must be fully understood and considered in any change.
- The risk of public participation is not a defence under the legislation, but the costs of such potential change in participation will be fully considered through the modelling.
- Government research shows that for any recycling scheme to be successful for public buy-in, it must be simple and easy to use.
- The National recycling trend is seeing more local authorities move away from kerbside to comingled collections

7. Stakeholder Engagement

The full results of “Outline Waste Management Strategy- 2015-2018” consultation (a summary can be found in appendix E) and “The Future of Waste and Recycling- a 2025 vision for Cardiff” are available on the Councils web page but in summary identify:

- Residents support the need to recycle in order to reduce costs and avoid fines
- They support reducing the impacts on our environment through waste minimisation and recycling
- The same service across the city was important to them
- A smaller bin or bespoke bags was the most popular choice of restricting the general waste.
- The council should do more to encourage recycling and take enforcement action where residents don't recycle.
- Less than one fifth used local brings sites
- There was general support for more wheeled bins, reusable sacks and continuation of the green bag scheme.
- Having simple schemes that don't cause clutter on the streets was important to residents.
- People support the need to recycle and be more suitable, they are also interested in what happens to their recycling

Recycling Waste Management Strategy – 2015

1. Introduction

- 1.1. Cardiff's waste management strategy 2011, resulted in a significant change to the way recycling and waste is collected in Cardiff, with a move to a fortnightly collection of residual waste, and separate weekly collections of food waste and recycling. This change in kerbside collection method, along with adopting many other recommendations from the previous waste strategy, has seen Cardiff's overall recycling, re-use and composting rate rise from 39% in 2009/10 (prior to changes being introduced) to 52% in 2012/13. The City of Cardiff Council achieved its first statutory reuse/recycling & composting target of 52% in 2012/13. However, the 2013/14 period saw the city only achieving 50%. The reasons for this were a reduction in post sorting of material, as a result of ever reducing budgets; no further increase on the amount of recyclables being presented from domestic properties and under performance of the household waste recycling centres. All these factors demonstrate that the Council must keep recycling and waste management as a high priority and further step changes are required in the way we deal with waste across Cardiff.
- 1.2. The world of waste management is ever changing and since the last strategy was published, we have seen significant changes in legislation which need to be considered. In addition, the current financial climate has never been so challenging, with call for further collaborative working in the "Williams Commission", and a greater emphasis on providing the most cost effective services. These changes need to be reviewed, along with changing attitudes and behaviour of residents, alongside an ever growing City which creates its own individual challenges.
- 1.1. In summary, now is the time to consider all options and approaches within an updated waste strategy, to ensure we are on track to meet our statutory obligations, delivering high quality and cost effective services to residents and businesses of Cardiff.

2. Legal Overview and Update

- 2.1. Although there have been no changes to the overarching policy documents at EU level: Waste Framework Directive, or at national level: Towards Zero Waste since the waste management strategy of 2011, there has been changes within those elements with much discussion, and updated guidance in relation to the collection of recyclable items at source. The below information will give some background context, and Cardiff's current position in relation to complying with legislation.

2.2. EU Policy Context

Revised Waste Framework Directive (rWFD)

2.2.1. Key EU legislation implemented for waste is Directive 2008/98/EC, or the Waste Framework Directive (European Commission, 2012). This legislation outlines high level principles and approaches to the management of waste which are to be implemented by the EU's member states. The high level principles within the document allow for flexible adaptations by member states.

2.2.2. Within managing waste, the directive introduces the waste hierarchy. This identifies the best and preferred method of waste management practices among EU Member States, whilst setting targets for the re-use and recycling of waste. Key requirements for member states are to establish waste management plans that not only aim to maximise reuse and recycling (with materials such as paper, metal, plastic and glass being a compulsory material), but also deliver a network of waste treatment and disposal infrastructure (European Commission, 2012) so that its impact on the environment is reduced and recycling quality is maximised. There has been much argument as to the interpretation of "separate collection of paper, metal, plastic or glass" as referred to in Article 10 & 11 of the Directive, discussed in more detail below.

2.3. UK policy context

The Waste (England and Wales) (Amendment) Regulations 2012

2.3.1. The requirement for member states to establish waste management plans resulted in The Waste (England and Wales) Regulations 2011 being produced to transpose their interpretation of the key requirements within the rWFD. This was amended in 2012, forming The Waste (England and Wales) (Amendment) Regulations 2012.

Judicial review- Is "co-mingled" a form of separate collection?

2.3.2. The 2011 document was subject to a judicial review challenge by six member companies of the Campaign for Real Recycling (CRR), due to the following statement under regulation 13, part 2: duties in relation to collection of waste:

2.3.3. *"For the avoidance of doubt, co-mingled collection (being the collection together with each other but separately from other waste of waste streams intended for recycling with a view to subsequent separation by type and nature) is a form of separate collection."*

2.3.4. They argued that the way in which the regulations had been interpreted were faulty and failed to address the provision of

separate waste collections, to ensure maximised quality & recovery of material and recycling.

2.3.5. Following a 6 month consultation period, in which Defra and the Welsh Government considered the wording of the regulation, The Waste (England and Wales) (Amendment) 2012 was produced, with the need to establish a separate collection of waste paper, metal, plastic or glass by January 2015 made clear on the provisions that:

- It is necessary to ensure that waste undergoes recovery operations in accordance with Articles 4 & 13 of the rWFD and to facilitate or improve recovery
- Is technically, environmentally and economically practicable (TEEP)

2.3.6. The CRR continued with their request for judicial review, which was dismissed on 6th March 2013. In summary, the outcome was that co-mingled collections of dry recyclable material will remain legal after January 2015 where the local council has decided this is the collection method best suited to local circumstances (provided that provisions A & B have been explored).

2.4. National Policy Context

“Towards Zero Waste (TZW)” strategy

2.4.1. Towards Zero Waste is the overarching waste strategy for Wales and describes a framework for resource efficiency and waste management between now and 2050. The strategy outlines the actions that need to be taken if Wales is to reach its ambition of becoming a high recycling nation by 2025, and a zero waste nation by 2050.

2.4.2. TZW outlines challenging targets that all local authorities must achieve which not only focus on achieving high levels of recycling, but also exceed the European Union (EU) landfill diversion rates. The strategy also outlines preferred methods of collection and treatment of waste and recycling, and seeks to stem the growth of waste.

Table 1 – Statutory targets

Target on waste collected by	2014/15	2015/16	2019/20	2024/25
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Local Authorities				
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	-

2.4.3. The above targets are now statutory under the Waste (Wales) Measure 2010 and if not met, will carry a £200 per tonne fiscal fine. This is in addition to the existing landfill allowance penalties, which also carry a £200 levy for each tonne over the set individual allowance.

2.4.4. TZW identifies throughout that in order to meet the outcomes and milestones to become a zero waste nation by 2050, that the core principles of “reduce, re-use and recycle” must be a key focus for each industry sector in Wales. The below sector plans have been produced, to compliment TZW:

- Food, manufacture, service and retail
- Construction and demolition
- Commercial and Industrial
- Collection, infrastructure and markets
- Municipal waste

Municipal Sector Plan- Part 1 “Collections Blueprint”

2.4.5. This collections blueprint describes the Welsh Government’s recommended service profile for the collection of waste from households. It is anticipated that the recommended service would result in high rates of high quality recycling, significant long term cost saving and improved sustainable development outcomes.

2.4.6. The key emphasis throughout the document is to achieve “closed loop” recycling, the basis of which requires high quality material.

2.4.7. The Welsh Government have suggested that this is best achieved by collecting recyclate at source (kerbside sort), thus reducing the risk of contamination. It is also suggested that there is a limited market for poor quality recyclate in Wales and the UK, therefore significantly reducing the likelihood of additional green jobs to the economy in Wales.

2.4.8. The blueprint also identifies a number of other service requirements that local authorities should adopt, in order to meet the objectives within Towards Zero Waste. Currently, Cardiff council meet the majority of the requirements, e.g. separate weekly food collections, fortnightly residual collections, weekly

recycling, seasonal green waste and charging for bulky collections.

2.4.9. It is acknowledged within the blueprint that local authorities not currently complying with all requirements will need phased change, supported by a long term business plan (covering at least 10 years). It is specified that to determine this business plan, comparative studies of service delivery options (which must include the Welsh government's preferred approach as identified in the collections blueprint), are carried out to identify the best options in terms of cost, sustainability, legality and achieving the ultimate objectives of increasing high quality recycling and reducing waste to landfill.

2.4.10. Those Authorities that do not comply with the collection blue print may risk their Sustainable Waste Management Grant (SWMG) support, Cardiff this currently has a value of around £7.2 million. WG have clearly state that financial support in the future will only be in line with WG policy. On the whole Cardiff does comply with the blueprint, except for the current variants which are that Cardiff continues to use the co-mingled green bag recycling scheme, does not currently restrict residual waste to smaller 140L bins, does not charge for green waste collections and are yet to deliver 80% recycling on the HWRCs through via direct recycling on site by the public, some sorting takes place after delivery by the public.

2.5. Recycling Collections justification

2.5.1. Welsh Government are produced their own guidance on the rWFD and what will contribute as justification for a recycling collection method that is not kerbside.

2.5.2. The guidance in relation to The Waste (England and Wales) (Amendment) Regulations 2012's requirement of separate collections of waste paper, metal, plastic or glass, by January 2015 has been published in Wales, which state that:

- Kerbside sort is to be used as the benchmark
- Any collection scheme should meet the same high quality closed loop recycling markets as kerbside sort.
- If not delivering kerbside sort, there must be a robust business case that evidences there is excessive costs in delivering the service.
- Variation from kerbside sort is acceptable if there are excessive costs of change or a robust financial case on why a change should be delayed.
- Risk to public participation and opinion is not classed as a defence against change.

2.5.3. As a comingled authority the Council must therefore develop a robust evidence base around its decision process and present data modelling on the council chosen collection method. This work will be undertaken in support with Local Partnerships, which are funded by Welsh Government. The detail behind any required change will be brought forward in future detailed implementation plans and be subject to budget approval.

2.5.4. The main areas the council need to consider in this evidence base are;

- **High Quality Recycling.** What is high quality recycling? How do the council's current end markets compare with that of kerbside recycling systems e.g. do we supply the same closed loop markets. There is a potential legal argument that as long as the material is recycled, then this meets the definition of high recycling within the rWFD. WG have taken this meaning to be closed loop only as kerbside sort is perceived to provide higher quality markets.
- **Technically practicable** – is there any reason why kerbside sort cannot be undertaken. This can be taken down to a very small localised area e.g. flats
- **Environmentally practicable**, it is more damaging to the environment to undertake kerbside sort than the current method e.g. carbon footprint.
- **Economically practicable**, the service costs from collections through to reprocessing should be compared against the default kerbside collection and reprocessing systems. The economic case can only be defended if the cost of change is prohibitive. Current contractual arrangements and infrastructure can be considered as natural constraints that may delay a change in collection method.

2.5.5. Although WG guidance does say negative public opinion is not a legal defence, this can be considered in cost terms due to reduced recycling participation. However, the rWFD does require the Council to consider impact on human health, and social impacts are also key.

Therefore, the council should also consider;

- **Human Health**, which could be the impacts of increased traffic congestion from slower kerbside collections and/or having to transport product to further distances to ensure they are processed through a closed loop processors
- **Social Impacts**, can also cover the impacts above, but also the number of people employed, the street scene and quality for residents.

Cardiff's recycling collections current position

- 2.5.6. **High Quality Recycling** – Cardiff does achieve high quality recycling and supplies many of the same markets as kerbside sort systems. Where the markets differ are for glass and some paper streams. The comparison between kerbside sort and Cardiff's markets needs review as higher quality recycling could be achieved for paper and glass if they were collected separately.
- 2.5.7. **Technically practicable** – Kerbside sort collection method and bulky operations are well established and proven in the recycling industry. There are not technical reasons why a kerbside sort method could not be adopted in a city environment. Although the council should consider the best approach to certain property types such as flats. This will be explored through collections modelling.
- 2.5.8. **Environmentally practicable**, this will have to be explored as kerbside sort requires more vehicles on the road, but a simple bulking operation requires less electricity than a full Materials Recycling Facility. However to achieve full market potential, paper and plastic separation are also needed, therefore a kerbside sort needs to be backed up by more than a simple bulking station.
- 2.5.9. **Economically practicable**, this is where the most focus is required. The costs of collections should not be considered in isolation; the whole life costs of providing the service, processing and end market income, capital investment, costs of change etc must be considered. They also need profiling for the current, but also future recycling rates.
- 2.5.10. **Human Health** – the impacts of traffic congestion should be considered as kerbside collections tend to be two to three times slower and for a city with narrow streets and high volumes of traffic, it is without a doubt that a kerbside collection method will impact on traffic congestion and air pollution across the city.
- 2.5.11. **Social Impacts**, - differing collection options will impact on jobs. Some collection options may require more operatives, but less people to process the materials. Therefore again, the whole change impacts on jobs should be considered as retaining local jobs is an important consideration for the Council.
- 2.5.12. The Welsh Government recognises that developing business cases and exploring the change process is a complicated and lengthy challenge. Therefore, in 2012, they introduced the Collaborative Change Programme (CCP) to provide assistance to local authorities with the modelling of waste services. In 2013 Cardiff were accepted on to the programme and have been allocated technical support from WRAP (Waste Resource Action Programme) to undertake kerbside sort and waste restriction modelling to compare to the current methods.

This high level modelling has been undertaken to assist the council to explore and narrow the range of options available for detailed modelling and decision.

2.5.13. Although a change of service is not required by January 2015, plans of change or evidence bases to remain co-mingled should be being formulated, which the Council are, in collaboration with Welsh Government complying with these changes.

2.5.14. The Council continues work with Welsh Government explore the best future recycling option for Cardiff in light of the new legislation. The detailed implementation phase will be subject to future approval once the detailed modelling is complete.

2.6. Local policy context

Technical Advice Notes (TAN 21): South East Wales Regional Waste Group

2.6.1. Whilst the waste industry is ever changing, planning for waste is a much more long term process. Within Wales, TAN's are used in conjunction with Wales the Spatial Plan and together they comprise the overarching National Planning Policy Wales (Welsh Assembly Government, 2010). In being able to achieve recycling and waste reduction targets outlined within Towards Zero waste, the TAN recognises that individual authorities must adopt sound and realistic strategies, and have the appropriate infrastructure in which to deliver those targets.

2.6.2. Regional waste groups were formed as a result of TAN to take control of the "strategic overview" of sustainable waste management at a regional level. The regional waste group for South East Wales later became recognised as Prosiect Gwyrdd ('Project Green'). It now consists of a partnership between five local authorities (Cardiff, Caerphilly, Monmouthshire, Vale of Glamorgan and Newport) to find a solution to residual waste treatment for the region. The Prosiect Gwyrdd procurement exercise was compiled in 2013, and will fully commence on 1st April 2016. The Viridor, Energy from Waste (EfW) facility at Trident Park, Cardiff began commissioning in Autumn 2014.

Local Development Plan (LDP)

2.6.3. When adopted, the new Local Development Plan (LDP) for Cardiff will provide a planning policy framework to help facilitate the move to more sustainable waste management methods, such as re-use and recycling over the next 15 years to 2026. The LDP will need to take into account the proposals of this Strategy and enable the identification of suitable locations or types of locations that may be acceptable for waste management facilities arising out of the Strategy.

2.6.4. In order to help comply with WG targets the City Council has formulated supplementary planning guidance (SPG) on waste for Cardiff.

Corporate Plan

2.6.5. It is important to embed the core priorities of City of Cardiff Council, as identified within the corporate plan, within the development of the Recycling Waste Management Strategy.

2.6.6. The corporate plan is very much set within the context of financial pressures being faced by the City Council, and recognises the continued increase in demand for services. The administration's three key priorities can be summarised as;

- economic development
- education and skills for people of all ages, to enable future employment in Cardiff economy and beyond
- Support the vulnerable.

2.6.7. Recycling and waste management services are reflected within all of these priorities.

2.6.8. Attracting further economy and business to the City will result in increased opportunity for our commercial waste team; poor local environmental quality may deter economic development. In terms of education and skills, there is much potential to develop skills throughout the waste management service, in particular working in partnership with social enterprises, to increase the re-use of items otherwise destined for landfill. In addition, we must consider the impact any changes to recycling and waste collections will have on the vulnerable.

2.6.9. The waste management and street cleansing service also have a vital role to play in achieving the leader's vision; for Cardiff: "to be Europe's most liveable capital city".

3. Waste Management in Cardiff

Progress since the Waste Management Strategy 2011

3.1. Cardiff's reuse/recycling/composting performance has increased from 39% in 2009/10 to 50% in 2013/14. A summary of Cardiff's performance throughout these years can be seen in the table below and the summary of deliverables from the strategy is attached in appendix A.

Table 2 - Cardiff's reuse/recycling & composting rate 2009-2014

	%
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Year	Dry recycling	Composting	Re-use	Total	% change from previous year
2009/10	22.29	16.90	0.00	39.19	-
2010/11	23.12	18.82	0.06	42.00	2.8
2011/12	28.39	20.99	0.14	49.51	7.5
2012/13	34.41	17.67	0.15	52.24	2.7
2013/14	31.79	17.79	0.21	49.67	-4.9

- The reuse rate continues to grow each year
- Composting recycling continues to vary as the green waste element intrinsically linked to the weather
- Dry recycling has increased year on year, but financial pressures in 13/14 have seen a decline in operations processing that supported recycling.

The amount of Municipal Solid Waste (MSW) managed by The City of Cardiff Council has fluctuated somewhat during the past 5 years. Many external, and often uncontrollable factors, can contribute to this including population, economic climate & behavioural change.

Table 3 - MSW managed by the Council 2009 to 2014, including population and household growth

Year	Total MSW managed (T)	Change from previous year (T)	Population	No. of households
2009/10	181057	-	337,656	139,028
2010/11	172874	- 8183	341,402	140,898
2011/12	169241	- 3633	345,442	143,777
2012/13	174102	+4861	349,074	145,818
2013/14	173529	- 573	352,604	147,866

3.1.1. In 2013/14, 173,529 tonnes of waste was collected by the City of Cardiff Council. The breakdown of waste arising, by operational area is below:

Table 4 - Operational Area waste arising & recycling rate 2013/2014

Operational Area	Tonnes of waste collected	proportion of the total waste arising	Current recycling rates (%)	Recycling potential
Household kerbside collections & bring sites	111593	64%	56%	+70%
Household Waste Recycling	30429	18%	60%	+85%

Centres				
Commercial waste collections	15905	9%	33%	+60%
Street cleansing (incl. sweepings, fly-tipping and litter)	9527	5%	< 1%	+60%
Other (parks/highways)	6074	4%	99%	100%

The table above identifies the operational areas that contribute the greatest to the total MSW managed by the City of Cardiff Council. Although it is clear from the offset that we need to focus our main resources into increasing recycling within the main sources of MSW, we must not discount opportunities to increase recycling in all operational areas.

3.2. Current service provision

3.2.1. All services detailed below are provided “in house” by a team of approximately 550 employees.

3.2.2. Every household in Cardiff has a weekly collection of recycling and food waste, and a fortnightly collection of residual waste. Garden waste is collected fortnightly from March-October, on the alternate week to residual waste. From November 2013-March 2014, garden waste was collected once a month, to accommodate the reduced demand for service.

3.2.3. Residents also have the opportunity to apply for the “hygiene collection service” if they are unable to manage large amount of nappies and incontinence waste with a fortnightly residual waste collection. Those signed up to the service receive a collection of “tiger bags” on the alternate week to their residual waste collection.

3.2.4. Almost 28% of households in Cardiff are flats; although the majority of flats conform to the collection frequencies listed above, where storage space is limited property managers may arrange additional collections as required, with additional cost to their residents.

3.2.5. Bulky waste collections are provided at a charge, with over 14,000 users of the service each year. There is currently limited recycling of bulky waste items (with the exception of hazardous white goods), which will be addressed within this updated waste management strategy.

3.2.6. In 2014 the council supported 3 Household Waste Recycling Centres (HWRC) located at Lamby Way, Bessemer Close and Wedal Road. Recycling facilities for various materials are available

at all our HWRC sites which include cardboard, electrical goods, wood, garden waste, metal and much more. Sites are currently open seven days a week. Following a review of services, including public consultation, a decision was made to move to a two site model. It is anticipated that this will be implemented during 2015.

3.2.7. There are currently 17 “Bring Sites”; local drop off points located around the City, to enable residents to recycle household items such as mixed recycling, batteries and textiles.

3.2.8. The council operates commercial recycling & waste collections, currently servicing approximately 3300 customers. Customers are able to recycle the same range of dry recyclable material as householders in Cardiff. Various collection arrangements are available, changeable to the customer’s individual needs. Waste audits are arranged to assist in determining the most appropriate arrangements. In addition, a commercial waste recycling centre has recently been opened at the Bessemer Road site, to enable commercial customers to drop recycling and waste off at site.

3.2.9. The street cleansing service has been recently re-designed – with the new operating model for street cleansing across the city changing to a ‘needs based service’ that focuses resources efficiently upon the areas that require the most cleaning. In addition to using the latest mechanical sweepers, both community sweepers and service personnel are responsible for clearing litter by manual means. Responsibilities include; ensuring that roads and pavements are kept clean and tidy, emptying litter bins on a regular basis, and cleaning busy highways (e.g. town centres).

3.2.10. The descriptions provided above are of the main public facing services, accessed by our customers. Other services not listed above may be referred to in more detail throughout the recycling waste strategy.

4. **Headline Policy and Aims**

4.1. Although the basic principles of the 2011 strategy objectives are still valid, there is a requirement for these to be updated to reflect the current priorities.

4.2. To provide a framework for the development and delivery of the Recycling Waste Strategy 2015 to meet new challenges, the following headline policies & aims have been identified.

Table 5 Headline Policy & Aims

Headline Policy	Aim
Waste Minimisation	To inhibit the growth of MSW per capita by promoting waste minimisation initiatives with a long

	term aim of reducing growth to zero
Underpinning Awareness and Education	To raise awareness with the public and the Council of the need to enhance re-use, high quality recycling and composting throughout the city through comprehensive stakeholder engagement
Maximise high quality Reuse, Recycling and Recovery	To ensure compliance with all legislation and guidance produced, with the ultimate aim of achieving 70% re-use/recycling/compositing rate by 2024/25
Minimising Waste to Disposal	To minimise the amount of MSW sent for disposal, by not exceeding the maximum amount of waste to landfill/energy from waste facility targets set by Welsh Government
Partnering	To work with local partner organisations, where practicable, to deliver local, regional and national benefits.
Cost Efficient Service	To provide a value for money waste management service which is cost effective and efficient
Sustainable Management	To offer waste management services that offer substantially improved sustainability and much reduced carbon emissions

4.3. Waste Minimisation

4.3.1. The recycling waste strategy will seek to explore and enact approaches aimed at limiting the growth of waste collected by the Council. It will analyse data available, in respect of waste streams, and controllable and uncontrollable pressures, and create a plan founded on this analysis. Equally the recent public consultation results continued to support and recognise that waste minimisation is an important part of managing waste and recycling in Cardiff.

4.3.2. It must be recognised that the main factors influencing consumer behaviour, and reducing waste at a producer level, are out of the control of the City of Cardiff Council. Wider issues surrounding these challenges are being addressed within Welsh Government's Waste Prevention Programme for Wales and associated sector plans.

4.3.3. The recycling waste strategy will consider all recommendations for local authorities, as identified within the Waste Prevention

Programme, in particular the need to locally promote strategies devised at a national level.

4.3.4. The Council will seek to drive down the growth of waste so that by the year 2024/25, growth will be static. This will be achieved by further enhancing the waste minimisation and education initiatives already in place, exploring the notion of items currently classed as “waste” as being considered a “resource” by customers. Awareness will be raised through a variety of forms, with messages and communication methods being tailored to target audiences. In addition, we will commit to support minimisation activities such as reusable products, home composting bins and wormeries.

4.3.5. The Council will also take the opportunity to stimulate people’s awareness and buying habits throughout any key collection change material.

4.4. Underpinning Awareness and Education

4.4.1. The Environment Directorate, particularly Waste Management & Street Cleansing is a key frontline Council Service which can shape citizens perceptions of the Council as a whole.

4.4.2. It is important to acknowledge the role of the public in raising levels of high quality re-use, recycling and composting. The council can undertake detailed waste flow modelling, analyse collection data, research best practice and initiate improvements to infrastructure and recycling and waste schemes, but none of that practice is worthwhile without the full support and participation of the public.

4.4.3. As strategic changes are implemented, full communication plans will be drafted with the support of the council’s communication team. A range of methods will be employed to communicate with all customers, both internal and external. These will embrace all available media formats, and recognise the social and demographic variations across Cardiff. Once these demographics have been identified, the council will provide targeted educational messages specific to the areas, using all data available to identify the message required.

4.4.4. Full consideration will be given to Ethnic and Minority Ethnic groups, with multi lingual information available where needed. In addition, the council will consider preferred communication formats for these specific groups, seeking advice from neighbourhood management and community groups. The council is also committed to the Equal Opportunities Policy, offering material in formats such as large print, Braille and audio formats.

Planned operational changes would be subject to the Equality Impact Assessment.

4.4.5. The council will make full use of communication material that is available from partner organisations. For example, fly-tipping publicity material from Natural Resources Wales. In addition, it will draw on best practice communication activities and case studies provided by Waste and Resources Action Programme Wales (WRAP), as well as utilising existing research undertaken by partner organisations into behavioural change, demographics and preferred communication methods.

4.4.6. Education will be supported by the “Zero Tolerance” enforcement approach towards environmental crime, for those in the community who do not take responsibility for their own waste. Enforcement will only be an option in cases where legislation, and political direction, is available to support it.

4.5. Maximise high quality re-use, recycling and composting

4.5.1. All waste service elements have been analysed to bench mark our current position against potential best practise, recycling performance and waste minimisation activities (these are outlined in Appendix B). This helps to identify how each area can increase their recycling potential and assist in developing action plans and projecting the councils overall projection against statutory targets.

4.5.2. The future recycling target of 58% can be achieved, but steps have to be taken now to ensure this target is met. The success of achieving the future target of 64% by 2019/20 will be challenging based on initiatives identified to date.

4.6. Minimising Waste to Disposal

4.6.1. Minimising waste to disposal is a key priority, and will fundamentally be achieved by ensuring increased levels of high quality re-use, recycling and recovery.

4.6.2. The through the Prosiect Gwyrdd Contracted regional partnership, which has concluded its long term project aim of securing an alternative treatment for residual waste, has resulted in the Viridor Energy from Waste (EFW) plant being built. The EFW plant processes Cardiff’s residual waste, it will not be treating any waste over and above the maximum amount of waste permitted to treat targets, as set out in the Welsh Governments Towards Zero Waste strategy and the contracted arrangements.

4.6.3. The council are committed to reducing waste to disposal or treatment, through increased quantity and quality of re-use & recycling. This can be achieved by improving infrastructure, public

accessibility and behaviour with a view to achieving national targets and avoiding financial penalties (for exceeding maximum disposal and/or treatment targets).

4.7. Partnering

4.7.1. The Council will examine ways to deliver improved performance, in the most cost effective manner, by maintaining and exploring new partnership opportunities.

4.7.2. Further regional working with neighbouring authorities will be actively explored, taking into consideration any experiences as learnt from the Prosiect Gwyrdd partnership. Additional partnerships already exist following the Waste Management Strategy 2011-15 including the Cardiff Organic Waste Treatment programme, with the Vale of Glamorgan Council, and the South East Regional working group for procurements of recyclates. New areas will be explored such as recycling processing, shared resources for procurements and service delivery, plus education and enforcement activities.

4.7.3. Work is currently under way with the support of Welsh Government and Local Partnerships to explore the feasibility of a regional recycling facility that will deliver cost effective processing and maximise income for the region.

4.7.4. Both the Welsh Government's Waste Prevention Programme and Towards Zero Waste strategy put great emphasis on increasing re-use, recognising both the environmental benefits and social benefits it can bring. The Council will continue to maintain existing partnerships with third sector organisations, as well as seek new partnerships to create additional re-use opportunities.

4.8. Cost Efficient Services

4.8.1. The need to provide the most cost efficient services has never been more important, with savings of £50 million required in 2014/15 in the Council. The following service changes have already been, or are in the process of, being implemented;

- seasonal garden waste collections
- no further deliveries of black bags to those without a wheeled bin
- wheeled bin expansion to drive recycling and waste minimisation
- review of the green bags and food liner distribution process
- reusable green waste bags and opt in garden waste services for the inner city areas

- continuing use of technology to ensure round & crew efficiencies
- HWRC rationalisation and considering cross boarder traffic by residents

4.8.2. Cost effectiveness will form a key part of the criteria for identifying preferred options throughout the waste flow modelling. The Council will consider any “invest to save” options, taking into account long term financial benefits and will be a priority of each detailed implementation plan.

4.8.3. In general terms, cost effectiveness will also be exercised through;

- compliance with the re-use, recycling and composting targets to generate revenue to help offset costs, and the avoidance of financial penalties
- improving the quality of recyclable material, to ensure best market values are obtained
- enhancing waste minimisation initiatives, to reduce waste going to landfill/ energy to waste plants at a cost
- Investing in joint public procurement partnerships where economies of scale are a clear benefit
- Engaging appropriately with the third sector and other partnerships to exploit greater, long term financial efficiencies.
- Considering a charge for those services that are not statutorily required to be provided for free
- Seeking opportunities for revenue in all aspects of operations

4.8.4. Detailed financial modelling will be brought forwards in each detailed implementation plan, as the delivery of the recycling waste strategy is broken down into implementation phases.

4.9. Sustainable Management

4.9.1. In 2006 the Council joined the Carbon Trust’s Local Authority Carbon Management Programme and in 2007 set a 60% reduction target for CO₂ emissions by 2018. Cardiff Council, in partnership with other major employers and organisations in the city, is committed to implementing its Carbon Lite Cardiff Action Plan, with the aspiration of becoming a Carbon Lite City.

4.9.2. Cardiff will significantly improve the sustainability of its waste management service by adopting a high quality and quantity recycling, composting and landfill diversion strategy. Throughout the implementation of this Strategy the Council will need to investigate the potential for reducing the carbon impacts of all its activities and end markets.

4.9.3. As part of the development of the Recycling Waste Strategy a carbon analysis of the various collection options will be modelled to establish the comparative benefits & impacts on global warming and the environment.

5. Achieving High Quality Re-use, Recycling and Composting

5.1. Previous waste flow modelling, detailed within the Waste Management Strategy 2011, concluded with indications on the level of waste that should be captured within each operational area, to ensure that the long term 2025 Welsh Government re-use, recycling and composting targets were achieved. The long term recycling targets will require an additional recycling tonnage excess of 30,000 tonnes at the current growth rates. The maximum level of recycling required for each operational area will be referenced below, further details on best practise can be found in Appendix B. Achieving the 2020 target of 64% is achievable based on the tonnage assumptions and initiatives outlined below. Additional waste flow modelling will be completed within each implementation plan of the main recycling waste strategy, so these figures may differ slightly. However, the potential strategies will remain as options, regardless of any change in statistics.

5.2. The Recycling waste management strategy 2015 will be broken down into implementation phases. Each phase will be subject to a detailed business planning and budget approval.

- Phase 1: Residual waste restricting programme
- Phase 2: HWRCs, new markets and reuse options
- Phase 3: Recycling collections change requirements
- Phase 4: Regional recycling infrastructure
- Phase 5: Additional recycling performance; commercial, cleansing

5.3. Phase 1: Residual waste restriction programme. Summer 2015, provides an additional 5000 tonnes of recycling

Household Kerbside Collections

5.3.1.1. The re-use, recycling and composting performance of kerbside collections will need to increase to excess of 70% in order to achieve the 64% statutory recycling target by 2020. However, as well as recycling targets, the council must also consider if the current service provision is recycling collections compliant and fit for local needs in order to remain legally compliant. The review undertaken to date considered the following through a detailed implementation plan;

- Restricting residual waste is the only option to drive recycling out of the domestic waste stream. Restricting can be

- implemented through replacing the existing 240l wheeled bin with 140l wheeled bins, or retaining the 240l wheeled bin and changing the residual collection frequency to 3 or 4 weekly.
- Monthly residual waste collections are less expensive than restricting the wheeled bin size and keeping the frequency to fortnightly, but the impacts on the public's recycling habits, fly-tipping and health concerns are unknown.
- Cardiff's vehicles and operative costs are higher than the industry norm.
- Wheeled bins for recycling would move the council further away from the legal guidance and could actually limit the quantities recycled by residents.
- Food waste should continue to be collected weekly
- Recycling should continue to be collected weekly; although fortnightly recycling reduces costs, it may significantly reduce the quantities of recycling presented by resident.

5.3.1.2. The main conclusions that have been explored in detail, through the detailed business case design are;

- **Weekly food waste collections** remain with the kerbside caddy system
- **Recycling will weekly** and currently via green papers as the detailed implementation plan is reviewed.
- **Seasonal Green waste**, fortnightly collections in the summer, with reusable garden sack to replace the biobag scheme. Charging for green waste will not be progressed currently due to lack of public support and the risk to recycling if this material is lost.
- **Residual waste collections will remain fortnightly**, but **restricting of residual waste** is required; as supported by the consultation the preferred method is through the exchange of the current 240l wheeled bin for a 140l wheeled bin, following expansion of wheeled bins to further suitable areas. The remaining bag areas will be provided with a comparable limit of bespoke waste bags.

5.4. Phase 2: HWRCs, new markets and reuse options, 2015/16, to deliver an additional 5000 tonnes of recyclate.

Household Waste Recycling Centres (HWRC)

- 5.4.1.1. The Welsh Government's "collections blueprint" suggests that HWRC must achieve an 80% recycling rate if we are to achieve the statutory recycling targets of 64% by 2020. The HWRCs achieved 65% recycling in 13/14 and above 70% in 14/15, so there is potentially a large proportion of material (up to 5000 tonnes, with a further 1000 tonnes from new markets) that could be captured. Recycling over 80% is achievable and some high performing sites achieve over 85% recycling.

5.4.1.2. To achieve high recycling on our HWRC sites the following steps must be initiated:

- Considering best practice design and layout, including split-level sites and efficient traffic management systems, when planning the development of the new site
- As a result of the HWRC 2 site” re-design, it is anticipated that there will be a higher staffing levels per site. The council will dedicate resources to ensure that site operatives are proactive in diverting waste from landfill, directing materials into the correct skips, as well as providing helpful and useful knowledge to the site users.
- Adapting to recycling markets, and providing recycling facilities for a range of bulky items and materials not currently recycled e.g mattresses and carpets
- It has been identified that 5% of all site users are trader (businesses) that should not be using the sites and also 17% of all users do not live in Cardiff. The council must reconsider the current vehicle access policy, to ensure that only domestic site users from Cardiff are accessing the site and external users are charged appropriately.
- Alternatively, consider the introduction of a “permit scheme” to ensure only Cardiff residents benefit from the HWRC.
- Invest in comprehensive training and up skilling programme for the site operatives so they can assist the customers to reuse and recycle as much as possible, plus identify and turn away those not entitled to use the sites.
- Considering a “no bag” policy at the HWRC, to encourage users to segregate material prior to entering the site, as well as reducing contamination of mixed recycling skips.
- Progress a re-use shop run entirely by a third party organisation, with conditions to ensure that any items deemed unsuitable for re-use are recycled.
- Improving signage around site, and on containers, to improve capture rates and reduce contamination levels.
- Educate residents on the facilities available to them and how best to present and prepare their waste and recycling before coming to site.

Bring Sites

5.4.1.3. The popularity for bring sites reduced when weekly recycling was introduced in 2011. This was supported by the consultation results with 72% of respondents stating they no longer use bring sites. The number of sites provided by the council has reduced in recent years due to abuse or under use. However, they still provide certain communities with an alternative recycling option and are part of the WG preferred waste collections blueprint.

- Review existing bring site provision to ensure its suitable for user needs
- Evaluate current usage, satisfaction and contamination levels of existing bring sites, and adapt as appropriate
- Upgrade or adapt existing bring side provision to compliment any future change to kerbside recycling collections
- Work with partners to consider opportunities to place recycling banks in alternative locations, accessed by a large footfall e.g. schools, community halls

Bulky waste collection/Fly-tipping clearance

5.4.1.4. The household kerbside collection scheme will re-use, recycle or compost excess 70% of its waste arisings by 2020. Increased re-use and recycling of bulky waste items, both from arranged collection, and fly-tipping, is integral. Excess of 500 tonnes of material could be diverted to from disposal with a change to collection methods. Potential strategies to achieve this include:

- Utilising available facilities at HWRC's, to either recycle or re-use items collected, diverting increasing amounts of materials from collection as the sites expand the types of materials accepted
- Investigating the benefits, or otherwise, of introducing a credit scheme, inviting organisations that currently accept items for re-use an incentive, in return for obtaining their re-use data. Work with these organisations to divert re-useable items for the bulky collection scheme, and into their organisations
- Initiating a project team, to investigate current bulky waste, and fly-tipping collection arrangements, and identify any improvements necessary.
- Increasing understanding of the composition of fly-tipped, and bulky collected waste, to identify common materials and the need to implement new recycling streams.
- Considering all potential options to improve the bulky waste collection service, taking into account best practice examples of an in house run service, a partly outsourced service, and a service ran entirely by third sector organisations.
- Working with Welsh Government to implement a re-use network, consisting of third sector organisations that have the ability and relevant processes in place, to re-use and recycle collected bulky waste.

5.5. Phase 3: Recycling collections change requirements, detailed plans will be presented 15/16 to ensure Cardiff remains legally complaint and deliveries cost effective and high quality recycling

5.5.1.1. The next step is to undertake detailed business planning with support of the CCP, based on the preferred option and

benchmarking against kerbside sort methodologies. Any change in service must consider the timings; ability to meet LARTs; capital investment requirements; cost of change; the current MRF asset value and the current contract arrangements such as the refuse collection fleet which has a three year life span remaining.

5.5.1.2. The following need exploring in more detail, prior to a final decision;

- Efficiencies can be found by combining the food and recycling collections on one vehicle.
- Efficiencies could be found by reviewing the working time and crews levels on each round.
- The quality and market price obtained by Cardiff for paper and glass could be improved by separating these materials prior to collection, as cross contamination in the green bags reduces the quality slightly.
- Processing through a bulking station reduces the operating costs. However, the sorting of some recyclable streams such as cans, plastics, fibre and even glass can increase the market value obtained, compared to just bulking materials
- The restricting changes will change the dynamic of the recycling and waste collected, so this changed position needs to be fully understood before the final models can be run.

5.5.1.3. Alternative recycling collections should be considered to obtain higher glass and paper recycling markets. The options open for further exploration remain a 'twin stream' approach that requires the public to present paper and card in one container and cans, glass and plastics in another container or the full kerbside sort option with containers for paper, glass, cans, card and plastics collected separately at the kerbside. Continuing with the co-mingled green bag system may not be the best recycling collection method or cost effective method for Cardiff.

5.5.1.4. Further details of the recycling collections considerations against the legislation can be found in appendix F

5.5.1.5. A range of options available to the Council when considering the best solution for Cardiff were outlined in Appendix C and possible high level costs in appendix D. Through the support of the CCP and WRAP, modelling of kerbside collection options was undertaken to assist in narrowing down the options. The final solution will be presented through detailed business planning later in 2015. Sensitivities are also required on the base model to explore the financial costs of factors such as;

- Public participation

- Market prices
- Recycling capacity e.g. what if residents require an additional container?

5.6.Phase 4: Recycling infrastructure, further feasibility study to be presented 15/16. To secure recycling infrastructure and obtain high quality recycling and optimum market income.

Regional Recycling Infrastructure

5.6.1.1. The benefits to Cardiff through regional working and joint procurements have been well evidenced with the success of projects such as the Project Gwyrdd; the Cardiff and Vale organics procurement and also regional procurement contracts such as electrical items; wood; textiles and sweepings. By combining together, we share the resource costs and secure better gates fees through economies of scale. Equally Welsh Government is keen to see more regional working to secure longer term cost savings.

5.6.1.2. Regional approaches have been tried and tested for residual waste, food and green waste facilities across Wales, yet there remains a gap in the market for recyclable materials. All local authorities process to varying degrees: paper; card; plastics; glass; metals, from the kerbside but also larger materials such as furniture; wood; rubble; oils; batteries; textiles and other bulkier items from household waste collections.

5.6.1.3. Regardless of the collection method for dry recycling it is clear that the best market prices and quality can be obtained by further sorting materials ready for market, for example glass into different colours; plastics into different types; metals into steel and aluminium and also depending on market condition paper into different grades. There are a range of local facilities across Wales, including our own Materials Recycling Facility, but no large scale facilities exist in Wales.

5.6.1.4. It is proposed, through partnership with Welsh Government and support from Local Partnerships (funded by Welsh Government), Cardiff will explore the feasibility of a regional recycling facility. The programme will initially seek expressions of interest from surrounding and regional Authorities; test the market appetite for such a facility and most importantly what materials do the end processes seek in order to scope the facility requirements. The initial scope of materials under consideration will remain wide in order to maximise the potential of any such venture.

5.6.1.5. A feasibility study will be completed based on the main objectives of the facility;

- Secure future recycling capacity for the region
- Delivery high quality materials to the market place
- Provide a flexible processing facility for all dry recycling materials
- Provide economies of scale to deliver cost effective processing and maximise income potential for the region.

5.6.1.6. In addition, working with other local authorities to develop regional solutions, to expand the range of materials that can be recycled from the kerbside e.g. nappies

5.7. Phase 5: additional household recycling performance; commercial & cleansing. This will be tabled for 2016 and beyond to obtain to secure the further 12,000 tonnes.

Commercial Waste

5.7.1.1. The commercial recycling and waste collection team will re-use, recycle or compost 59% of their waste arisings by 2020. Currently only 38% of the commercial material is recycled as the priority has been to secure income for the service. The balance between income and recycling performance are closely linked, with the higher commercial incomes being related to residual waste collections, rather than recyclables. Based on compositional analysis, excess of 3000 tonnes of the existing waste stream could be converted from waste to recycling. Potential strategies to achieve this include:

- Investigating the benefits, or otherwise, of procuring on board weighing equipment. This will allow for more accurate recording of customer's individual recycling performance, and will allow the team to target low performing customers to encourage increased recycling contracts
- In depth waste audits to be arranged for all new potential customers, to ensure that their waste contracts allow for maximum levels of recycling
- Increasing our understanding of customer's needs, including customer consultation/feedback, and analysis of residual waste collected, with a view to introducing collections of additional material (should recycling

markets, and user need allow), with possible support from third sector organisations

- Introducing case studies of successful recycling schemes within existing customer contracts, focusing on both environmental & financial benefits. These personalised case studies can be complimented with Welsh Government's commercial sector plans
- Investigating the potential of a commercial waste re-use area within the commercial waste recycling centre, or any other re-use potential.
- Working closely with the Bessemer Close Commercial Recycling Centre, diverting customers that do not produce a large amount of waste (therefore not warranting a recycling and waste collection) to the site.
- Continuing, and further developing, education and enforcement activity across the commercial sector to improve presentation of waste with the view of improving overall local environmental quality.
- Where education does not bring about the desired improvement in recycling, considering the use of a formal enforcement notice prescribing and enforcing the manner in which recycling and food waste must be separated from residual waste receptacles. This will be considered as a last resort, with sensitivity to contractual agreements.

Street cleansing

5.7.1.2. Street cleansing operations (litter bins and street sweepings) will recycle or compost 60% of their waste arisings by 2020. Potential strategies to achieve this include:

- Continuing to procure a suitable contract, with the ability to recycle and/or compost street sweepings and leaf fall. This makes up over 50% of the street cleansing material and potentially can all be recycled.
- Investigating new recycling markets and technologies with the ability to improve recycling in street cleansing operations.
- Considering an improved design litter bin, within the standardised litter bin policy, with specific material receptacles, in order to reduce contamination and improve recycling potential
- Investigating how litter segregated for recycling at events and within the City Centre is currently collected, processed and recorded for recycling.

- Updating, and further developing, the Local Environmental Quality strategy, with key recycling educational messages throughout.
- Considering the potential for split collection vehicles, in order to be able to efficiently collect and segregate recyclable items during cleansing operations.

5.8. Summary of the recycling target requirements

5.8.1. As previously, mentioned the Council must take steps to ensure they avoid fiscal penalties from the LART and LAS schemes, but also provide a collection service which remains compliant with the rWFD. The latter can be a change in service or a robust recycling collections evidence base to remain as we are. The table below determines when step changes in performance should be made, in order to avoid fiscal fines. The need to implement general waste restrictions in 2015 should be the key driver when considering the required changes to the collection service and associated timings of any change for the rWFD.

Table 7 – summary of steps required to achieve LART

Scheme	Target year	Target %
Sweepings recycling	2014/15	52%
HWRCs 80% recycling	2015/16	58%
Reuse shop	2015/16	58%
Restricting residual waste	2015/16	58%
Carpet recycling	2015/16	58%
Mattress recycling	2015/16	58%
Bulky/flytipping recycling	2015/16	58%
Commercial 60% recycling	2016/17	58%
Hygiene recycling	2016/17	58%
PG 5% recycling contribution	2016/17	58%
Cleansing 60% recycling	2017/18	58%
Domestic collections to achieve 70%	2019/20	64%

6. Finance

6.1. Welsh Local Government Association's (WLGA) waste finance project 2012-13, released individual local authority bulletins, detailing overall net expenditure of household waste collection services. An overview of the results are below:

- Cardiff's overall net expenditure on household waste services (Residual, Dry recycling, Organic, HWRC and Bring sites) for 2012/13 was **£23,468,844**.
- This represents an expenditure of **£157 per** household per annum (£3.01 per household per week).
- When compared with the other local authorities in Wales on a per household basis, Cardiff are ranked as **7th** lowest cost authority

(median expenditure per household is £181, lowest expenditure £120)

- Overall expenditure on household waste services has **fallen by 1.5%** when compared to 2011/12.

6.2. Financial challenges

6.2.1. The 2015-16 corporate budget report, approved by Cabinet in February 2015, identified savings of £50 million to be made. Environment Directorate is required to deliver savings excess of £7m over the next three years. This is in addition the SWMG is expected to reduce at least by 3% each year, which will add an additional £1m pressure to recycling services over the next three years.

6.2.2. In 2013/14 the Council failed the LART by over 4000 tonnes. If the full fine is imposed this would equate to £800,000. To do nothing is not an option.

Table 8 – do nothing option

Do Nothing option based on 13/14 performance	LART Target	Recycling Tonnage defecate	Annual Fine value
2014/15	52%	4365t	£0.8m
2015/16	58%	15,900t	£3.2m
2016/17	58%	17,113t	£3.4m
2017/18	58%	18,341t	£3.7m
2018/19	58%	19,584t	£3.9m
2019/20	64%	31,812t	£6.4m
		Total	£21.4m

6.2.3. However, any short term and long term financial decisions will need to be considered in conjunction with the aims and objectives of the Recycling Waste Management Strategy, loss of grant support and the risk of LART fines. For example, the £2m capital investment in restricting wheeled bins, could protect against an annual fines of the same magnitude.

6.2.4. We must recognise the importance of the synergy that should exist between directorate priorities and service and financial planning, along with timely performance management that will integrate financial and service performance.

7. Risk Management

7.1. There are numerous risks associated with the recycling waste strategy. Principally these are summarised in five key areas; funding,

failure to meet statutory targets, public participation, future change to legislation and the risk of change.

7.2. Funding:

7.2.1. The Welsh Government have outlined their preferred collection and processing methods within the collections blueprint. The SWMG funding may be at risk for schemes that do not adopt their preferred methodology. It is unclear at this moment in time if the whole £7.2m is at risk or the parts that only fund activities that are not directly linked with the blueprint. In addition there are pressures on revenue budgets to deliver the increased service provision and these must be balanced with corporate needs to deliver savings. The council must deliver affordable services and manage the growth pressures, particularly as the long standing future of the SWM grant is unclear.

7.2.2. Obtaining high quality recycling markets will increase the income to the council and also reduce the risks if markets become unstable or market prices drop. Closed loop recycling products consistently secure the best market prices. Any future collection method must incorporate and minimise the impacts of future markets and income that can be secured.

7.2.3. If the council continues with the co-mingled recycling collection service without a robust business case then the council will be open to legal challenge from National Resources Wales, although the penalties are unclear at this time. Equally, the Council may face expensive legal challenge from third parties that supported the judicial review of the original directive.

7.2.4. Welsh Government has outlined that there will be some capital funding available to support Local Authorities with the cost of change, but the level of support needs to be fully explored as it may not be sufficient to fund the level of change Cardiff require. Nor may it be available when the council require the funding for the final scheme that the council adopts. Any change will be financially modelled on an invest to save principle.

7.3. Failure to reach targets:

7.3.1. Failure to meet the Landfill Allowances scheme carries a £200 per tonne fine. In addition the new statutory recycling targets also incur an additional £200 fine if the targets are not met. These costs would be placed on the Authority and would be of a significant magnitude each year. As highlighted previously the risk of fiscal penalties is real and potentially severe. If unchecked the fines could potential equate to more than £21m by 2020.

7.3.2. As well as the financial consequences of not meeting national targets, the impact in terms of public reputation would also be significant and this could further undermine public participation in recycling efforts.

7.4. Public participation:

7.4.1. The public will have to be fully engaged with principles of waste minimisation, reuse and recycling. Without high public participation rates, the later targets beyond 2016 will be difficult to achieve. By delivering the required service infrastructure the Council will be well placed to engage with the public in a timely manner to deliver increased capture and recycling rates.

7.5. Future changes to legislation:

7.5.1. An amendment to national legislation, along with development of new guidance has been significant since the waste management strategy 2011-15. Legislative change is always a risk, and will always need to be taken into consideration; hence this strategy focuses on the next three years only.

7.6. Risk of Change

7.6.1. The market is still developing modern kerbside sort vehicles, and as such the lease market is not currently available, so the vehicles must be purchased out right. A recent visit to Belfast confirmed that the confirmation of the vehicles is imperative to suit your needs. Once the first compartment on the six compartment vehicle is full the vehicle must return to the depot to off load. This can rapidly increase costs if the waste composition changes over the 5-7year life span of the vehicle. Equally due to long procurement periods of 12-24 months it is vital to ensure the right number of vehicles are procured, or the service will have to support too many or too few vehicles.

7.6.2. The current refuse collection vehicle contract will have to be considered for any change. The current contract has a three year life remaining. Significant changes to the fleet in this period will incur financial penalties.

7.6.3. The asset value of the MRF must be fully understood and considered in any change. In addition what would be the cost of change to reconfigure the MRF building into a bulking station suitable for kerbside collection? The foot print may not be sufficient to be safely adapted to offer load kerbside sort vehicles.

7.6.4. Less than 4% of the public supported kerbside boxes in the recent consultation survey (November 2013) and the risk of the public rejecting a change to kerbside sort must be fully considered as this would increase waste to landfill and reduce recycling performance. This risk is not a defence under the legislation, but the costs of such potential change in participation will be fully considered through the modelling. Only two local authorities have made the change from co-mingled to kerbside boxes (Chester and Torbay) to date; both saw a reduction in their recycling performance.

7.6.5. Government research shows that for any recycling scheme to be successful for public buy-in, it must be simple and easy to use. The National recycling trend is seeing more local authorities move away from kerbside to comingled collections.

8. Stakeholder Engagement

8.1. A new organisation model has been identified for the City of Cardiff Council, in which the fundamental qualities of being a “co-operative” council are being introduced. The City Council will create services **with** people, creating a city **for** people with a strong commitment to openness and engagement.

8.2. The achievement of high recycling and composting rates relies upon strong support from the public. The Council can provide appropriate infrastructure, but without the residents of Cardiff fully participating in the initiatives, the targets set out by WG will not be reached. It is therefore critical that the public are fully informed about the national and local objectives, how they are to be fulfilled and the important role that they will play in securing high recycling rates.

8.3. The City of Cardiff Council already undertakes a programme of public awareness and education. These activities will be continued, reinforced and enhanced to ensure that the public are consulted, and fully engaged with any change process. Concerns and comments will be actively encouraged and considered before final decisions are made.

8.4. Questions in relation to the services that waste management and street cleansing provide are featured within the annual “Ask Cardiff” surveys. Additional surveys and consultations are also initiated by the service area, including most recently the community litter plan consultation, and “The Future of Waste and Recycling- a 2025 vision for Cardiff”. The latter survey confirmed that the residents of Cardiff consider environmental matters and recycling to be a priority.

8.5. The full results of “Outline Waste Management Strategy- 2015-2018” consultation (a summary can be found in appendix E) and “The Future of Waste and Recycling- a 2025 vision for Cardiff” are available on the councils web page but in summary identify:

- Residents support the need to recycle in order to reduce costs and avoid fines
- They support reducing the impacts on our environment through waste minimisation and recycling
- The same service across the city was important to them
- A smaller bin or bespoke bags was the most popular choice of restricting the general waste.
- The council should do more to encourage recycling and take enforcement action where residents don't recycle.

- Less than one fifth used local brings sites
- There was general support for more wheeled bins, reusable sacks and continuation of the green bag scheme.
- Having simple schemes that don't cause clutter on the streets was important to residents.
- People support the need to recycle and be more suitable, they are also interested in what happens to their recycling

Appendix A – Waste Management Strategy 2011, Gap analysis

MSW Gap analysis from 2011-16 Strategy

Area	Action point	Status	Comments
Waste Minimisation	Continue to promote waste minimisation	<input type="checkbox"/>	Ongoing
Education and Awareness	Targeted education campaigns	<input type="checkbox"/>	Ongoing
	Promote new items that can be collected for re-use or recycling	<input type="checkbox"/>	Ongoing
	Student campaign	<input type="checkbox"/>	Ongoing
	Use waste analysis and compositional analysis to provide intelligent and targeted educational campaigns	<input type="checkbox"/>	Ongoing
	Schools education campaign	<input type="checkbox"/>	Ongoing
Waste Collections	Maximise the distribution of green bags, bio-bags and liners	<input type="checkbox"/>	needs to be reviewed
	rebalancing of collection days and a strong supporting education campaign	<input type="checkbox"/>	completed 2011
	Weekly green bag recycling	<input type="checkbox"/>	completed 2011
	Fortnightly residual collections	<input type="checkbox"/>	completed 2011
	Fortnightly green waste collections	<input type="checkbox"/>	completed 2011
	No side waste policy	<input type="checkbox"/>	completed 2011
	Expand wheeled bins to all areas suitable	partial	partially completed
	Separate food waste kerbside caddies to all households	<input type="checkbox"/>	completed 2011
	Consider hygiene collections	<input type="checkbox"/>	completed 2011
	Realign collections and cleansing	<input type="checkbox"/>	completed 2011
	Seasonal green waste	<input type="checkbox"/>	completed 2011
	Review waste presentation times in city centre	<input type="checkbox"/>	completed 2011
	Limit the number of black bags presented for collections	x	areas remain unlimited
	Consider reducing the volume of residual wheeled bins from 240l to 140l prior to 2020	x	Grant funding reliant - not delivered
	Consider the impacts of black bags to be collected in advance of green bags	<input type="checkbox"/>	completed 2011
Utilise the bar-coding system to report issues	x		
Bulky Waste Collections	Change bulky collections to maximise reuse and recycling, esp WEEE & furniture	partial	electrical and white goods only
	Continue to promote the bulky service and the alternatives as a re-use and	<input type="checkbox"/>	Ongoing

	recycling option and encourage the public to pre sort their materials for recycling		
	Working and promoting appropriately, relationships with the 3 rd sector and small to medium enterprises to identify opportunities for assisting in the collection on bulky household waste and support the council with the collection of a wider variety of materials.	<input type="checkbox"/>	Ongoing
	Consider charging for bulky collections	<input type="checkbox"/>	completed 2013
HWRCs	Investigate the benefits of introducing a permit system	<input checked="" type="checkbox"/>	
	Consider post sort arrangement of residual skips.	<input type="checkbox"/>	
	Develop a 4 th or 5 th site	<input checked="" type="checkbox"/>	Business case not supported
	Consider providing an interim commercial recycling centre	<input type="checkbox"/>	completed 2014
	Recycle the soil and rubble collected at HWRCs.	<input type="checkbox"/>	completed 2013
	Working with HWRC operatives to ensure commercial customers are not illegally disposing of waste at the HWRC	partial	training undertaken
	Refocus the current operatives into a new role that supports the public to maximise recycling, in a meet and greet manner.	partial	proposed for 2014/15
	robust van policies to HWRCs	<input type="checkbox"/>	completed 2012
	Explore methods for the collection and recording of tonnage data by material stream, collected for each individual site.	<input type="checkbox"/>	completed 2012
	Expand recyclable material streams to include additional recyclable material that is currently not included within the residual household waste collection	<input type="checkbox"/>	on going
	Consider expanding the community sector involvement for the collection of materials that are not suitable for processing through the MRF e.g. textiles, CD's, books	<input checked="" type="checkbox"/>	no suitable contract arrangements identified
	Identify patterns into why residents choose which HWRC to visit and where they come from.	<input type="checkbox"/>	on going surveys

	Improve signage at all sites	<input type="checkbox"/>	completed 2012
Bring Sites	Expand the existing bring site provision	×	expansion has not been required
	Undertake a survey of current bring sites to ensure they are of a good quality, accessible and well maintained. Identify any needs for further provision	<input type="checkbox"/>	completed 2012
	Consider increasing the number of bring sites that are close to flats and multi occupancy dwellings.	<input type="checkbox"/>	Ongoing
	Review the materials collected and potential to expand the range, to support the kerbside collection scheme.	<input type="checkbox"/>	Ongoing
	Expand the online resources and promotional materials for businesses with specific sector information on how to recycle your waste	<input type="checkbox"/>	Ongoing
Commercial	Continue to use the two tier pricing structure to drive customers to recycling.	<input type="checkbox"/>	Ongoing
	Consider enforcing recycling only contracts for all customers and remove waste only contracts by 2012.	<input type="checkbox"/>	started 2014
	Continue to target specific material streams to increase capture rates for food, paper and glass.	<input type="checkbox"/>	Ongoing
	Investigate partnerships with not for profit organisations to promote recycling initiatives	×	
	Explore collection methods or partnerships for cooking oil and shredded paper.	×	
	Implementing the results of a comprehensive review of commercial recycling operations in order to deliver long term business expansion, increased customer care and higher recycling.	<input type="checkbox"/>	Ongoing
	Undertake waste audits for customers to allow for the calculation of suitable containers and collection frequency	<input type="checkbox"/>	Ongoing
	Improve commercial recycling	<input type="checkbox"/>	Ongoing
	Continuing and further developing education and enforcement activity across the commercial sector to improve the presentation of waste, and to increase recycling and local	<input type="checkbox"/>	Ongoing

	environmental quality issues.		
Organics	Procure an organics facility	<input type="checkbox"/>	
Disposal	Complete the PG partnership	<input type="checkbox"/>	On track to be delivered
Flytipping	Provide strong enforcement action to tackle and deter further fly-tipping	<input type="checkbox"/>	Ongoing
	Provide strong education activities to prevent fly-tipping by continuing to support awareness campaigns on reporting fly-tipping and promote prosecution success through the Keep Cardiff Tidy and neighbourhood partnerships.	<input type="checkbox"/>	Ongoing
	Identify fly-tipping hot spots and implement preventative measures to prevent waste deposits.	<input type="checkbox"/>	Ongoing
	Consider the most appropriate pre or post sort methods for collecting fly-tipped materials to maximise recycling.	<input type="checkbox"/>	Ongoing
	Introduce a wet waste recycling centre to de-water street sweeping and maximise the recycling and composting potential of the materials processed	partial	planned 2014/15
Cleansing	Expand the network of recycling litter bins across the city and support operational changes to deliver maximum recycling while carrying out cleansing activities	<input type="checkbox"/>	Ongoing subject to Grant funding
	Continue to seasonally compost the leaf fall where possible.	<input type="checkbox"/>	on going
	Consider embedding recycling in all cleansing activities	x	no progress to date
	Explore the possibility of "parking day" restrictions to allow cleansing on streets that are heavily parked.	<input type="checkbox"/>	completed 2013
	Ensure standard signage across litter bin suite so that message is consistent.	<input type="checkbox"/>	completed 2013
	Provide a clear process for establishing new litter bin locations, in conjunction with GIS mapping of all existing sites.	<input type="checkbox"/>	completed 2013
	Ensure adequate litter bin provision and appropriate design.	<input type="checkbox"/>	completed 2013

	Promote strong enforcement of offenders that drop litter and incorrectly present waste, through the use of section 46 and 47 notices, frontage controls, litter control notices, fixed penalty notices for littering and fly-tipping prosecutions.	<input type="checkbox"/>	Ongoing
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Household Collections

Kerbside Sort



As part of the collaborative change programme, in March 2014 Cardiff was invited to meet with officers of Castlereagh and Belfast City Council. Belfast City Council, with a population of 334000, currently offers a kerbside sort collection to 53% of their households, with the rest being serviced by a co-mingled collection. In addition, they have trialled a “trolley box”, which resulted in a 10% increase in participation rate with each unit costing £40 to supply.

Main findings from the visit were:

- Compartment size and vehicle configuration is critical. Vehicle procurement is a very high risk area to ensuring correct specifications and long lead times of capital purchase.
- MRF/Bulking reconfiguration, do we have sufficient space for a safe layout
- A trial/phased approach will be essential to establish round sizes.
- H&S concerns in relation the increased manual handling, noise, crossing and vehicle reversing movements
- Crews do not return to the depot for breaks
- Public satisfaction and capacity are significant factors
- Belfast and Castlereach have lower recycling and participation rates than Cardiff.

Restricted residual waste capacity

The below 2 examples identify local authorities which have “restricted” their residual waste collections; 1 by reducing the available capacity of their residual waste receptacles, and 1 by reducing the frequency of collections.

Restricted capacity



Monmouthshire County Council, a semi rural area of approximately 38,500 properties, provide a roll of bespoke, grey bags to each property. The number of bags on the roll allow for each property to present 2 bags per collection (fortnightly) equating to approximately 120L of capacity. Additional bags are supplied on request for households of 5+, and those which produce large quantities of ash are allowed an additional collection of an ash bin.

To compliment the service, residents can apply for a weekly collection of hygiene waste. This scheme took 5 months to implement, from cabinet decision to first collection. A summary of the key results is below:

- 32% increase in food waste participation
- 4.5% average increase in recycling performance across 2 recycling collections
- Reduction in kerbside collected residual waste per/household per/collection 5.2Kg to 2.3KG
- Total Municipal Sector Waste tonnages (includes kerbside, HRC's & commercial): 15% reduction in residual, 30% increase in recycling (+4000T)
- 2013/14: overall re-use, recycling and composting rate of 62.9%
- 30% increase in residual waste to HRC
- Over 2000 requests for food caddies over 2 months
- 1500 additional requests for hygiene service; additional collection had to be put on at additional cost

However, it is important to remember that local authorities have a duty to collect waste presented on the highway. Monmouthshire strategy officers confirmed that they are reliant on residents' good will to conform; additional waste is inevitably collected when it impacts the local environmental quality.

3 weekly collections

Falkirk Council

There is limited data available as to the success or otherwise of implementing 3 weekly collections of residual waste. However, it is a method that we will see being rolled out more frequently in the coming years, with Gwynedd Council implementing the change Autumn 2014, after which further examples can be gained.

Falkirk Council made the decision to implement 3 weekly collections in December 2013. A phased approach to implementation was undertaken firstly to 18,000 properties, after an analysis of material within resident's residual waste bins proved 60% recyclable content.

Early results are positive and have shown a 30% increase in food waste collected during Apr'-Jun 2014 in comparison with the same period in 2013, along with 5.5KG of residual waste collected per/household per/week in comparison with 7.62KG before the change was implemented.

Charging for green waste



Along with restricting residual waste capacity, Monmouthshire County Council also made the decision to implement a charge for garden waste. The charge is £10 a year for a permit, which allows residents a weekly collection of 1

garden waste bag. Garden waste can be taken to the HRC's free of charge. A summary of results is below:

- -27% reduction in garden waste participation
- -3.9KG collected per/household per/collection
- 15% decrease in total Municipal Sector Waste garden waste collected tonnage(includes kerbside, HRC's & commercial): -1000T
- Increase in garden waste tonnage through HRC's



Wirral Borough Council implemented a £35 per/annum charge for a fortnightly collection of garden waste. A £5 discount is applied if residents sign up for the service online, 82% of residents which did so. If households require an additional garden waste bin, a one off charge of £37 will be applied to buy a bin, along with an additional £20 per/annum charge. A summary of results is below:

- 51% of residents said it was an unacceptable change
- Initially just 35.5K (out of 144K) households signed up, equating to 24%
- Garden waste bins were brought back in after 6 months of the service beginning if residents had not signed up to the service
- 6 months implementation period
- Total tonnage of organic waste collected down 18% overall
- HWRC garden waste tonnage up 64%
- Kerbside tonnage down 44%
- Residual overall up 1%
- October 2013/14- composting tonnage down 20% in comparison to Oct 2012/13

Re-useable Garden Waste Sacks

There are many examples of Welsh local authorities that already use re-useable sacks for garden waste, where bins are not provided. These include Monmouthshire, Blaenau Gwent, Bridgend and The Vale of Glamorgan. Costs and ways of accessing bags differ, with The Vale of Glamorgan charging £1 per bag, with no limit on the number of bags that can be bought. They also apply a “no excuse” policy to replacement bags; if bags are lost or damaged, despite the reason, a charge will be applied for a new one. Officers from these local authorities have suggested that bags are no bigger than 90L for health and safety issues, and advised that it would be worth procuring weighted bags at the offset, to minimise the risk of bags blowing away. A visit to the Vale of Glamorgan took place in August 2014 to determine any operational differences or risks e.g. an open back vehicle will be required for re-useable bags, different to the vehicles currently used in Cardiff.



Bulky Waste Collections



In 2000, Bulky Bob's was awarded a contract to collect all bulky household waste from households in Liverpool, saving Liverpool Council £145,000 in disposal costs. Bulky Bob's collects all bulky household waste and provides training, employment and wider community benefits to those on low incomes in the city. Full time, trainee, volunteer and placement employment opportunities have increased as the social enterprise has developed new reuse and recycling activities. New activities include cable stripping and microwave oven recycling, to which disabled placements and their key workers are assigned. Between 2000-2010, Bulky Bob's:

- made over 450,000 collections of bulky household waste;
- diverted over 275,000 individual furniture items and white goods from landfill (60%+ of this material is recycled/reused);
- collected more than 35,000 tonnes of waste furniture and white goods; and

- employed 238 people from the long-term unemployed. 93% of the trainees who finish the Bulky Bob's year long fully salaried training programme move in to full-time employment.

Household Waste Recycling Centres

Shared HWRC facilities



Although not currently a practice adopted within Wales, there are many examples whereby English local authorities, more often than not who cover a significantly large geographical area, share facilities. This includes Suffolk and Hampshire, who charge each other for cross border usage. Limited data is available as to the success of these shared agreements. However, a recent story published within the waste industry suggests that local authorities are moving away from this practice. During March 2014, Essex Council terminated an agreement which allowed Southend residents to use their HWRC's for a £30,000 a year payment from the local authority, due to "financial restrictions".

Similarly, Bradford Council has implemented a resident's permit scheme, whereby users have to prove they are residents of Bradford to use the site. They have estimated a crack down on cross border usage will make savings of up to £160,000.

A recent study undertaken by Resource Futures, with support of WRAP Cymru, into cross border usage in Cardiff has suggested that 11% of users are from outside Cardiff, with potential additional costs of £430,000 per annum.

Carpet Recycling at HWRC's



The introduction of carpet recycling at Nottingham's HRC's has increased their HWRC diversion from landfill by 4% bringing it up to 94%.

A trial undertaken during Winter 2013 in Cardiff, whereby site operatives diverted all carpets out of the residual waste skips, resulted in 500T of carpet being collected in just one month.

Re-use Centres at HWRC's



Swansea Council have a re-use “corner shop” on site at their HWRC, which is run by 2 members of staff. Residents are invited to take items that can be re-used to the shop which are displayed in 2 storage containers. In addition, site operatives intercept users if they feel that their items can be re-used. Any items that are deemed to be of significant value are sold on Ebay using a council account, and any profit made is reinvested into a waste educational programme. The shop is currently achieving an income of approximately £130 a day, as well as re-use data. In addition, the HWRC site has a reduced disposal cost as a result of waste diversion.



Warwickshire County Council (WCC) have been recognised as the “best practice” example of developing a re-use shop by WRAP. Re-use shops are available at 3 sites, each ran by a different charity; Age Concern, Action 21 and The Shakespeare Hospice. The shops carry out 120-150 transactions per day, with Action 21 diverting approximately 10 tonnes of items per month from landfill. WCC charge a rental fee of £5000 p/annum, or 5% of the gross annual income should this be higher than £5000. 3.5 tonnes of items were diverted from landfill and re-used in 2011-12.

Commercial Waste



Limited data is available as to recycling and re-use incentives, due to the competitive nature of commercial waste collections (often run through the private sector.) Cardiff is very much at the fore front of providing an established recycling and waste collection service “in house”.

However, on board weighing technology is commonplace in the US and throughout Europe and has been found to incentivise waste reduction, with businesses (& householders!) charged by the weight of waste thrown away.

This is seen as being a fair solution, with customers only paying for what is produced.

The waste prevention programme for Wales has suggested a non-statutory waste reduction target of -1.2% a year across the commercial sector, and suggests that this is to be achieved by using economic drivers to encourage resource efficiency. Waste audits are imperative to be able to apply a figure on potential savings businesses can achieve, by improving their recycling and waste management.

During the Christmas period of 2013, Cardiff's waste education and enforcement officers, in collaboration with the commercial waste team, launched the "Operation 8" campaign. This consisted of a trial within the City Centre to 1) reduce the collection window time, to ensure waste was not on the street for an unreasonable length of time 2) regular monitoring of incorrect waste presentation 3) a requirement to lock bins at all times 4) a requirement to separate food waste. The above requirements were prescribed by issuing a formal Section 47 Notice to all businesses affected, and resulted in improved street scene during the busy christmas shopping period, with praise from visitors and the managing director of St Davids 2 received.

Bring Site Update

Cardiff currently has 13 bring sites across the city, they vary in size, type and waste stream collected. The number has significantly reduced during the past two years due to issues surrounding contamination, commercial abuse and ;lack of funding available to upgrade facilities.

Bring Sites are defined as '*any area (usually unstaffed) where members of the public can visit to deposit recyclable materials such as glass, cans, plastics, paper, textiles, shoes etc.*'.

Larger sites, for example, at supermarkets, have rear end loader skips for mixed recycling, while smaller sites (in car parks for example) simply have a number (between 1 and 4) of 1100 litre bins.

The table below identifies existing sites and the materials currently collected

Location	Ward	Facility	Materials
Western Leisure Centre, Caerau Lane	Caerau	Street Unit	Mixed recycling*
Albert Street Car Park	Canton	Rescape	Mixed recycling*
Asda, Leckwith Road	Canton	RO/RO's	Mixed recycling*
Maindy Leisure Centre	Cathays	Rescape	Mixed recycling*
Asda Cardiff Bay, Ferry Road	Grangetown	RO/RO's	Mixed recycling*

IKEA, Ferry Road	Grangetown	Rescape	Mixed recycling*
Morrisons, International Way	Grangetown	RO/RO's	Mixed recycling*
Car park behind High Street	Llandaff		Mixed recycling*
Sainsbury's, Excalibur Drive	Llanishen		Mixed recycling*
Llanrumney Library, Countisbury Avenue	Llanrumney	Street Unit	Mixed recycling*
Asda, Deering Road	Pontprennau	RO/RO's	Mixed recycling*
Rumney Community Centre, Llanstephan Road	Rumney		Mixed recycling*
Asda, Longwood Drive	Whitchurch	RO/RO's	Mixed recycling*

*Mixed recycling – items that are currently collected in the green bag domestic collection, paper, cans, glass, cardboard, plastic.

The Waste Strategy (2011-2016) stipulated that:

- *We will investigate the possible expansion of the existing network and range of facilities*
- *Work with the third sector and small to medium enterprises to provide recycling facilities for materials that are not currently collected by the kerbside scheme*

Recycling banks can also be found on private sites, as a result of agreements with private landowners and a third sector, however, have no connection with the Council. At present we do not receive any weights/information relating to their performance.

In the main, recycling banks are collected as part of the Commercial rounds, as a result, no weights/figures are available to assess their performance.

Recycling banks at supermarkets are collected through HWRC collections. As a result, the containers are weighed at Lamby Way and figures for its contents counted towards recycling figures. Recycling from bring sites at Supermarkets equates to less than 0.2% (255 tonnes) of the overall recycling performance (2012 data).

WRAP do not offer any best practise examples, their most recent report 'Bring Site Recycling' outlines the issues LA's may encounter with Bring Sites and how to overcome them. Welsh Governments 'Municipal Sector Plan, Part 1' (2011) identifies that LA's should provide 'bring site density to reflect the needs of local residents'.

As a result due to ongoing costs of maintenance and repair, and effectiveness of the kerbside collection system it is proposed that the bring site network should not be expanded further.

From experience best practise in Cardiff is to only install bring sites using purpose built facilities. Even then they do not come without their issues, including vandalism, contamination and arson. See pictures below



Where possible the council should work with the third sector to support them with their bring site network in return for data to contribute to the Local Authorities performance. The main concern to overcome here is an incentive – if there is no incentive to the Third Sector, why would they take the time to report performance figures? In England they encourage the use of recycling and reuse credits, unfortunately there is no such scheme in Wales.

At present, the only third sector organisation the Council work with in the Bring Site context is the YMCA. As a long standing partner of the GIOFC Campaign they supply us with bring site weights on a monthly basis which contribute to our reuse performance. During 2012/13 this lead to 42.14 tonnes, and 2013/14 40.37 tonnes.

A considerable number of high density blocks of flats are being developed across the city due to the improved economic/financial position in the housing sector. In order to cope with the high density often bin stores with communal facilities are incorporated into the design of blocks of flats. At present, with the SPG there is only a requirement to segregate waste into three waste streams (residual, recycling, composting). This could be expanded further on large sites to include:

- Textiles
- Electricals
- Segregated cardboard
- Books and other media
- Separate glass collections

In facilitating this collection arrangement with the private sector, an income could be generated for the property management company/residents

association, and in return for facilitating the partnership, could provide Cardiff with some performance data.
At present, the costs of setting up this arrangement are unknown, and there are no known examples of this being implemented.

Appendix C – Collection options considered through the KAT model

Option	Residual waste	Recycling	Food	Compostable Waste	Processing
0 - BAU	Fortnightly	Weekly – co-mingled bag	Weekly	Fortnightly	MRF (Materials Reclamation Facility)
1	Fortnightly	Weekly – comingled wheeled bin	Weekly	Fortnightly	MRF
2	Fortnightly	Fortnightly – comingled wheeled bin	Weekly	Fortnightly	MRF
3	Fortnightly	Weekly comingled bag and separate box for glass	Weekly	Fortnightly	MRF
4	Fortnightly	Weekly kerbside (2 boxes and a reusable sack for cardboard)	Weekly	Fortnightly	Bulking
5	Fortnightly restricted*	Weekly – co-mingled bag	Weekly	Fortnightly	MRF
6	Fortnightly restricted	Weekly – comingled wheeled bin	Weekly	Fortnightly	MRF
7	Fortnightly restricted	Fortnightly – comingled wheeled bin	Weekly	Fortnightly	MRF
8	Fortnightly restricted	Weekly comingled bag and separate box for glass	Weekly	Fortnightly	MRF
9	Fortnightly restricted	Weekly kerbside (2 boxes and a reusable sack for cardboard)	Weekly	Fortnightly	Bulking
10	Monthly**	Weekly – co-mingled bag	Weekly	Fortnightly	MRF
11	Monthly	Weekly – comingled wheeled bin	Weekly	Fortnightly	MRF
12	Monthly	Fortnightly – comingled wheeled bin	Weekly	Fortnightly	MRF
12	Monthly	Weekly comingled bag and separate box	Weekly	Fortnightly	MRF

		for glass			
13	Monthly	Weekly kerbside (2 boxes and a reusable sack for cardboard)	Weekly	Fortnightly	Bulking

* the existing 240l wheeled bin areas and the unlimited black bag collections are provided with a 140l wheeled bin or equivalent capacity in all bag areas, that continue to be collected every two weeks.

** 240l wheeled bin (an equivalent capacity for all bag areas) are collected every four weeks

Appendix D – Summary of the high level modelling costs,

These are not final costed options but are indicative of the financial dynamics of each option in year 1.

option	collections costs	supplies costs	treatment & disposal costs	total service costs	Set up costs	Capital	vehicle penalties	Total set up costs	Total first year costs
BAU1 - fortnightly residual, weekly recycling comingled, weekly food, seasonal green, bags & liners free	£6,053,000	£1,095,006	£5,639,104	£12,787,109	£0	£0	tbc	£0	£12,787,109
BAU1a - fortnightly residual, weekly recycling comingled, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£6,385,400	£1,057,686	£5,639,104	£13,082,190	£75,000	£293,250	tbc	£368,250	£13,450,440
BAU2 - fortnightly residual restricted, weekly recycling comingled, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£6,155,900	£1,202,621	£5,430,519	£12,789,040	£435,000	£1,637,714	tbc	£2,072,714	£14,861,754

TWIN2 - fortnightly residual restricted, weekly recycling 2 bags, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£7,675,900	£497,799	£2,877,886	£11,051,585	£435,000	£2,038,293	tbc	£2,473,293	£13,524,878
KERB2 - fortnightly residual restricted, weekly recycling kerbside 2 box & bag, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks, HMOs comingled	£7,249,400	£528,208	£2,717,913	£10,495,521	£435,000	£3,037,426	tbc	£3,472,426	£13,967,947
BAU3 - monthly residual, weekly recycling comingled, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£5,503,900	£1,363,544	£5,430,519	£12,297,962	£435,000	£293,250	tbc	£728,250	£13,026,212
TWIN3 - monthly residual, weekly recycling 2 bags, weekly food, seasonal green, bags & liners free, further wheeled	£7,023,900	£557,410	£2,896,968	£10,478,279	£435,000	£693,829	tbc	£1,128,829	£11,607,108

bin expansion, opt in reusable garden sacks									
KERB3 - monthly residual, weekly recycling kerbside 2 box & bag, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks, HMOs comingled	£6,367,900	£618,227	£3,253,569	£10,239,697	£435,000	£1,692,962	tbc	£2,127,962	£12,367,659
BAU4 - 3 weekly residual, weekly recycling comingled, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£5,446,800	£1,101,310	£5,430,519	£11,978,629	£435,000	£12,000	tbc	£447,000	£12,425,629

Appendix E: Recycling Waste Management Strategy Consultation results summary

Results of the Outline Waste Management Strategy- 2015-2018 Consultation

The outline waste management strategy 2015-2018 consultation was available to complete from 21st November 2014 -12th January 2015, in line with the budget consultation.

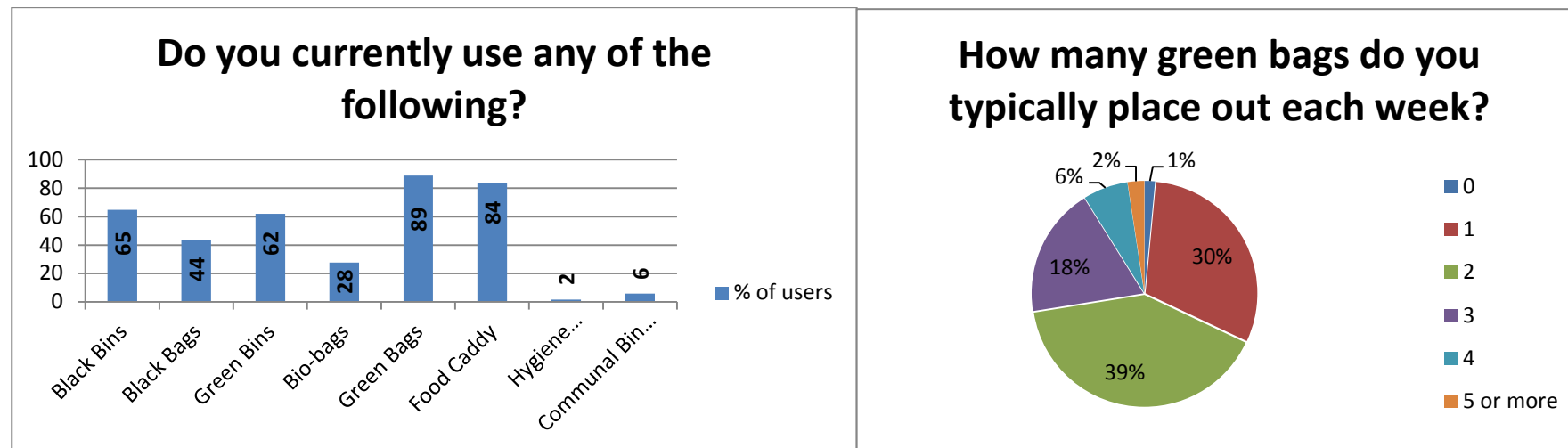
Hard copies were distributed to all libraries/leisure centres and hubs.

Press releases encouraging members of the public to complete were issued.

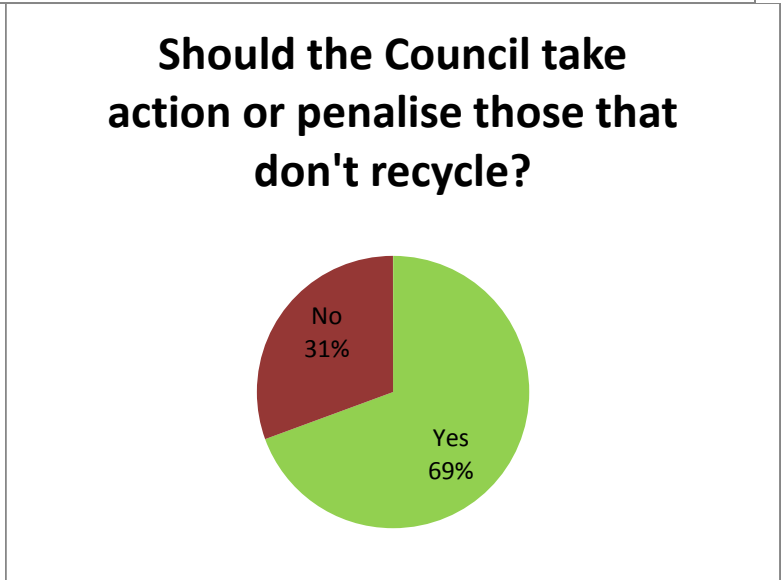
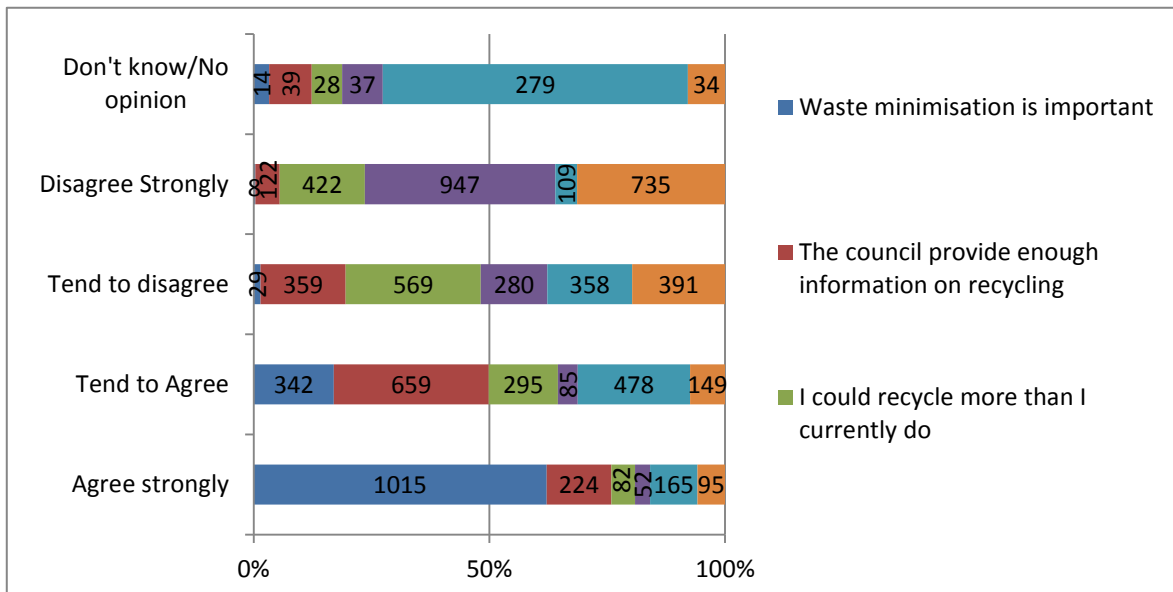
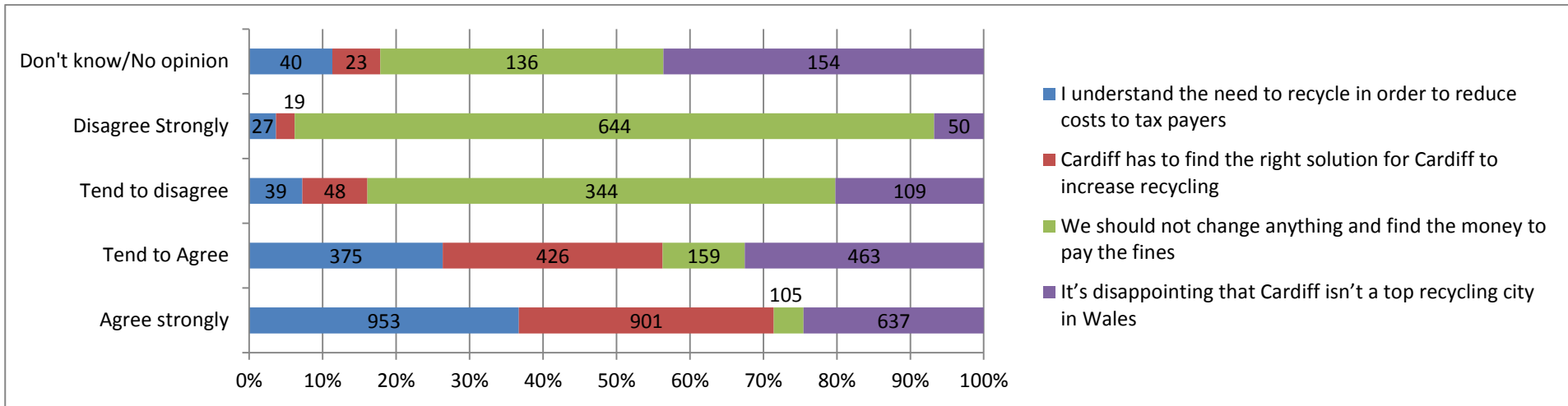
The electronic link to complete was widely promoted through social media, along with being circulated to key stakeholder contact lists. Internal communications were also prevalent.

In addition, the internal access officer was informed of the consultation and provided with hard copies to distribute amongst various groups.

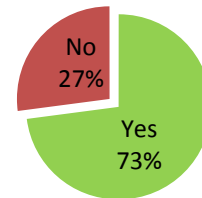
There were 1,443 respondents, and the results can be seen below. Where % results do not reach a full %, this suggests no response entries:



How much do you agree with the following statements?



Do you think the Council should encourage people to recycle more through service change, supporting them through clear information and enforcing those that don't recycle, even if this costs more to deliver these objectives?

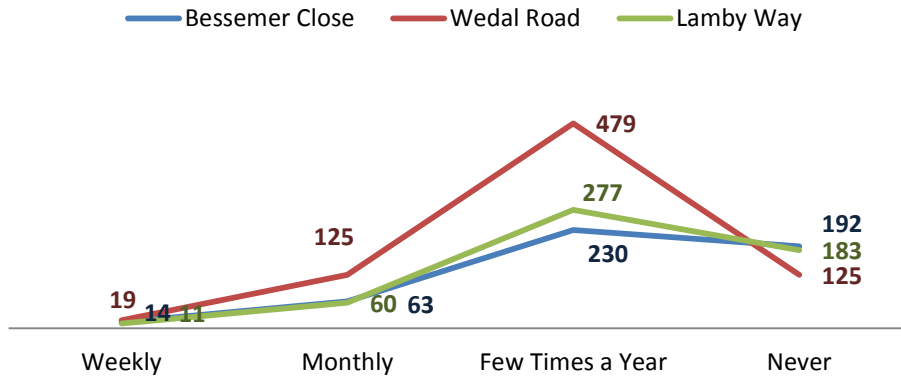


HOUSEHOLD WASTE RECYCLING CENTRES (HWRC'S)

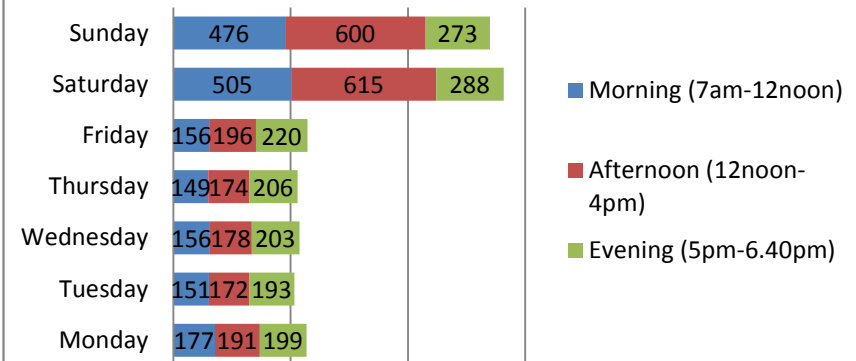
Do you use Household Waste Recycling Centres?

Yes: 72% **NO 28%**

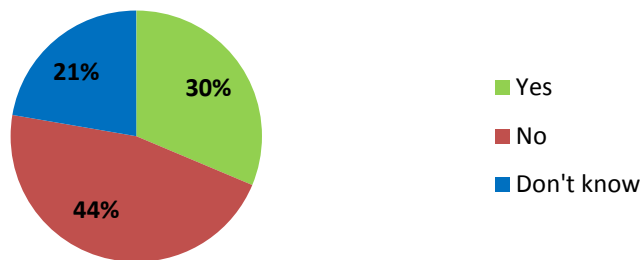
Which of the following sites do you use?



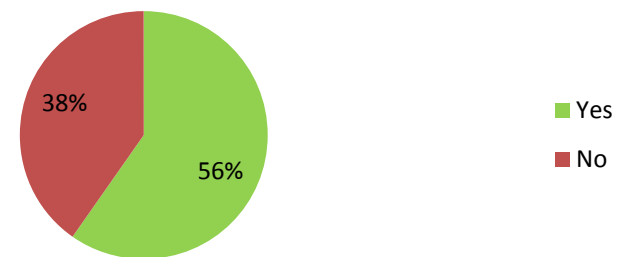
What days of the week are you most likely to visit and when?

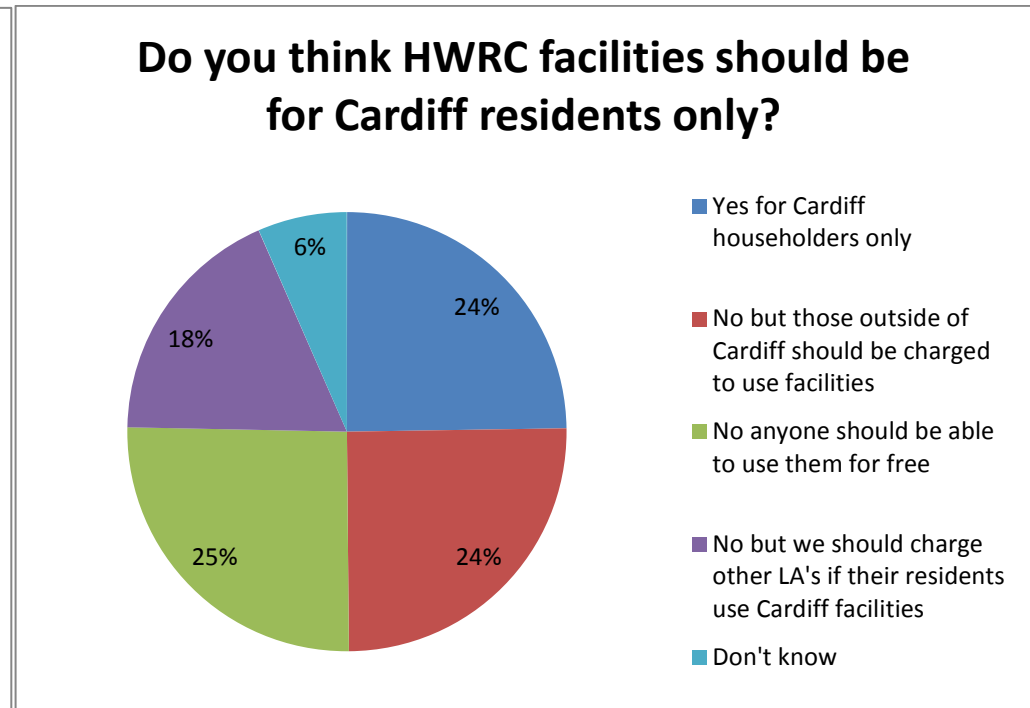
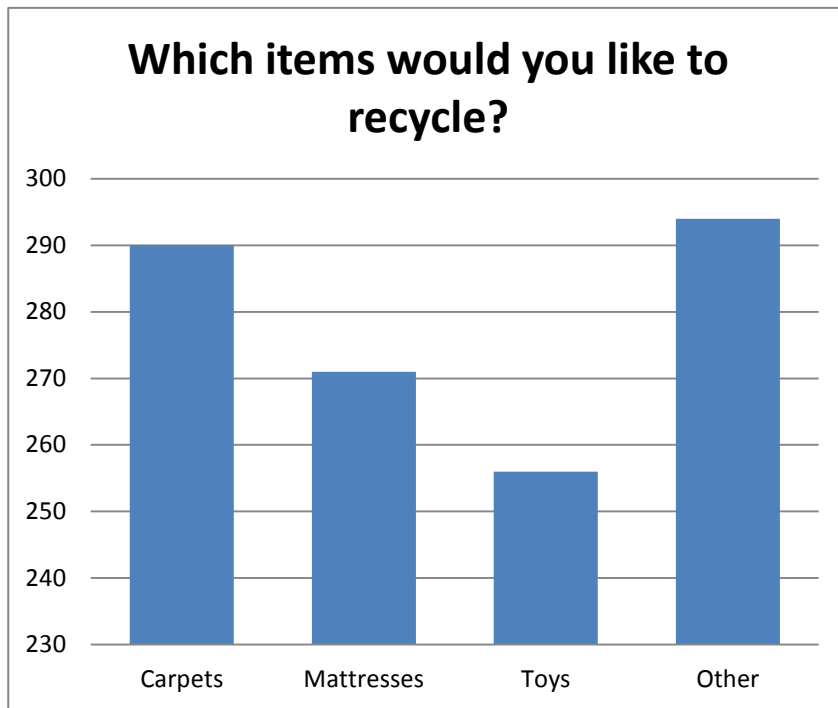


Could the Council improve the site layout and signage to encourage you to recycle more?



Would you like to be able to recycle more items when you visit your local HWRC?





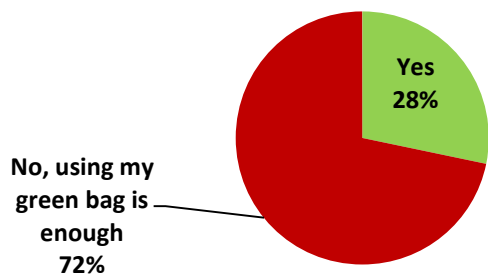
I'd like more help to understand what can be recycled and where to put things at the HWRC's?

YES 45% NO 52%

The City of Cardiff Council is looking to have a reuse shop on a HWRC site. If there was a reuse shop would you use it or donate items?

YES 76% NO 7%

Do you think there should be more bring sites or bottle banks across Cardiff?

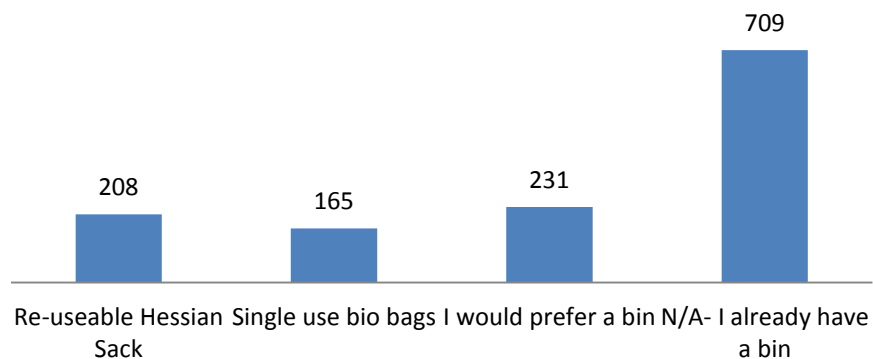


WASTE RESTRICTIONS

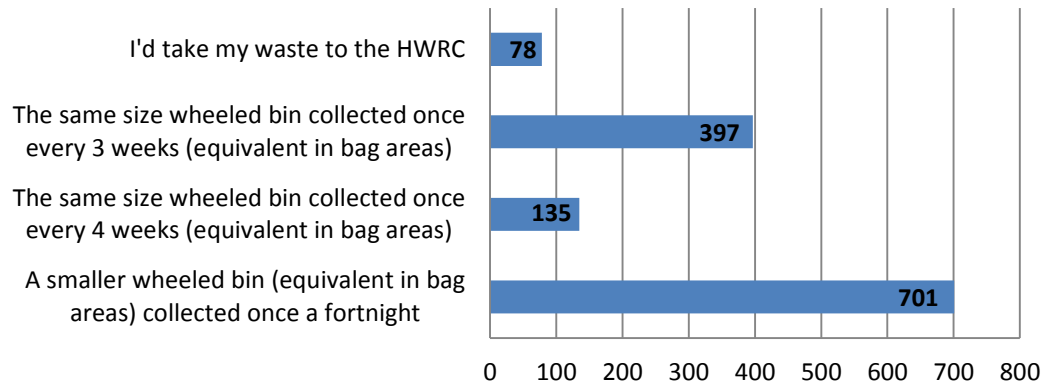
If green waste collections stopped in the winter, would you consider paying for an 'opt in' service Oct-March



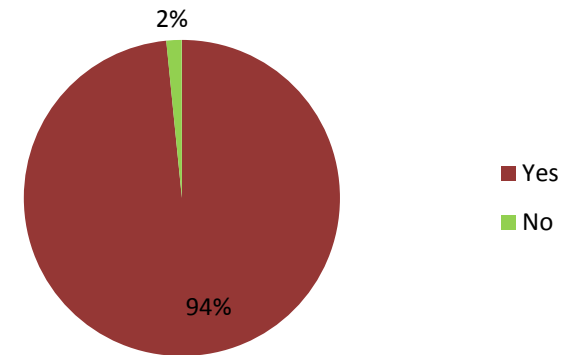
What is your preferred option for the collection of garden waste?



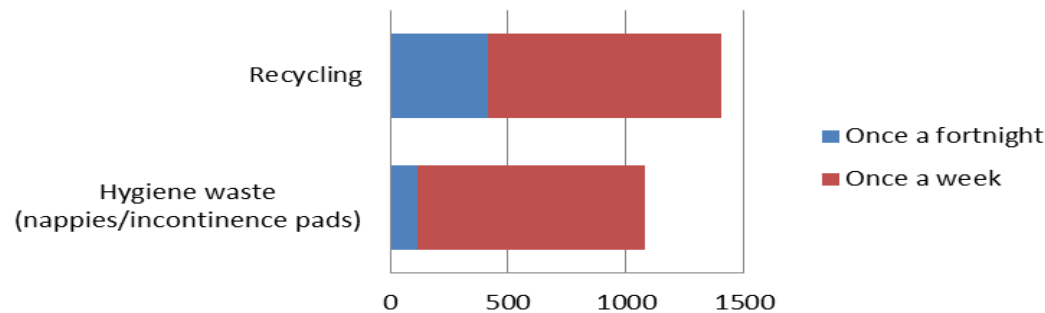
If the Council has to reduce the amount of general waste they collect from me, I would prefer:



Do you use the hygiene waste service to dispose of nappies?

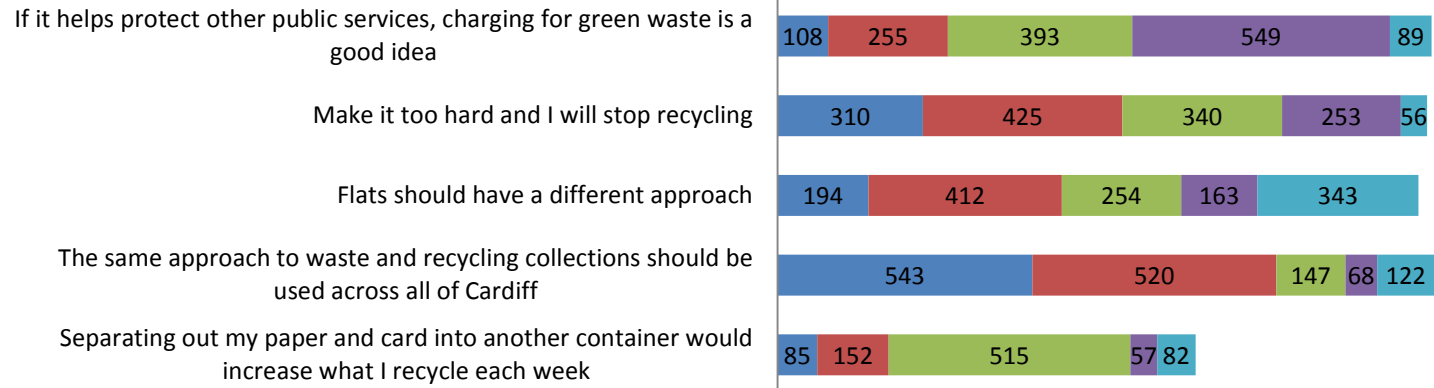


How often do you think the following should be collected?

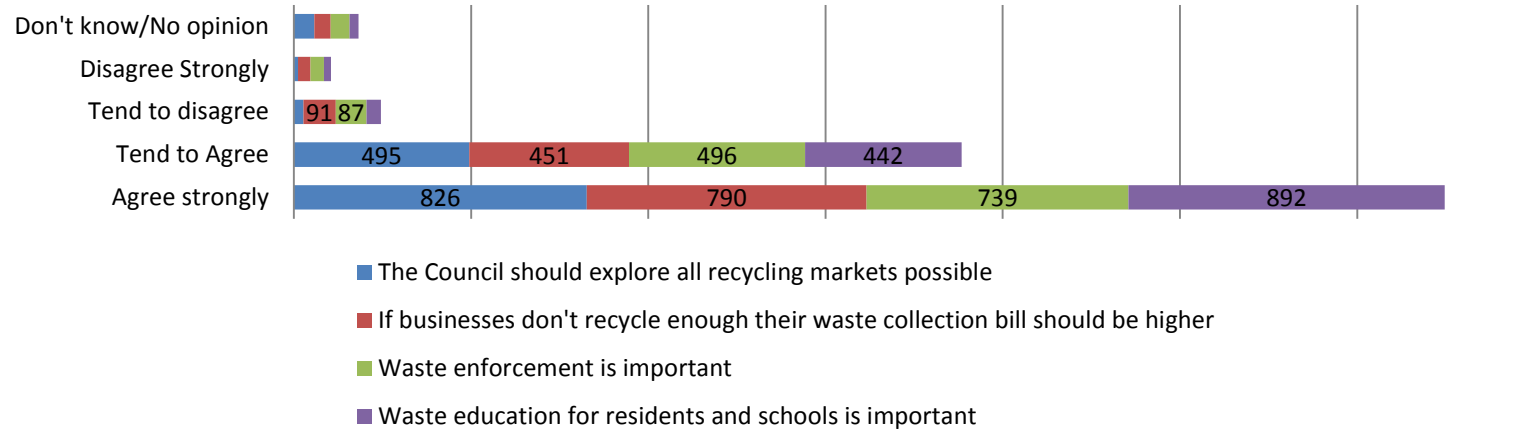


How much do you agree with the following statements?

■ Agree strongly
 ■ Tend to Agree
 ■ Tend to disagree
 ■ Disagree Strongly
 ■ Don't know/No opinion



How much do you agree with the following statements?



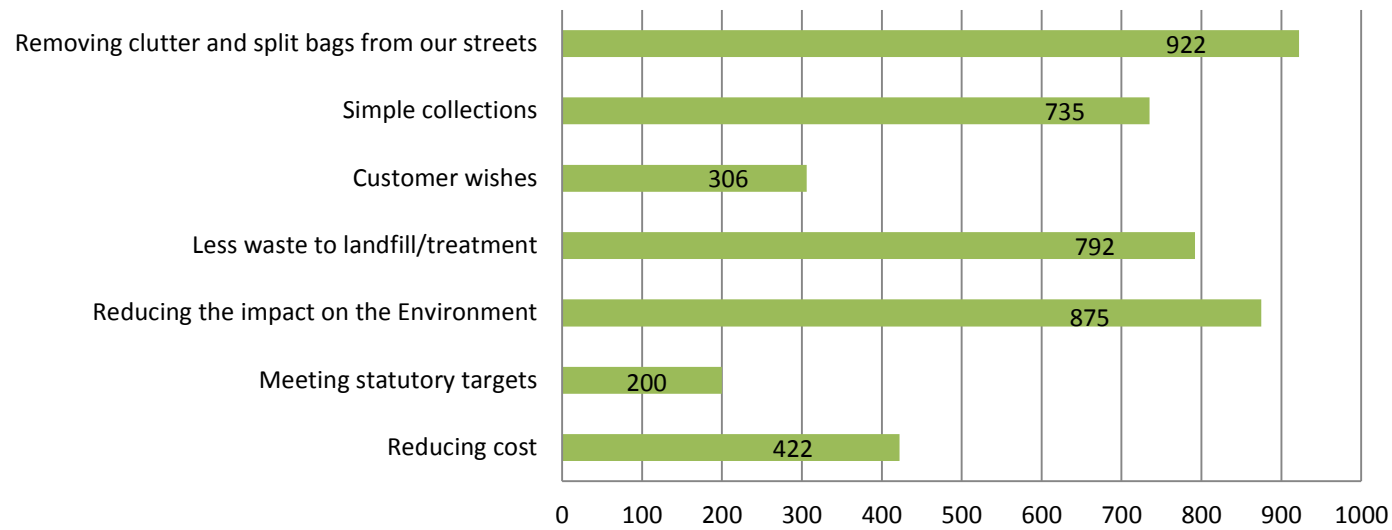
Which of the following would you prefer to use for your recycling?

RE-USEABLE RECYCLING SACK: 17%

RECYCLING BOXES- 15%

SINGLE USE RECYCLING BAG- 62%

Please choose your top 3 priorities...



Appendix F: Cardiff Council position on compliance with the separate collections guidance and TEEP

For clarity, 'separate collections' means the gathering of waste, including the preliminary sorting and preliminary storage of waste for the purposes of transport to a waste treatment facility where a waste stream is kept separately by type and nature so as to facilitate a specific treatment. There is debate over what constitutes 'separate collection' that has been the subject of legal argument in the UK and the (England & Wales) Waste Regulations were amended as a result of legal challenge.

The WG guidance on the revised waste framework was only published on 22nd December 2014. The guidance aims to clarify key debates around what constitutes high quality and the necessity test and will take time to consider.

Cardiff has always strived for high quality recycling in order to maximise recycling and secure the best market prices. Legal compliance is also an absolute priority. Yet, we have always balanced these needs with local solutions that the residents of Cardiff support.

Collections Options Modelling and Appraisal

One of the key consideration of the work to date has been the need to baseline the current kerbside collection service against WG's preferred 'collections blueprint' (kerbside sorting). Equally, the lack of public support identified in the initial December 2013 waste strategy consultation also must be considered in developing future service options. Although under the current WG guidance public opinion is outlined as not a factor, low participation for recycling can significantly increase service cost and increase the risk of failing future recycling statutory targets.

The high level modelling that has been undertaken looks to identify the best options and to explore these in more detail. The work to date has provided a Outline Business Case which is subject to further assessment and market testing. This will be followed by a submission of a Final Business Case before an absolute decision is made on any form of collection change in relation to dry recycling collections.

High level summary of the modelling sample costs – first year only

option	Total service costs		Total set up costs		Total first year costs	Achieve future recycling
--------	---------------------	--	--------------------	--	------------------------	--------------------------

					targets	
BAU1 - fortnightly residual, weekly recycling comingled, weekly food, seasonal green, bags & liners free	£12,787,109		£0		£12,787,109	NO
BAU2 - fortnightly residual restricted, weekly recycling comingled, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£12,789,040		£2,072,714		£14,861,754	YES
TWIN2 - fortnightly residual restricted, weekly recycling 2 bags, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£11,051,585		£2,473,293		£13,524,878	YES
KERB2 - fortnightly residual restricted, weekly recycling kerbside 2 box & bag, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks, HMOs co-mingled	£10,495,521		£3,472,426		£13,967,947	YES
BAU3 - monthly residual, weekly recycling comingled, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£12,297,962		£728,250		£13,026,212	YES
TWIN3 - monthly residual, weekly recycling 2 bags, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks	£10,478,279		£1,128,829		£11,607,108	YES
KERB3 - monthly residual, weekly recycling kerbside 2 box & bag, weekly food, seasonal green, bags & liners free, further wheeled bin expansion, opt in reusable garden sacks, HMOs co-mingled	£10,239,697		£2,127,962		£12,367,659	YES

The modelling considers 'whole life costs', so treatment costs (the process after collection e.g. composting, anaerobic digestion, energy from waste etc.) have also been determined for each collection option. Additionally, a piece of work was undertaken to determine what affect each collection option would have on the requirements on the Materials Recycling Facility and potential market prices for recycle.

It is a high level model that shows indicative costs based on the vehicles used and method of treatment. They are used to show a comparison between collection methods, rather than determined budgetary values. In terms of the potential material income associated with each collection method and processing costs, average price per tonnes were used. These prices are a guide only and subject to market fluctuation.

Once further work is completed on the current options a range of sensitivities will be explored against the preferred option to fully understand the risks. These sensitivities include;

- *Kerbside sort creates a 10% decrease in participation:* Research has shown that Councils which switched from comingled collections to kerbside sort face a risk of reduced participation. This is due to the highly acknowledged fact that comingled collections collect a higher yield of recyclate from its residents. The most significant costs associated with this are an increase in disposal costs, due to materials being put back in the refuse collection, and the risk of fines should the reduction in tonnage collected result in Cardiff not meeting its targets.
- *Increased participation as we move towards 70% recycling:* any model needs to be tested against current participation of capture of recyclate, but also how a scheme performs if residents recycle more.
- *Changes in market prices:* there is a need to further understand the market prices that can be achieved by the various collection methods. The theory remains that by achieving high quality better market prices can be secured despite the risk of market instability.

Sustainability modelling (Carbon footprint)

With support from WRAP, a sustainability model was undertaken on the various high level options. The report made the following recommendations for Cardiff to improve our carbon footprint;

- increasing recycling and avoidance of disposal;
- using collection vehicles with a different fuel source or lower consumption;
- less vehicle movements;
- considering reusable containers instead of the single use green bags;
- high quality recyclables to local markets; and

- reducing the energy consumption to process the recyclables collected.
- Make use of energy from waste instead of landfill disposal.

Many of the points above will be addressed in 2015 through restricting the residual waste to drive up recycling; MRF improvements; continually rebalancing the rounds to drive out efficiencies and diversion of residual waste to the Project Gwyrdd, Viridor energy recovery facility.

Necessity

WG have determined that LAs should seek to achieve the best overall environmental outcome, and that where possible, should look to achieve 'closed loop' recycling. This for example, would mean to turn a glass bottle back into a glass bottle and not into road aggregate.

Under the necessity test, Cardiff must consider whether it actually needs to separate materials further in order to achieve high quality recycling. A simple benchmark for this test was to compare the quality of our materials, at the point that they are recycled, with 'good' kerbside sort authorities. Unfortunately, terms such as 'high quality' and 'good kerbside sort authority' are not defined by Natural Resources Wales (NRW) and the WG guidance was only provided 22nd December 2014. As a starting point waste officers compared the top destinations for Cardiff's recycling in 2012/13, to those used by Welsh kerbside sort authorities in the All Wales End destinations report.

Reviewing the All Wales End destinations report showed that Cardiff achieved the same if not higher standards in recycling than some kerbside sort authorities. Until the guidance is interpreted by the NRW, it could be argued that Cardiff already meets high quality standards when compared to other kerbside sort authorities. Such fundamental points should be considered prior to making changes to a highly effective, high performing, highly efficient service which enjoys high levels of public satisfaction at this time.

In addition the MRF regulations, which came into force in October 2014, will assist with mapping out the various "quality" standards achieved through the different collection methods used across Wales. The regulations require MRFs to undertake detailed sampling on material as it is received, and again after it has been through the sorting process. It will enable Cardiff to ascertain the true quality of our material, and how it is, or isn't, affected by the MRF process. Cardiff will then be in a better position to compare the quality of the material it provides to reprocessors to that of kerbside sort authorities.

Currently, our contamination rate is between 8-10% of inputs, which is below the industry standard. As the MRF regulations only came into effect in October 2014, more data is required across the industry to establish “what is quality”.

TEEP Test

Cardiff must also consider whether it is TEEP to do so.

- Technically practicable: Given that separate collections operate in cities similar to Cardiff – such as Belfast, it is likely to be concluded that such collections are also practicable within Cardiff. Equally, WG recognise that flats may require an alternative approach than kerbside sort.
- Economically Practicable: The benchmark for whether collections are economically practicable is that they must not be ‘excessive’ in comparison to non-separate collections. The final whole life costs of the different options will need to be assessed fully to determine this. The Council will also need to consider the “cost of change” in light of other investment priorities that need to be delivered. This also needs to consider current contracts and penalties from changing these procurements early. Far more data is required around the use of reusable containers for dry recycling as the timings of a collection cycle is the most significant factor in the collections modelling. Equally, the authority does not have sufficient data on the current composition of the waste collected or how this may change after the general waste has been restricted. The last compositional waste survey was funded and completed in 2002 by WG. The compositional split of the recycling can hugely influence the future vehicle requirements and configuration and therefore costs.
- Environmentally Practicable: Although high level sustainability modelling has been undertaken the final preferred option will need to be modelled as part of the full business case. Various changes such as restricting residual waste, further round balancing and the use of energy from waste will all improve our carbon footprint.

Local Government Measure 2009

In addition to the necessity and TEEP tests, the Council is subject to the requirements under schedule 2 of the Local Government Measure 2009. Under this, Cardiff must “Make arrangements to secure continuous improvement in the exercise of its functions”. In doing so, the authority must have “regard in particular to the need to improve the exercise of its functions in terms of;

- Strategic effectiveness

- Service quality;
- Service availability;
- Fairness;
- Sustainability;
- Efficiency; and
- Innovation.

Any decision to alter the service must also be justified when considering the above points. Further consideration will need to be given (and will be done so over 2015) to how we apply these 7 requirements to the service, but examples include:

- *Strategic Effectiveness*: where does the service sit within Council priorities and is it currently meeting LA and national performance targets. Is there a major strategic case for investment in change compared to other Council priorities;
- *Service Quality*: does the service meet the needs of its residents, satisfaction ratings, participation ratings etc. The necessity test (quality of materials can also be applied here)

RECYCLING AND WATSE RESTRICTING PROGRAMME

Appendix A: Collection changes

Main collection principles;

- Dry recycling will continue to be weekly via the freely provided green bags
- Food waste will continue to be weekly via the kerbside caddies
- Garden waste collections will remain fortnightly in the summer and monthly over the winter period
- General waste collections will remain fortnightly
- Assisted lifts, hygiene service etc. remain in place.

To ensure a better balance and efficiency across collection days, the following changes will occur:

- a) Moving Tongwynlais from a Friday Week A to a Monday Week B. This involves breaking up the ward into natural communities of Whitchurch and Tongwynlais.
- b) Moving 1424 properties in Whitchurch from a Friday Week A to a Tuesday Week B. This section of Whitchurch will be known as 'Velindre' for the purposes of waste communication material.
- c) Moving Plasnewydd from a Wednesday Week A to a Wednesday Week B.
- d) Moving a small number of properties within Grangetown from a Tuesday Week A to a Tuesday Week B (to be collected within the Canton area)
- e) Moving a small number of properties in Trowbridge to be collected within the Rumney routes.

All other ward collection days will remain unchanged. If there are any subsequent changes required to deliver further efficiencies this will be highlighted to the local ward members prior to implementation.

Appendix B: Expansion and bin changes:

- Bag areas will receive their bespoke bags in June & July and the new service will apply from late July.
- New wheeled bin expansion areas will receive their bin(s) in June & July and the new service will apply from late July.
- For the collection day areas the day change will apply from late July.
- All remaining areas that have existing wheeled bins will see no change to their service but their black bin will be exchanged during the summer months.
- Residents that already have a 140l black bin will see no change their service, unless they live on one of the wards that will have a change of collection day.

		RESIDUAL WASTE RECEPTACLES				GARDEN WASTE RECEPTACLES	
		Estimated July 2015	No change	August onwards	Estimated July 2015	Estimated July 2015	Estimated July 2015
Ward	Properties	Expansion to 140L Residual bins	Properties already on 140L	Exchange 240L for 140L	Bespoke Residual Bags	Green wheeled bin expansion	Re-useable garden sacks
Adamsdown	4603	1191	12	46	2207	0	3398
Butetown	6250	6	150	1004	131	6	131
Caerau	4935	0	28	4113	2	0	2
Canton	6724	2847	77	1817	1250	2847	1250
Cathays	8020	0	451	2348	2282	0	2282
Creigiau & St. Fagans	2076	0	27	2025	0	0	0
Cyncoed	4657	0	45	4128	1	0	1
Ely	6317	0	57	5720	1	0	1
Fairwater	6247	0	70	4820	14	0	14
Gabalfa	2675	161	145	1757	284	161	284
Grangetown	9407	0	326	3301	2216	0	2216
Heath	5614	0	58	4867	7	0	7
Lisvane	1538	0	6	1449	1	0	1
Llandaff	4053	0	59	2925	378	0	378
Llandaff North	3529	363	83	2583	65	363	65
Llanishen	7558	0	85	6244	1	0	1
Llanrumney	5249	0	70	4315	4	0	4
Pentwyn	6613	0	87	4947	2	0	2
Pentyrch	1448	0	21	1401	0	0	0
Penylan	5714	890	153	3308	224	711	403
Plasnewydd	8496	2314	365	1845	2316	0	4630
Pontprennau	3756	0	32	3467	0	0	0
Radyr & Morganstown	2772	0	28	2447	1	0	1
Rhiwbina	5147	178	78	4555	1	178	1
Riverside	7145	621	394	1534	2956	0	3577
Rumney	3860	0	28	3490	4	0	4
Splott	6339	1207	36	2378	1755	0	2962
Trowbridge	6904	0	35	6062	1	0	1
Whitchurch & Tongwynlais	7549	0	72	5703	345	0	345
TOTALS:	155195	9778	3078	94599	16449	4266	21961

Appendix C: Service Rules and Support Assistance

Residual waste bin provision

Each household that is deemed operationally suitable will be provided with 1 x 140L residual waste bin as the new standard size, with the following options for larger households:

Table 1: Bin allocation for larger properties.

Household size	Bins	Total Residual Waste Capacity
Standard Household, 1-5 people	140 litre bin	140 litre
6 or more people	240L	240 litres
8 or more people	Provision will depend on individual circumstances	

- All requests for additional capacity will be assessed through the completion of an “Additional residual waste capacity” application form with customers to ensure the household is maximising their recycling, and has access to appropriate services. Consideration will be given to medical issues, age and disability etc.
- Any street identified as having large numbers of Households of Multiple Occupancy (HMO)’s/shared households will be assessed before the expansion of the wheeled bins. Face to face engagement and cross referencing of council records, will determine the required number of bins for these properties prior to delivery.
- The justification of table 1 is given as larger households are often shared HMO. Shared HMOs often have residents living independently of each other and as a result, do domestic chores such as shopping and cooking alone. This independent activity can lead to higher levels of waste production and as a result, additional allowances should be made for their residual waste.
- Flats with communal bin arrangements will continue with assisting arrangements and be assessed on a block-by-block basis.
- The above table is a guide and it should be recognised that there may be individual circumstances whereby the above may not be the best solution.

- No additional allowance will be given for properties that have large amounts of animal waste.
- Residents producing nappy/incontinence pad waste will be offered the hygiene service as an alternative, but not additional residual capacity.
- Bins that are overfilled and too heavy to move will not be collected. The lid must be closed in order for collections to be made. As a guide that maximum weight of a bin should be 75 Kg. The residents will be expected to remove some of the contents and represent on the next collection day.
- Properties previously issued with additional residual bin provision, will be brought in line with the allocations in table 1.
- Assisted service is available to residents that qualify.
- Replacement, damaged, lost or stolen bins will be charged at £25 per bin.
- Only wheeled bins with the appropriate barcodes for the property will be collected.
- Deliberate contamination of recycling bags to obtain a weekly service of waste collections will be addressed by Waste Enforcement Officers and fixed penalties will be issued to those who are non-complaint with waste presentation guidelines.

Restriction Of residual Waste in the bag areas

In areas where it is not possible to store wheeled bins, or it is not operationally efficient to collect wheeled bins, the property will remain on a bag collection. A restriction on the number of residual waste bags that will be collected will apply.

- These properties will be provided with a roll of bespoke bags, the equivalent of 3 bags per fortnight.
- Operatives will collect all bespoke bags presented. Black bags will not be collected and subject to enforcement activity.
- Residents will be encouraged to present no more than 3 bespoke bags per fortnight, to ensure their roll of bags lasts the full 6 months. However, operatives will collect all bespoke bags presented. Additional rolls of bespoke bags will not be provided free of charge. Residents who exceed their allowance early on in the 6 month period will be provided with advice on alternative methods to dispose of their residual waste.
- Requests for additional bespoke bags for larger household will be assessed through the completion of an “additional residual waste

capacity” application form to ensure the household is maximising their recycling, and has access to appropriate services.

- Any additional allowance provided will be in line with Table 1, so that the allowance is consistent with the amount of capacity issued if properties are issued with wheeled bins.
- Delivery teams will deliver twice a year (every 6 months) to all households on the bag scheme. This will be reviewed periodically to ensure it is the most appropriate method/frequency. For properties that have restricted access and the delivery crews are unable to obtain access, it may be necessary for those residents to collect their bespoke bags from Lamby Way.
- Replacement bags will not be provided if the roll is lost or stolen.
- Where new residents move into a property and where they request it, we will deliver a new supply of bags on evidencing proof of moving.
- No additional allowance will be given for properties that have large amounts of animal waste.
- Residents producing nappy/incontinence pad waste will be offered the hygiene service as an alternative, but not additional residual capacity.
- Where there exists communal collection arrangements, i.e. bags grouped together around trees/dead end streets, residents will be encouraged to present their waste to the front of their property.
- Deliberate contamination of recycling bags to obtain a weekly service of waste collections will be addressed by Waste Enforcement officers and fixed penalties will be issued to those who are non-complaint with waste presentation guidelines.

Reusable garden waste sacks and green wheeled bins.

- The standard green wheeled bin provision will remain at 240l
- An additional green waste bin can be purchased for £25.
- Replacement, damaged, lost or stolen bins will be charged at £25 per bin
A maximum of two green wheeled bins can be presented on collection day. This limit was previously approved by cabinet in the July 2011 recycling and waste collection changes paper.
- Properties that currently have more than the 2 bin maximum will be reviewed individually. Additional bins may be removed.
- Assisted service is available for residents that qualify.
- Where properties are not issued with a green wheeled bin, they will be able to request reusable garden waste sacks. Residents can request up to 3 sacks be delivered per year.
- Beyond this allowance, reusable garden sacks can be purchased for £2 per sack.
- A maximum of six reusable sacks can be presented on collection day.

- Residents should also clearly mark their address onto the reusable sacks once delivered, to increase the chances of them being returned if the sack goes missing during bad weather.
- Where possible, delivery crews will knock doors and give the re-useable bags directly to residents, to minimise the risk of bags going missing from the pavement or alternatively they can be purchased from Lamby Way.
- Residents will continue to be able to transport any excess garden waste to the Household Recycling Centres free of charge. Alternatively, home composting bins are available to purchase for a subsidised price.

Green bags, food liners, kitchen caddies and kerbside caddies

- Green bags, food liners, kitchen caddies and kerbside caddies will continue to be provided free of charge.
- All items can be ordered for home delivery via the Councils web site, via email C2C@cardiff.gov.uk or by phoning C2C on 029 2087 0287.
- Green bags and food liners will be available from council hubs, but only one roll of each can be collected at any one time with presentation of a Cardiff address.
- Incorrect use of green bags, food liners or the food service can result in a £100 fixed penalty notice being issued

Waste Presentation

- All waste and recycling must be presented by 6am on the correct day of collection and not before 4pm the day before.
- Collections can take place between 6am and 10pm; individual area collection times are not guaranteed to be the same each week. Any recycling or waste missed as it was placed out after 6am on the correct collection day will not be rescheduled for collection. Residents will be asked to present before 6am on the next appropriate collection day.
- The bin lid must be closed in order for collections to be made.
- Missed collections that are a result of service disruption or failure will aim to be rescheduled within 5 working days.
- All wheeled bins and kerbside caddies should be removed from the adopted highway by 9am the day after collections.

Failure to remove containers from the adopted highway before 10am could result in a £100 Fixed Penalty Notice. Incorrect use of green bags, food liners or the food service can result in a £80 fixed penalty notice being issued under S87 of the EPA 1990 or £100 fixed penalty notice being issued under S46 of the EPA 1990.

Additional Waste

Wheeled Bins

- The lid of the wheeled bin should be closed
- Additional bags of waste alongside bins will not be collected.
- Bins that are overfilled and too heavy to move will not be collected. As a guide that maximum weight of a bin should be 75 Kg. The residents will

be expected to remove some of the contents and represent on the next collection day.

- Waste should not be compacted into the bins, as the waste will not then tip onto the collection vehicle. Where waste is too compacted the bin will not be emptied as it is not safe for operatives to pull the waste from inside the bin. The resident then has responsibility for disposing of any excess waste and representing the wheeled bin correctly at the next appropriate collection day.
- Any additional waste incorrectly presented will lead to enforcement action being taken where appropriate. An £80 Fixed Penalty Notice may be issued. Alternatively, a formal enforcement notice may be served on the property.

Bag Areas

- Only the bespoke residual waste bags provided will be collected by the collection crews.

The equivalent of 3 bespoke bags per fortnight will be provided for the bag areas.

- Additional bags will not be provided if the allocation is used too quickly by residents.
- Replacements will not be provided if lost or stolen.
- Black bags will not be collected.
- Any residual waste presented in black bags will lead to enforcement action being taken where appropriate. An £80 Fixed Penalty Notice may be issued.

Alternatives for excess waste

For residents struggling with the changes, there are numerous services available to assist them to minimise their residual waste;

- Assistance in understanding what can be recycled can be provided.
- Hygiene service for nappy and incontinence waste
- Additional capacity may be provided for larger households
- Bulky item collection service
- Local Charities for reusable goods (Track 2000; British Heart Foundation)
- Household Recycling Centres
- Paid frontage and waste removal service can be accessed through the existing Councils Commercial Waste Services.

Assisted Lifts

The assisted lift service will remain for residents that qualify for the service and require additional support with their waste collection service

- Assisted lifts are provided for residents who have difficulty moving their bins from a storage area on their property to the collection point.

- The collection crew take the residents bins, empty them and then return them to their property.
- This service is offered in the main to elderly and/or disabled residents, but all circumstances are considered.
- The service will not be provided if there is an able bodied individual resident over the age of 16 at the property.
- This service can be requested by contacting C2C. A home visit assessment will take place following request.
- Once accepted on to the service, an annual review will take place to ensure circumstances have not changed. Residents will be asked to complete a re-registration form.
- Should the re-registration form not be returned after a period of three weeks, residents will be notified that they will be removed from the service.
- The service can be withdrawn if evidence of abuse is found.
- Any household being removed from service will be provided notification in writing, unless they are removed at their own request, or because the resident has moved.

Hygiene Service

The Hygiene service will remain unchanged and is provided on a request basis for nappies, incontinence waste and associated changing waste only.

- The hygiene collection service is only intended for those residents who cannot fit this type of waste into their black bin/bespoke bags, with fortnightly general waste collections.
- The hygiene sacks will continue to be collected fortnightly, on the opposite week to your general waste collection.
- The hygiene collection service is not suitable for stoma bags, catheters, disposable bedding, dressings or animal waste. Alternative advice can be provided.
- The hygiene collection service is only available for households. Commercial businesses, such as a child minders or care homes, should contact us to discuss details of our commercial recycling and waste collection service.
- The hygiene bags can be collected from the kerbside or from a stated location on the property. The service can be accessed by contacting C2C or alternatively registering online.
- Four special bags will be provided once registration has been completed. The number of bags presented will be replaced following collection, e.g. if you place out two bags, we will provide a further two bags.

- Residents can stop the service at any point by phoning C2C or writing to the Council. Alternatively, if operatives notice that the hygiene service is being misused or bags are not being placed out, then residents may be written to and advised the service is being removed.

Appendix D: Education, Communications and Enforcement Plan

Key Stakeholders

- All Cardiff residents
- Staff
- Local Councillors
- Community leaders, especially minority groups
- Vulnerable groups
- Students
- Local Media
- Landlords and letting agents
- Current and potential new users of the assisted lift & hygiene service

Key messages

- Changes to waste collections start July 2015, but will be on going for some through the summer.
- What actually needs to go in your black bin?
- What happens to recycling- why do it?
- Recycling and food waste services - free and easy.
- Not achieving our targets means potentially heavy fines
- “Resource” not “waste”- how recycling helps local economy
- How to access services for more green bags, food liners, assisted lift; hygiene services etc.
- Changes will provide a value for money service for customers which helps protect other council services
- Reuse, Reduce, Recycle is how everyone can help us hit 58% WG target
- How to deal with extra waste.

Methods of Communications

- Targeted literature to the households in two phases;
- Staff Intranet; Our News; Message box of payslips; Core brief
- Include information in service area newsletters and email briefings – e.g. Tenant Times, School newsletters
- Cardiff Digs and student forums
- Capital Times advertising with editorial
- Press briefings and releases
- Social media – e.g Twitter, facebook
- Bus stop adverts and other advertising space
- Tidy Text messages through the new Push App messages

- Web pages info and links (including info on the KCT site).
- Radio advertisement
- Specialist press – community papers, websites
- Billboards
- Posters and pop up displays
- Email distribution to all our official external partners Internal staff, union and crews briefings
- Face to Face; outreach, environmental champions and door knocking activities
- Livery branding

Key dates

- 1st to 5th June 2015 Councillor briefing sessions
- 8th June City wide communications begin, information provided to all impacted households, specific to their changes.
- 15th June to late July 2015 new wheeled bins and bespoke bags will be delivered.
- Late July 2015 the new service starts
- The wheeled bin exchange will occur over a three month period, commencing in July.

Education stage 1st April – to throughout July 2015

This will involve engagement with residents and education on the changes ahead by communicating key messages. Specifically;

- The existing bag areas will be targeted and education provided to households that present an above number of black bags
- Target households that currently don't recycle.
- Bin assessments for capacity
- Provide further assistance on what can be recycled will be undertaken during this time.

Enforcement stage July 2015 onwards

Following the education stage, appropriate enforcement action will take place if residents are non-compliant which could result in fines over £80 or more:

- Any residual waste presented in black bags or additional to the wheeled bins or bespoke bags.
- Wheeled bins, bespoke bags, food caddies, green bags and reusable sacks presented incorrectly or not returned to property following collection.
- A build-up of general waste or bulky items within frontage of property.
- Deliberate / excessive contamination of recycling bags to obtain weekly collection service.
- Residents using others bins without permission

Appendix E: Financial Plans

Revenue

Current service			difference	New service	
black bags	Bag purchases	£0	£29,479	bespoke bags/roll	£29,479
Hygiene	Current services	£35,395	£9,000	increased service demand	£44,395
Collections	Current services	£7,650,570	-£137,266	New balanced rounds	£7,513,304
Bags, biobags & liners	Bags and Liners	£1400000	-£370,000	Bags, liners, reusable sacks, increase 10% demand	£1,030,000
Disposal	Current services	£2,401,827	-£367,480	Shift in tonnages	£2,034,348
Recycling & Food processing	Current services	0	£210,239	Shift in tonnages	£210,239
		Total annual	-£626,028		
		Target	£622,000		

Initial support

C2C – customer contact support	£50,000
City Wide Comms	£50,000
Additional education staff	£100,000
Additional enforcement staff	£250,000
Additional support – escalations, deliveries etc	£50,000

Capital

Wheeled bin expansion and new caddies and food provision	£395,000
Wheeled bin exchange	£2,400,000

Ref: RDB/PM/BD/10.03.15

11th March 2015

Councillor Bob Derbyshire,
Cabinet Member for the Environment,
County Hall,
Atlantic Wharf,
Cardiff,
CF10 4UW.



Dear Councillor Derbyshire,

Environmental Scrutiny Committee – 10th March 2015

On behalf of the Environmental Scrutiny Committee I would like to thank the officers for attending the Committee meeting on Tuesday 10th March 2015. As you are aware the meeting considered items titled 'Environment & Strategic Planning, Highways, Traffic & Transport Directorates – Performance Report Quarter 3 – 2014/15' and 'Recycling & Waste Restricting Programme 2015'. The comments and observations made by Members following these items are set out in this letter.

Environment Directorates – Performance Report Quarter 3 – 2014/15

- **WMT/009(b)** - The Committee were informed that a range of recycling initiatives is due to be delivered in Quarter 4 which should produce an outturn for the period of above 60%; this increase should be enough to help the Council reach its 52% recycling target for 2014/15. I would be grateful if you could provide a detailed summary of the work undertaken to produce this improvement, i.e. a shift from 49.47% in Quarter 2 to above 60% in Quarter 4. The response should include the actions taken; the costs of implementing the work and the savings generated by delivering this work.
- **STS/005(b)** – A Member noted that 'the performance indicator for the percentage of highways and relevant land inspected of a high or acceptable standard of cleanliness' was missed by 4.67% in Quarter 3. It was acknowledged that the target of 90% has been missed since the

2014/15 street cleansing budget reduction. The Committee will closely monitor this indicator in future.

Recycling & Waste Restricting Programme 2015

- The Committee were encouraged at the way that you have been working with 'Grangetown Community Concern' to develop a landlord waste information pack. This will provide important information on the management of domestic waste and will be available on request in a wide number of languages. The Committee believe that this type of engagement is a good example of how we should be looking to raise community awareness and ultimately help increase recycling rates.
- Swansea was cited as an example of where the waste restricting approach had delivered 3% increase in their overall MSW recycling rate. Several Members were interested in finding out the impact that this had had on the areas which accommodate Swansea's student population. I would be grateful if you could obtain this information and share it with the Committee.
- The waste presentation stated that Trafford Metropolitan Borough Council and Salford City Council have increased their recycling rate by 10% as a result of waste restricting. I'd be grateful if you could establish what the starting point for this recycling increase was and provide an update on their current recycling performance.
- Members accepted that incidents of theft and arson were minimal; however, they would welcome confirmation as to who would be responsible for the cost of replacing the new wheelie bins if they were stolen. The Committee would appreciate it if you could outline the approach that the Council will take in dealing with such thefts and describe cases where the liability will fall on the Council and when it is the responsibility of the householder.
- The Committee understands the importance of monitoring when householders place additional waste out for collection and when

enforcement action needs to be taken. Members anticipate that accurately monitoring compliance with the new restricting system will be difficult. They would like to know exactly how the process will work, for example, the role that waste collection operatives, the role of education and enforcement officers and the ICT system which will be used to record this data.

I would be grateful if you would consider the above comments and provide a response to the requests made in this letter.

Regards,

A handwritten signature in black ink that reads "P. D. Mitchell". The signature is written in a cursive, slightly slanted style.

Councillor Paul Mitchell
Chairperson Environmental Scrutiny Committee

Cc to:

Jane Forshaw, Director for the Environment
Tara King, Assistant Director for the Environment
Jane Cherrington, Operational Manager – Strategy & Enforcement
David Lowe, Waste Operations Manager
Paul Keeping, Operational Manager, Scrutiny Services
Joanne Watkins, Cabinet Office Manager
Members of the Environmental Scrutiny Committee



My Ref: CM30413
Your Ref: RDB/PM/BD/!0.03.15
Date: 26th March 2015

Councillor Paul Mitchell
c/o Scrutiny Services
Cardiff Council
County Hall
Atlantic Wharf
Cardiff
CF10 4UW

Dear / Annwyl Paul

Environmental Scrutiny Committee - 10 March 2015

Thank you for inviting myself and officers to present the proposals for the Performance Report Quarter 3 – 2014/15 and Recycling & Waste Restricting Programme 2015.

Environment Directorates – Performance Report Quarter 3 – 2014/15

WMT/009(b)

The sweepings contract has been fully implemented and processed in quarter 4. Over the year, the sweepings material has been stockpiled until the procurement exercise was fully completed. Approximately 8500 tonnes of material has been recycled. Recycling this material instead of landfilling or sending this to energy from waste has saved excess of £100,000 net, in disposal costs. In addition, if this material had not been recycled it would equate to £1.3m of fines from Welsh Government.

Additional post sorting of residual waste has been undertaken as well in quarter 4, to yield a further +2500 tonnes of recycling. This activity has cost an additional £260,000, but if this material had not been recycled it would equate to around £0.5m of fines from Welsh Government.

Other initiatives include recycling metals from the energy recovery plant at Viridor.

STS/005(b)

I note the Committee's comments and we are delivering ways to improve our performance through the Neighbourhood Services Project that you are aware of.

PLEASE REPLY TO: Cabinet Support Office, Room 514, County Hall, Atlantic Wharf,
Cardiff CF10 4UW
Tel (029) 2087 2631 Fax (029) 20872691



Recycling & Waste Restricting Programme 2015

Grangetown Community Concern

The Committees support for the 'Grangetown Community Concern' initiative is welcomed and officers are now looking at how we can expand this initiative wider across our city to raise community engagement with landlords and through the Neighbourhood Services Project and the Landlords licensing scheme.

Swansea

Cardiff officers have been working with Swansea waste officers to capture lessons learned from their bag restricting programme. Equally Swansea officers approached Cardiff last year to adopt our student communications plans. They worked with the University to promote the changes and provided extra resources on the streets to door knock and talk to their students. This mirrors what we already do in Cardiff annually and specifically the Environmental and we still do more with our Student Community Partnership approach which we are invited to present on in April.

Trafford Metropolitan Borough Council

An update has been requested from Trafford waste officers and this will be fed through once received.

Replacement Bins

If a bin is lost, damaged or stolen it is the responsibility of the householder to seek a replacement. If a bin is damaged during our operations, then the Council may show discretion and replace the wheeled bin free of charge. All other circumstances remain the responsibility of the householder or landlord. This practise has been taken from benchmarking of Local Authority waste services across the UK.

Tackling Waste Issues

The service will be providing additional resources to support the changes. Four education officers will be working ahead of the changes to undertake activities such as; outreach and roadshows; student events; hygiene service reviews; assisted lift assessments; education of high presenting households; larger families assessments and bin capacity checks on HMOs. An additional 12 waste officers will be recruited to target waste presentation issues and side waste.

The collection operatives will have clear instructions on the processes to follow and regular cross team reviews will be conducted. As well as proactive patrols, the waste collection and cleansing operatives will feedback via their end of shift reports of any problem areas. Equally in the Neighbourhood Service Trial areas the enforcement teams are embedded in the street scene teams and communicate directly on issues via the radios.

The enforcement teams will be using "fly-mapper" which is a handheld GPS device that allows officers to log the location, date, time and type of issue.

Yours sincerely
Yn gwyir



Councillor / Y Cynghorydd Bob Derbyshire
Cabinet Member Environment
Aelod Cabinet Dros Yr Amgylchedd

Report

CONSULTATION REPORT: OUTLINE WASTE MANAGEMENT STRATEGY, 2015-2018 *(Produced February 2015)*





Cardiff Research Centre is part of the Council's Policy, Partnership & Citizen Focus service. We strive to deliver research, information and consultation services for Cardiff Council and its partner organisations.

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- Analysis and interpretation of a wide range of secondary demographic and socio-economic data including the Census and all other sources from the wider data environment;
- Specialised studies on a wide range of topics including social, economic and demographic data sources, impact assessments and projections;
- Quantitative and qualitative research and consultation projects;
- The Cardiff Citizens' Panel;
- Focus Group facilitation;
- Advice and support on all aspects of research including survey & questionnaire design, &
- GIS thematic & schematic mapping services.

For further information please contact:

Claire Griffiths , Principal Consultation & Engagement Officer

☎ 029 2087 3217

✉ c.griffiths@cardiff.gov.uk

✉ research@cardiff.gov.uk

✉ consultation@cardiff.gov.uk

www.askcardiff.com

CONSULTATION REPORT: OUTLINE WASTE MANAGEMENT STRATEGY, 2015–2018

INTRODUCTION

The City of Cardiff Council is working with the Welsh Government to model the whole service impacts for waste minimisation, reuse, recycling and diversion from landfill for the next 25 years. This work will also help to inform the next waste strategy as it will give us robust data on the cost of providing services, the likely recycling performance and also tell us how sustainable our future services will be.

Cardiff has made massive leaps forwards in our recycling performance over the past ten years, but now we need to review how we will achieve the very challenging legal targets of 70% by 2025. Failing to meet these targets could cost the city £21m in fines if we do nothing and don't change our recycling performance.

The Welsh Government set out their vision for zero waste by 2050. This also included the introduction of statutory recycling targets for all Local Authorities in Wales.

- 58% by 2015/16
- 64% by 2019/20
- 70% by 2024/25

Unfortunately, in 2013/14 the Council failed to achieve the required recycling performance (we achieved 49.9% recycling and composting, the target was 52%) and could face significant fines if we don't turn this position around. During 2012/13 the cost of waste to landfill could have paid for over 450 additional Police Officers, or nearly 40 ambulances (*source: Waste Awareness Wales*).

The Welsh Government have firmly outlined their preferred collection blueprint for councils to follow in order to achieve high quality recycling, cost effective services and the most sustainable approach to waste and recycling. It is clear that the Councils waste and recycling collections cannot remain as they are and we must make improvements to drive up the recycling.

Consequently, the City of Cardiff council now must explore all future collection and recycling options to test what is the best solution for Cardiff. The public's views on the options available to us are important and will help inform the decision making process.

METHODOLOGY

A paper version of the waste management questionnaire was sent to 3,000 Cardiff addresses. This comprised a random sample of 2,500 Cardiff addresses, as well as a 'boost' sample of 500 surveys targeted at bag areas. Both of these were stratified by electoral division so as to reflect the distribution of Cardiff's population across the city. In addition, an electronic version of the survey was made available online and highlighted on the front of the paper survey. This was also linked to in the main council budget consultation, as well as being circulated to the Ask Cardiff online group and key stakeholder contacts held by waste management.

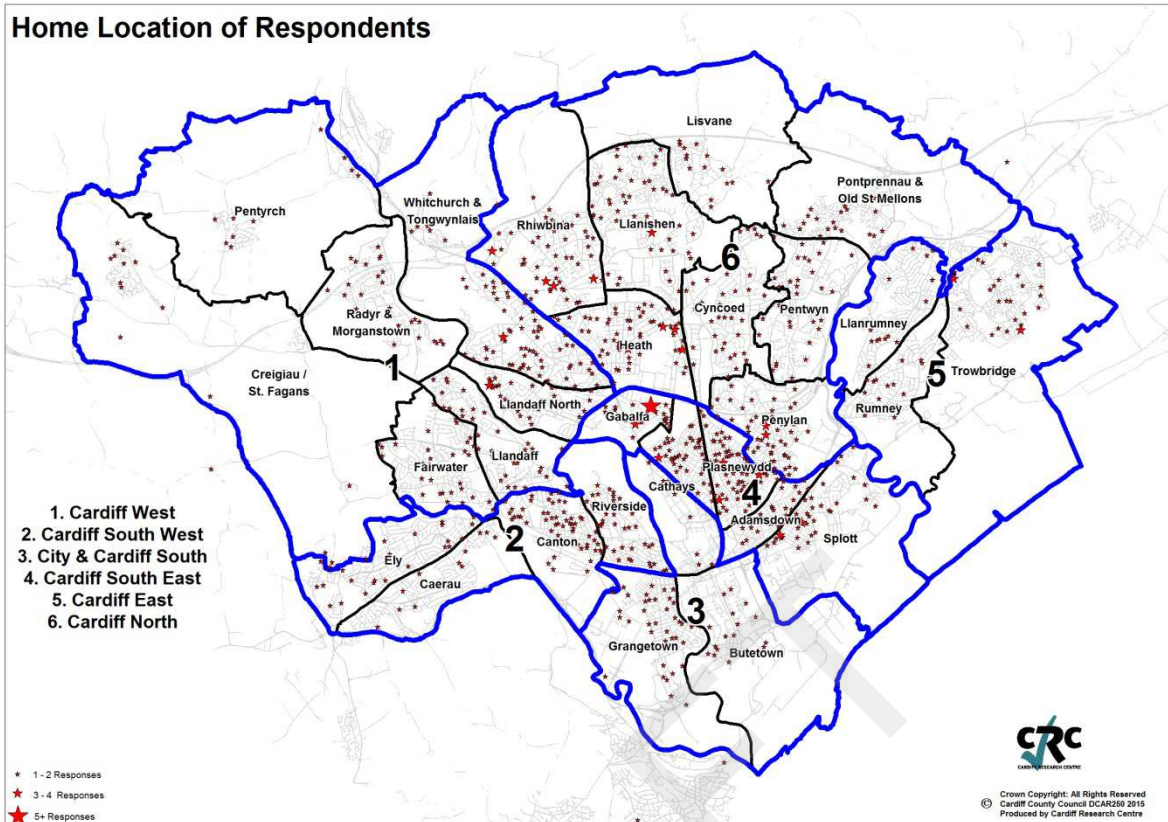
RESPONDENTS

There were 1,443 responses to the survey with around a quarter of these coming from Cardiff North (25.2%). In contrast, City & Cardiff South and Cardiff East accounted for just 5.1% and 4.6% of responses, respectively, compared to around a tenth of Cardiff's total population. Therefore, due to the low response rates, figures for these two areas should be treated with caution throughout the report.

Place of Residence	No.	%
Cardiff North	363	25.2
Cardiff West	246	17.0
Cardiff South East	227	15.7
Cardiff South West	148	10.3
City & Cardiff South	74	5.1
Cardiff East	67	4.6
Outside Cardiff	10	0.7
Unknown	308	21.3
TOTAL RESPONDENTS	1,443	100.0

NB. The 'unknown' category includes respondents whose exact location could not be identified due to missing, incomplete, or incorrect postcode information.

The map overleaf shows the distribution of respondents in Cardiff by neighbourhood partnership area (NPA) and electoral division.



RESULTS

Q1. Do you currently use any of the following?

Overall

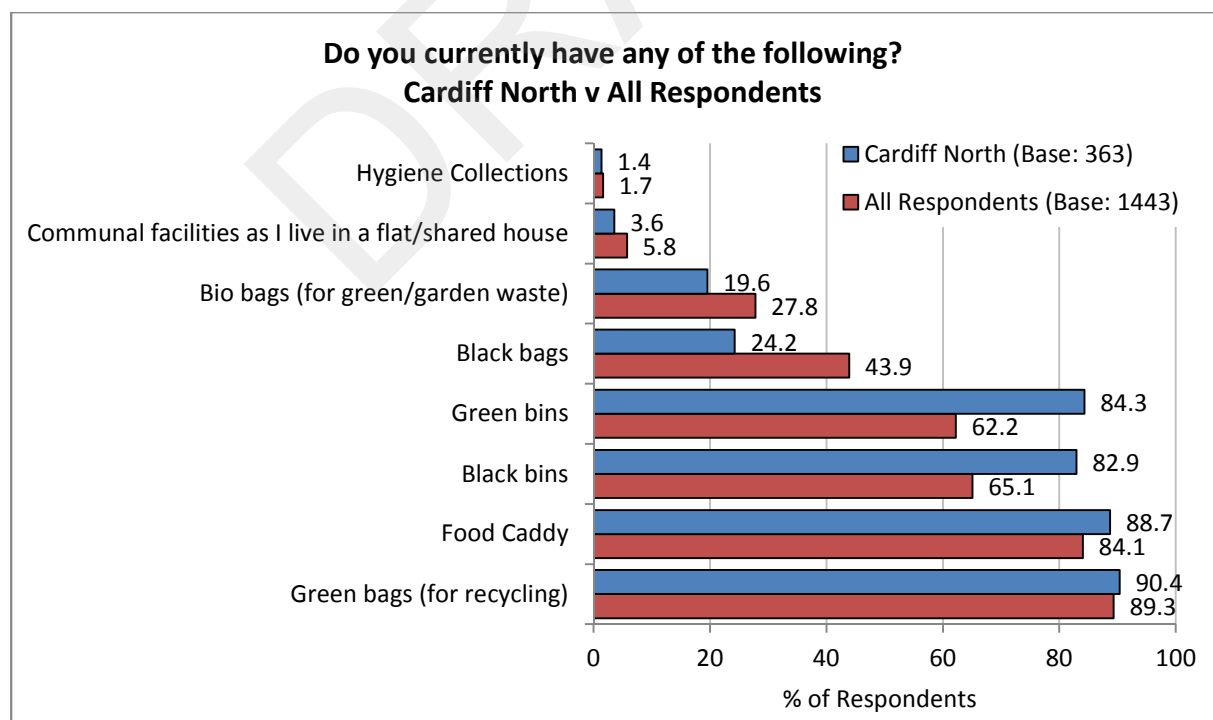
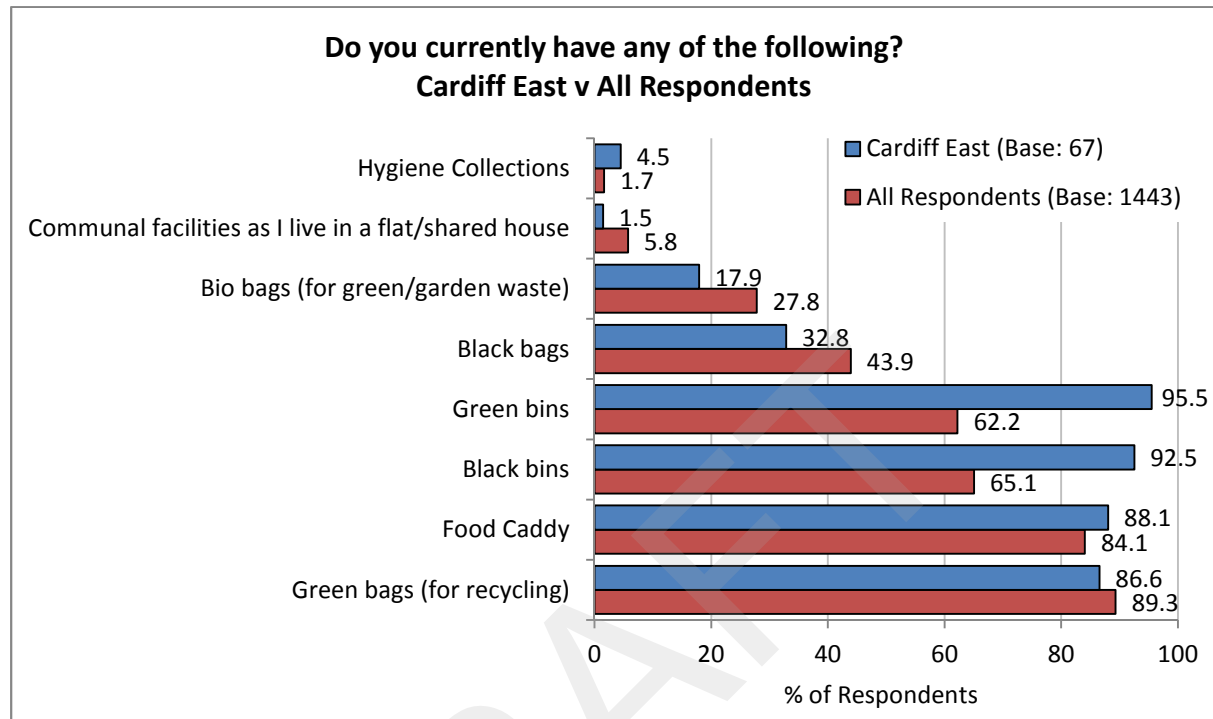
Green bags (for recycling) were most commonly used by respondents (89.3%), just above food caddies (84.1%). In addition, over three-fifths used black bins (65.1%) and green bins (62.2%). In contrast, just 1.7% used the hygiene collections.

Currently Use	No.	%
Green bags (for recycling)	1,289	89.3
Food caddy	1,213	84.1
Black bins	939	65.1
Green bins	898	62.2
Black bags	634	43.9
Bio bags (for green/garden waste)	401	27.8
Communal facilities as I live in a flat/shared house	83	5.8
Hygiene collections	24	1.7
TOTAL RESPONDENTS	1,443	–

NB. Percentages do not sum to 100% because respondents could give more than one answer

Neighbourhood Partnership Area

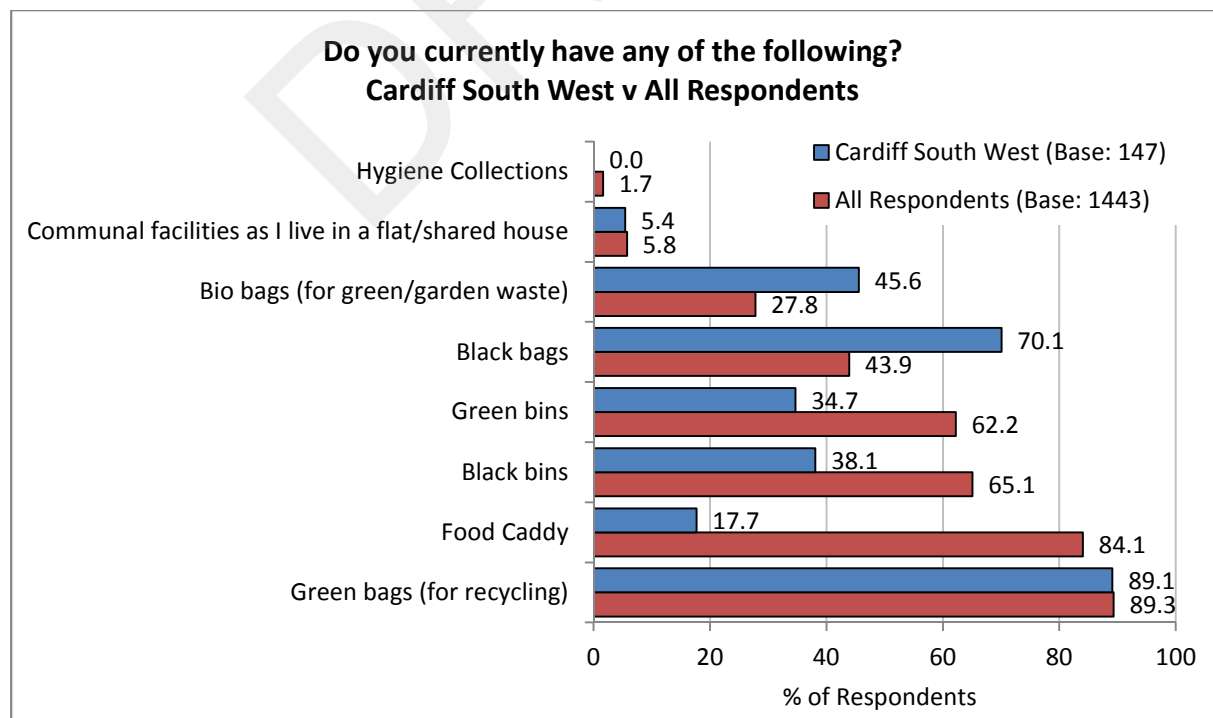
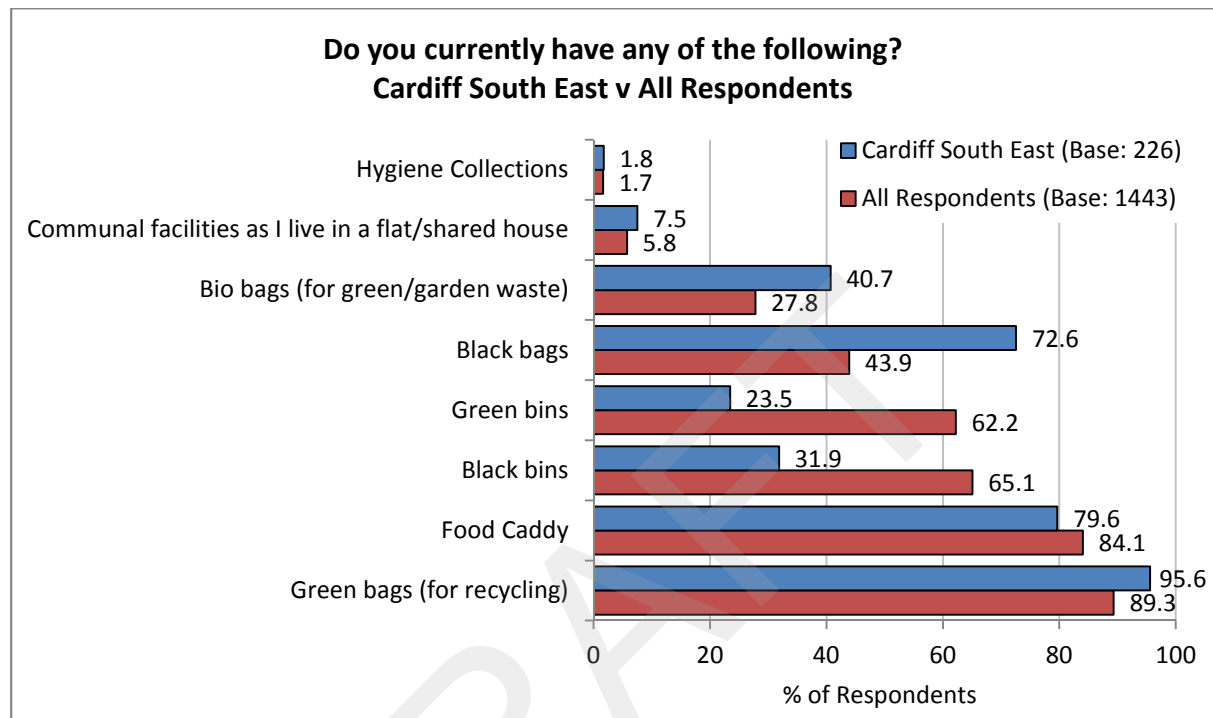
Respondents from Cardiff East were most likely to use green bins (95.5%) and black bins (92.5%); well above the equivalent proportions for all respondents. They also had above average use of hygiene collections (4.5%) and food caddies (88.1%).



As for all respondents, residents of Cardiff North were most likely to use green bags (90.4%) and food caddies (88.7%). More than four-fifths also used green bins

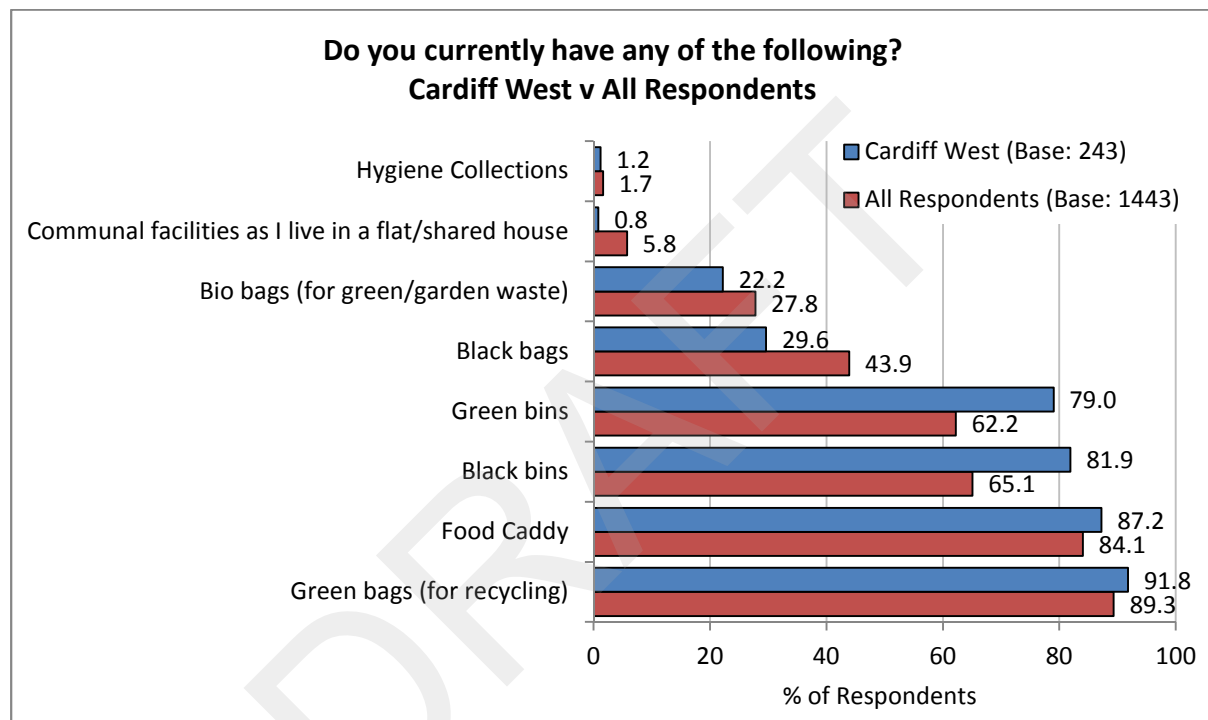
(84.3%) and black bins (82.9%): well above the equivalent proportions for all respondents.

Green bags were also the most commonly used item in Cardiff South East (95.6%), followed by food caddies (79.6%). Meanwhile, black bags (72.6%) and bio bags (40.7%) were much more likely to be used in the NPA than by all respondents.

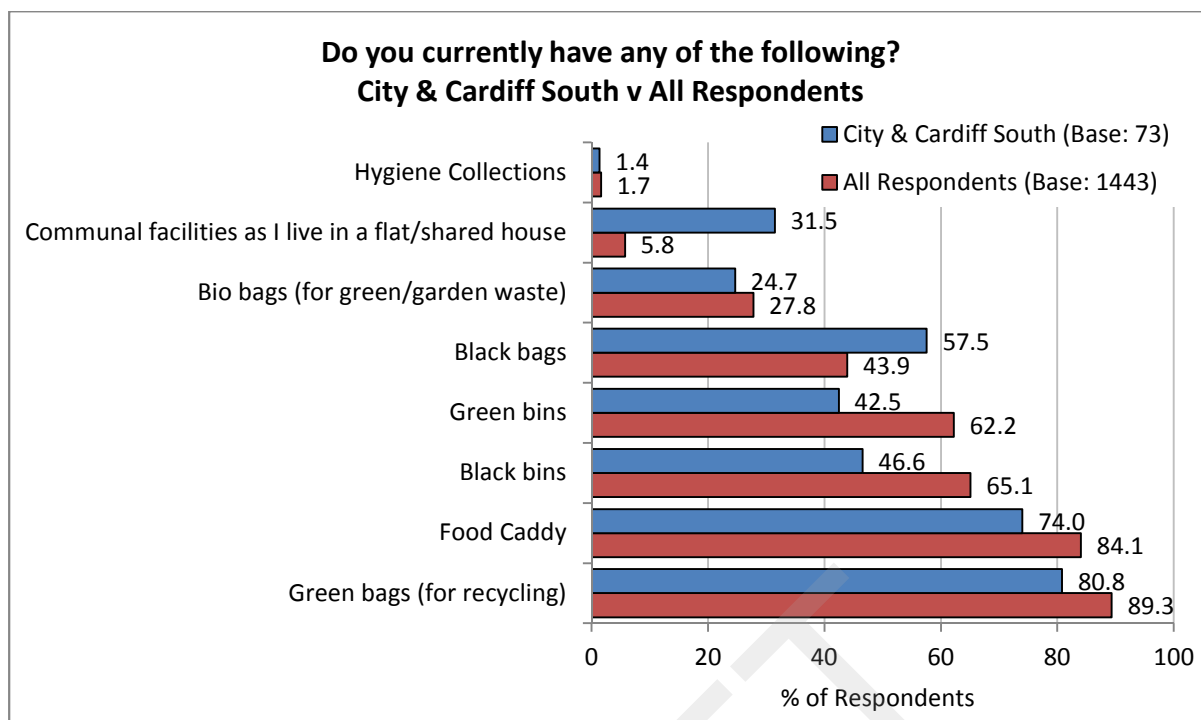


In Cardiff South West, green bags (89.1%) were again the most prevalent item. However, food caddies were only used by 17.7% of residents; less than a quarter of the figure for all respondents. Use of green bins (34.7%) and black bins (38.1%) was also less common in the NPA. However, black bags (70.1%) and bio bags (45.6%) were much more widely utilised within the NPA.

Green bags (91.8%) and food caddies (87.2%) were the most commonly used items in Cardiff West, and exceeded the levels seen across all respondents. This was also the case for black bins (81.9%) and green bins (79.0%). However, black bag use (29.6%) was around a third lower in the NPA.



In City & Cardiff South, green bags (80.8%) and food caddies (74.0%) again saw the most widespread use. Black bags (57.5%) were much more commonly used in the NPA, while almost a third of respondents utilised communal facilities (31.5%).



Q2. How many green bags do you typically place out each week?

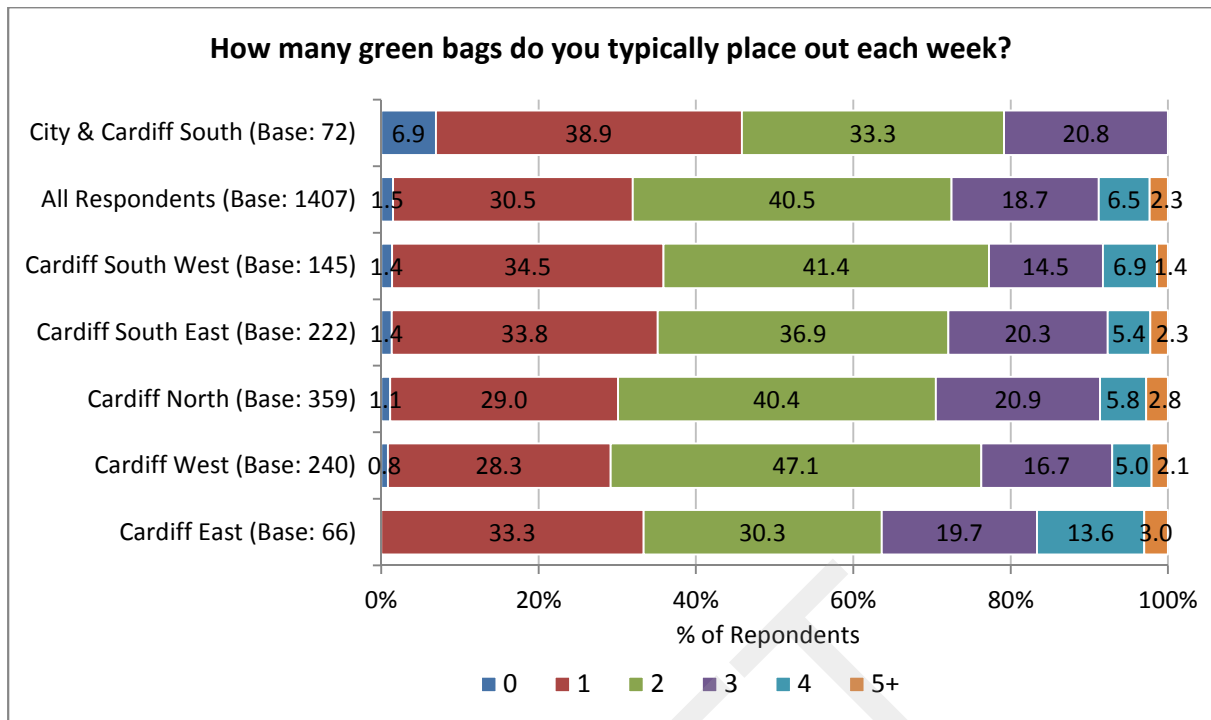
Overall

Two-fifths (40.5%) typically put out two green bags a week, while a further three-tenths (30.5%) put out just one bag.

No. Green Bags	No.	%
0	21	1.5
1	429	30.5
2	570	40.5
3	263	18.7
4	91	6.5
5+	33	2.3
TOTAL RESPONDENTS	1,407	100.0

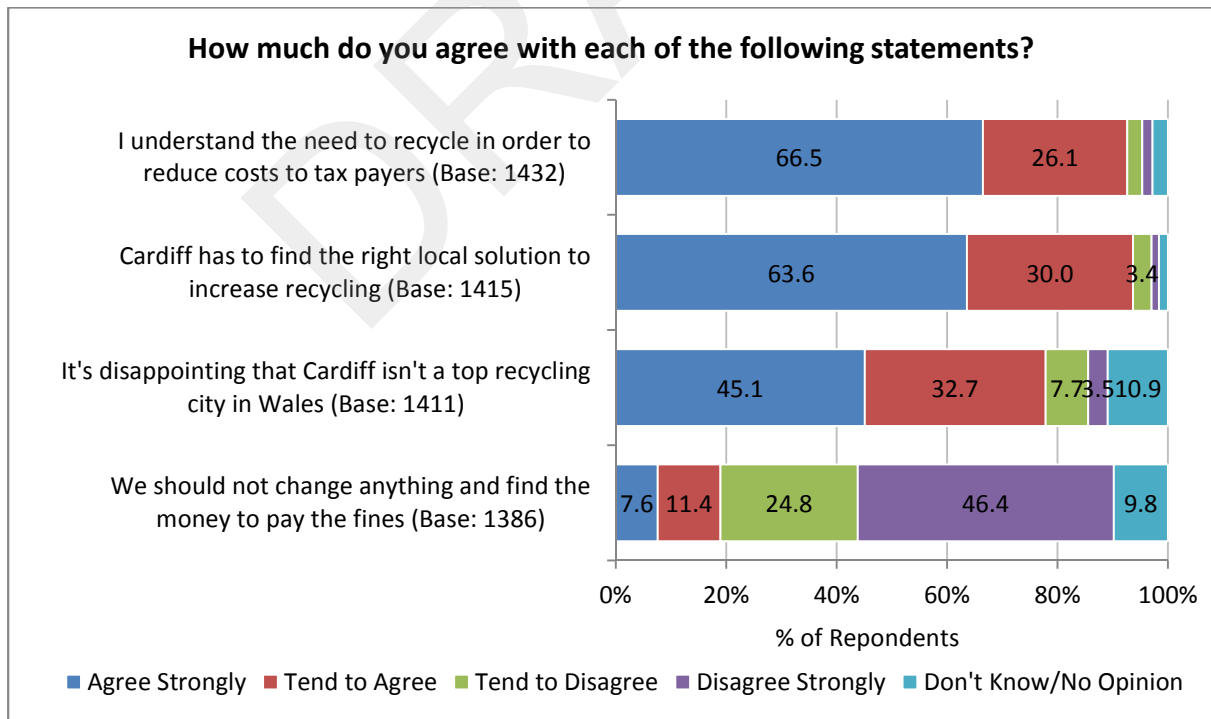
Neighbourhood Partnership Area

Residents of Cardiff East appear to put out the highest number of green bags each week with 13.6% of their respondents putting out 4 bags and 3.0% putting out 5+. In contrast, 6.9% of respondents from City & Cardiff South did not put out any bags; more than four times the figure for all respondents, and none put out more than 3 bags.



Q3. How much do you agree with each of the following statements?

Overall



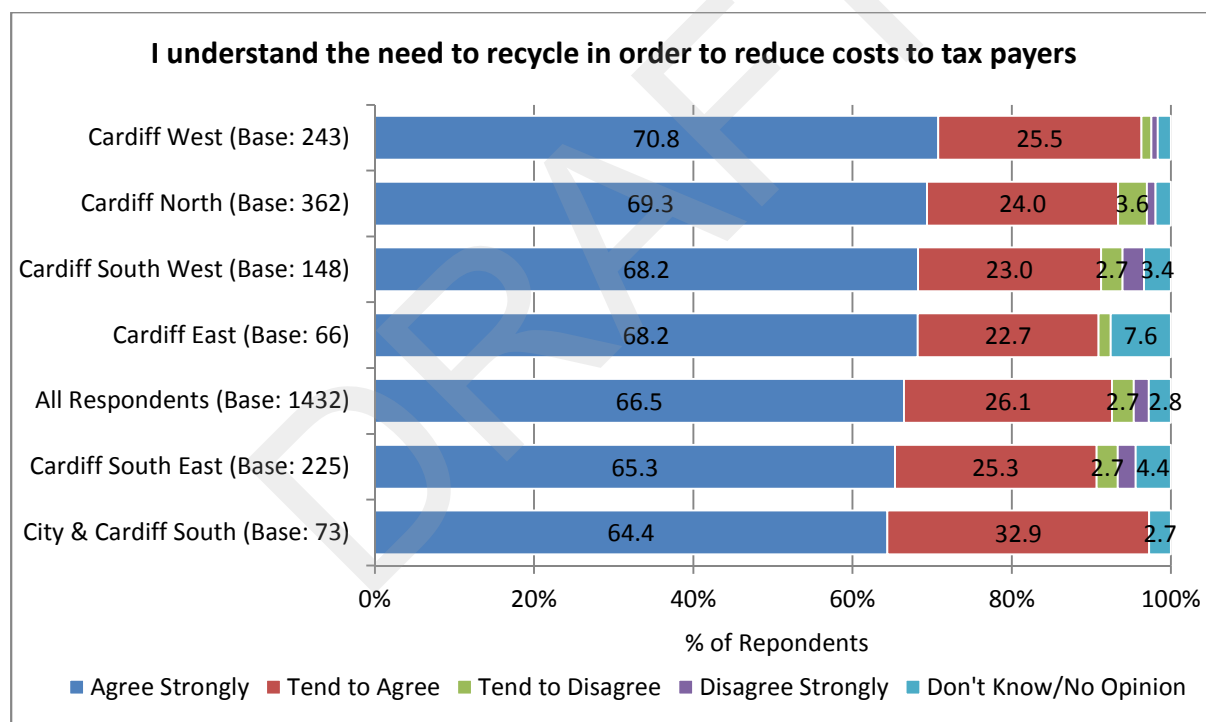
Over nine-tenths (92.6%) of respondents agreed that they understood the need to recycle in order to reduce costs to tax payers, including 66.5% that strongly agreed.

Similarly, more than nine-tenths (93.6%) agreed that Cardiff had to find the right local solution to increase recycling, including 63.6% that strongly agreed.

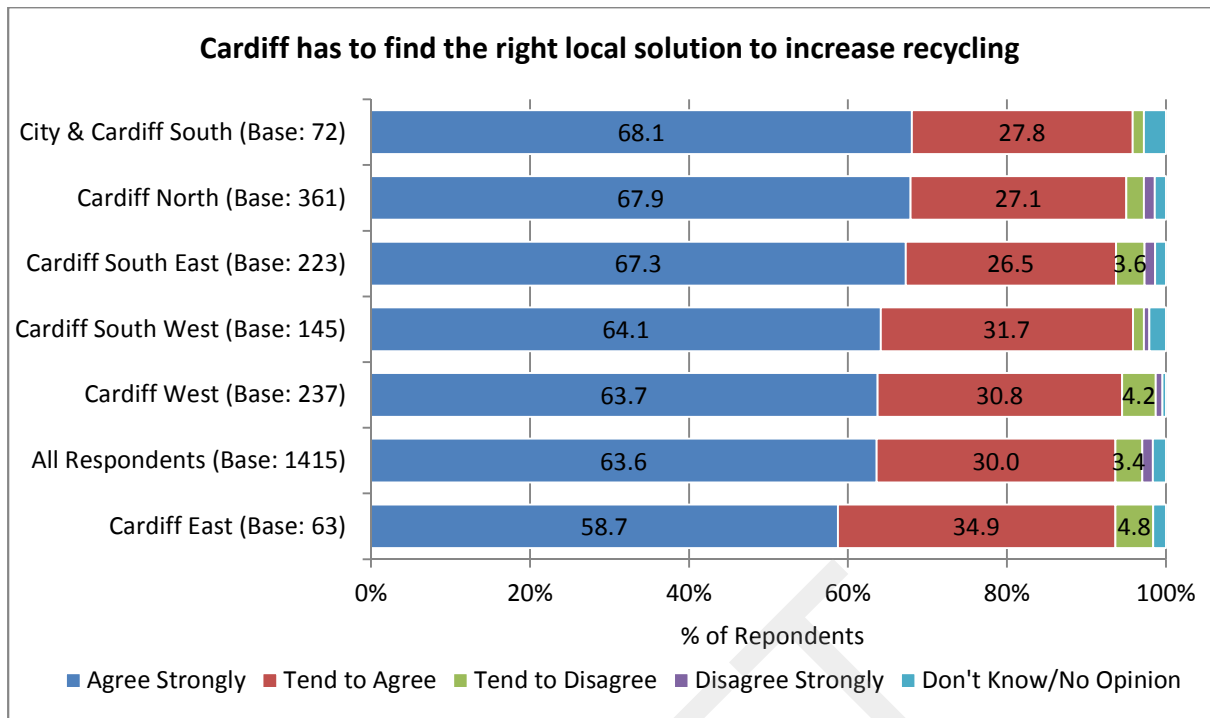
Around three-quarters (77.8%) agreed that it was disappointing that Cardiff isn't a top recycling city in Wales, with 45.1% strongly agreeing. In contrast, almost three-quarters (71.2%) disagreed with the idea that we should not charge anything and find the money to pay the fines, including 46.4% that strongly disagree.

Neighbourhood Partnership Area

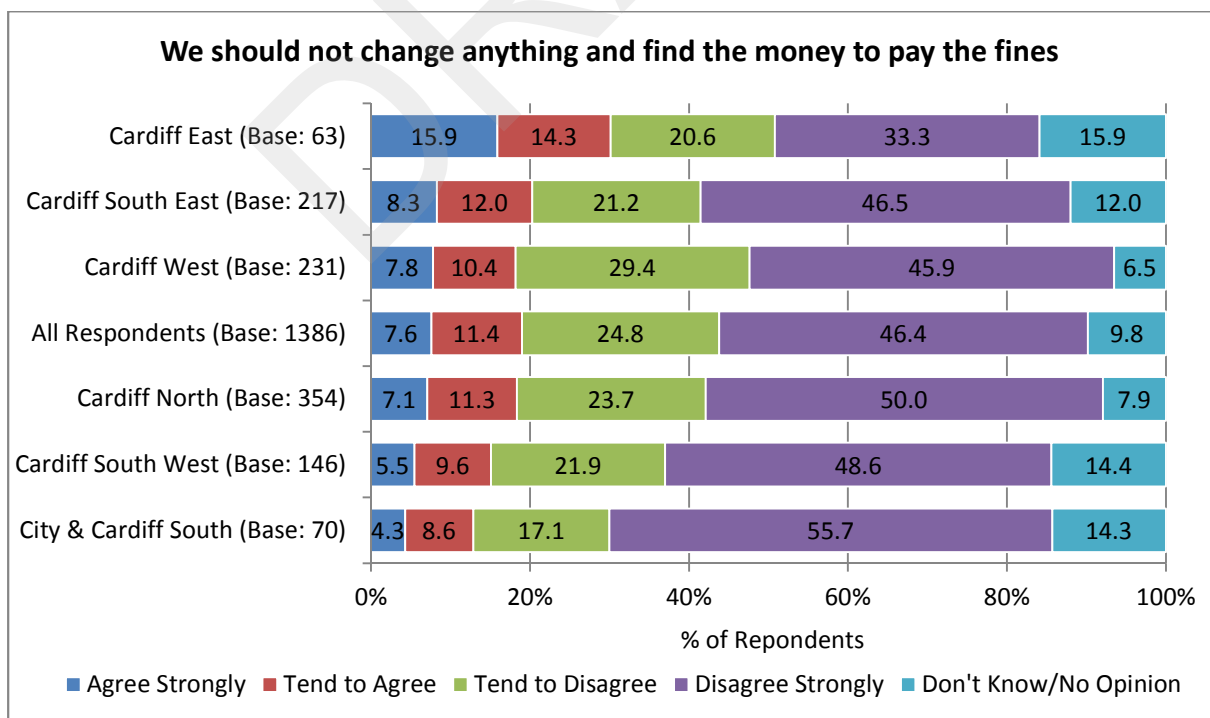
Over nine-tenths of respondents from each NPA agreed that they understood the need to recycle in order to reduce cost to tax payers. City & Cardiff South (97.3%) had the highest proportion of respondents that agreed, despite having the lowest percentage that strongly agreed (64.4%). In fact, none of their respondents disagreed with the statement. Residents of Cardiff West (70.8%), meanwhile, were most likely to strongly agree.



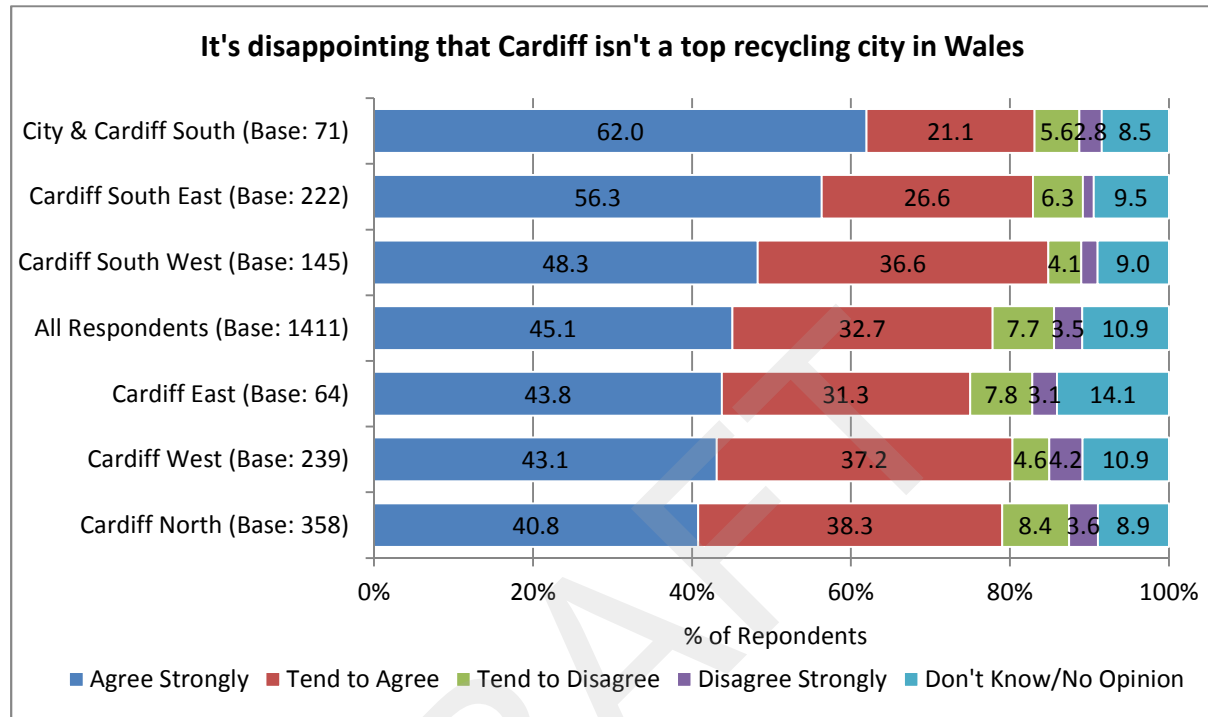
Again, more than nine-tenths of respondents from each of the NPAs agreed that Cardiff has to find the right solution to increase recycling. The proportion that strongly agreed ranged from 58.7% in Cardiff East to 68.1% in City & Cardiff South.



The majority of respondents in each NPA disagreed that we should not change anything and find the money to pay the fines. This was highest in Cardiff West where 75.3% disagreed, although residents of City & Cardiff South were most likely to strongly disagree (55.7%). In contrast, Cardiff East residents (30.2%) were most likely to support the statement.



At least three-quarters of respondents from each of the NPAs agreed that it was disappointing that Cardiff isn't a top recycling city in Wales, with this figure highest in Cardiff South West (84.8%). City & Cardiff South were most likely to strongly agree (62.0%). In contrast, more than a tenth of respondents from Cardiff North (12.0%) and Cardiff East (10.9%) disagreed with the statement.



Q4. How much do you agree with each of the following statements?

Overall

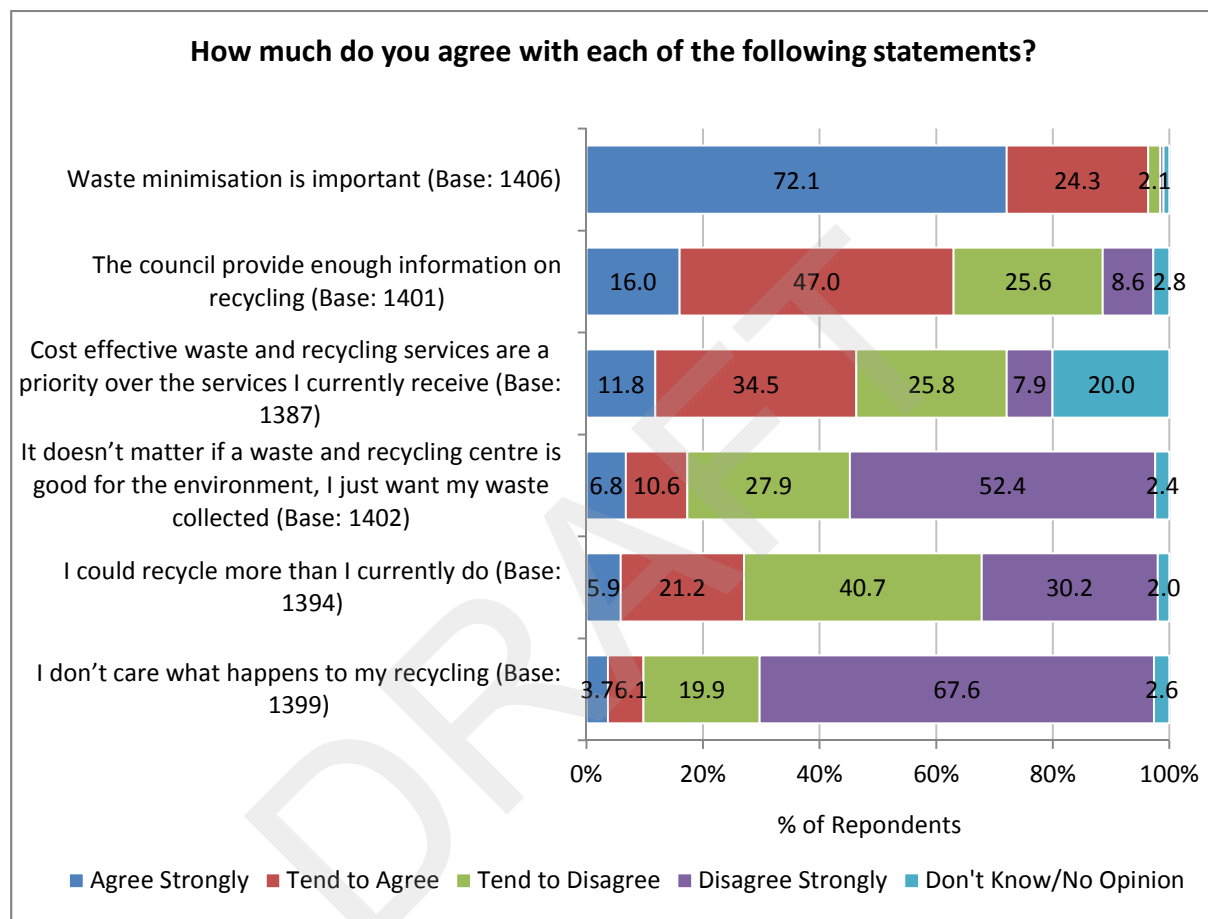
More than nine-tenths of respondents agreed that waste minimisation is important (96.4%), including 72.1% that strongly agreed. The only other statement that was agreed with by more than half of the respondents was that the council provide enough information on recycling (63.0%), although just 16.0% strongly agreed.

Over two-fifths (46.3%) agreed that cost effective waste and recycling services are a priority over other services they receive, although a third (33.7%) also disagreed, while a fifth (20.0%) didn't know or had no opinion.

More than half (52.4%) strongly disagreed with the statement "it doesn't matter if a waste and recycling centre is good for the environment, I just want my waste collected", while four-fifths (80.2%) disagreed to some extent.

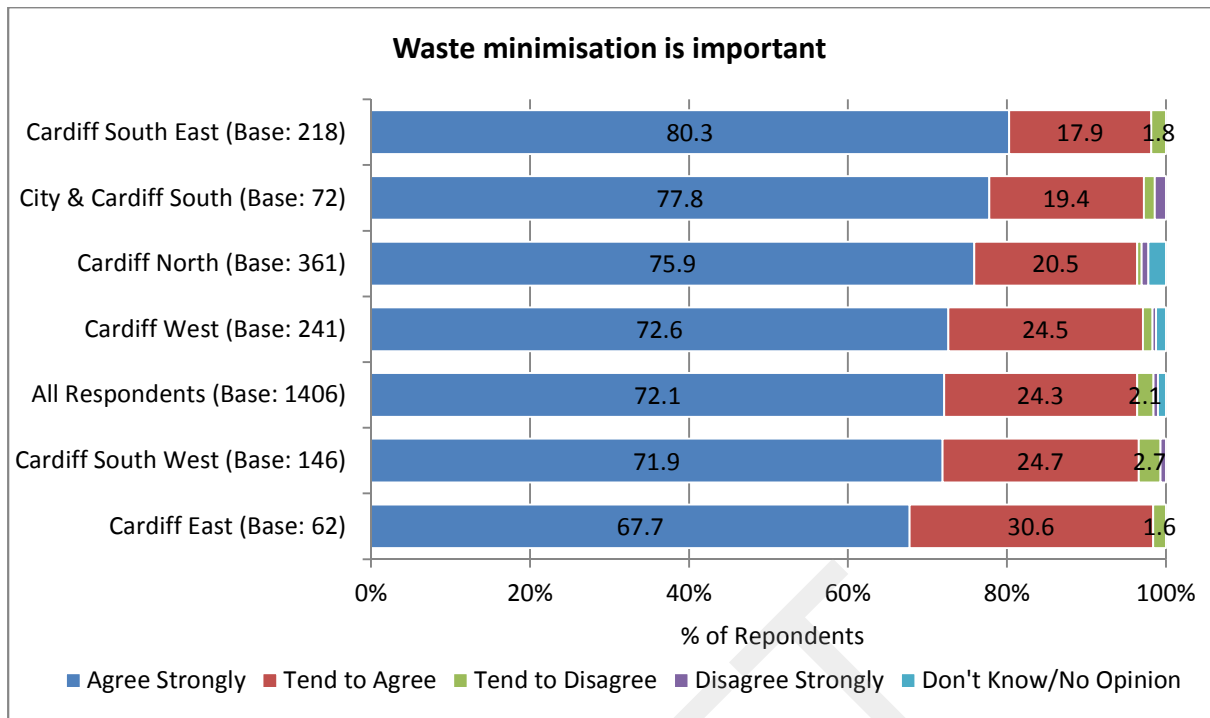
Seven-tenths (70.9%) disagreed that they could recycle more than they currently do, including 30.2% that strongly disagreed. However, over a quarter (27.0%) agreed that they could recycle more.

The statement that received the greatest level of disagreement was “I don’t care what happens to my recycling”, with 87.6% disagreeing to some degree, including two-thirds that strongly disagreed (67.6%).

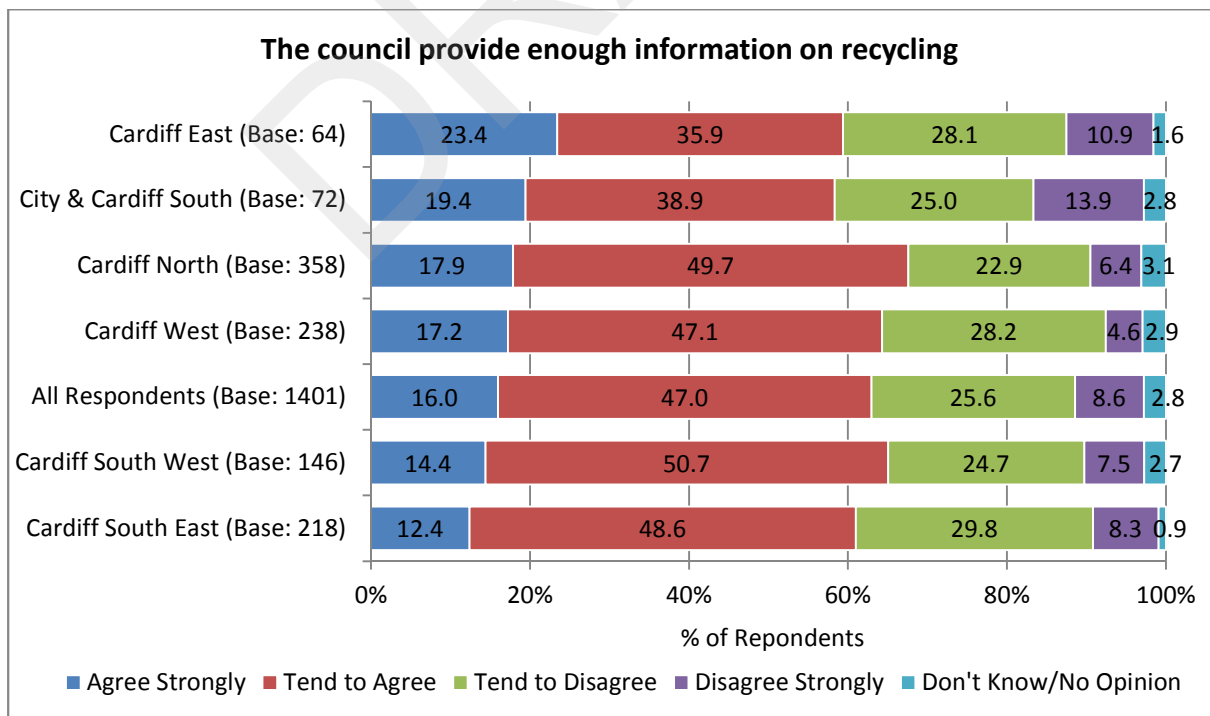


Neighbourhood Partnership Area

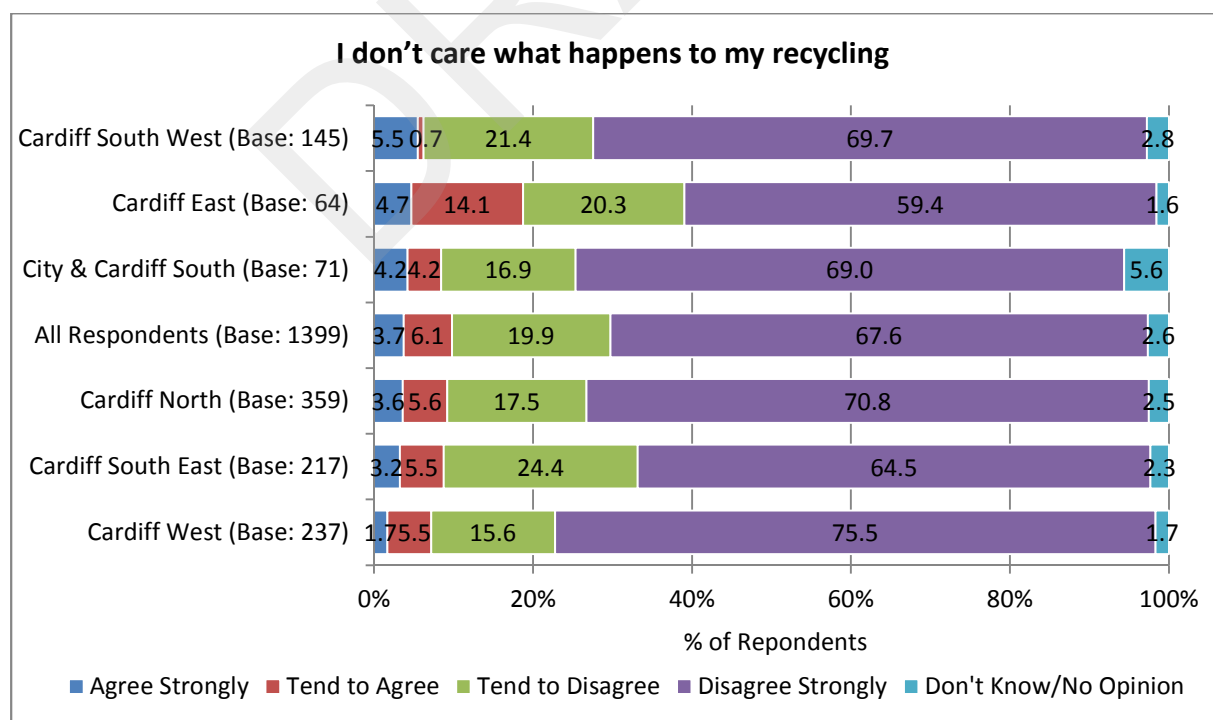
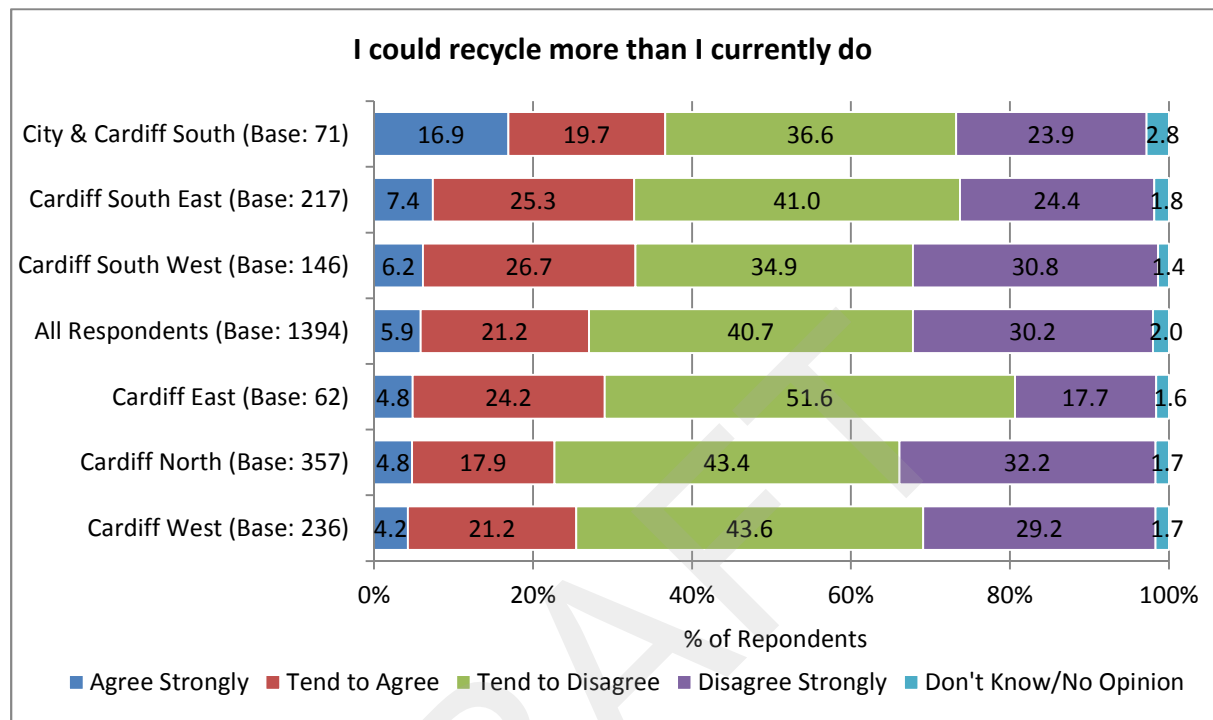
Over nine-tenths of respondents from each of the areas supported the idea that waste minimisation is important, with Cardiff East (98.4%) residents most likely to concur, even though they had the smallest proportion of respondents that strongly agreed (67.7%). The area with the largest proportion that strongly agreed was Cardiff South East (80.3%).



More than half of respondents from each NPA agreed that the council provided enough information on recycling, with Cardiff North (67.6%) having the greatest proportion that agreed to some degree. Cardiff East residents were most likely to strongly agree (23.4%). However, they were also most likely to disagree to some extent (39.1%).

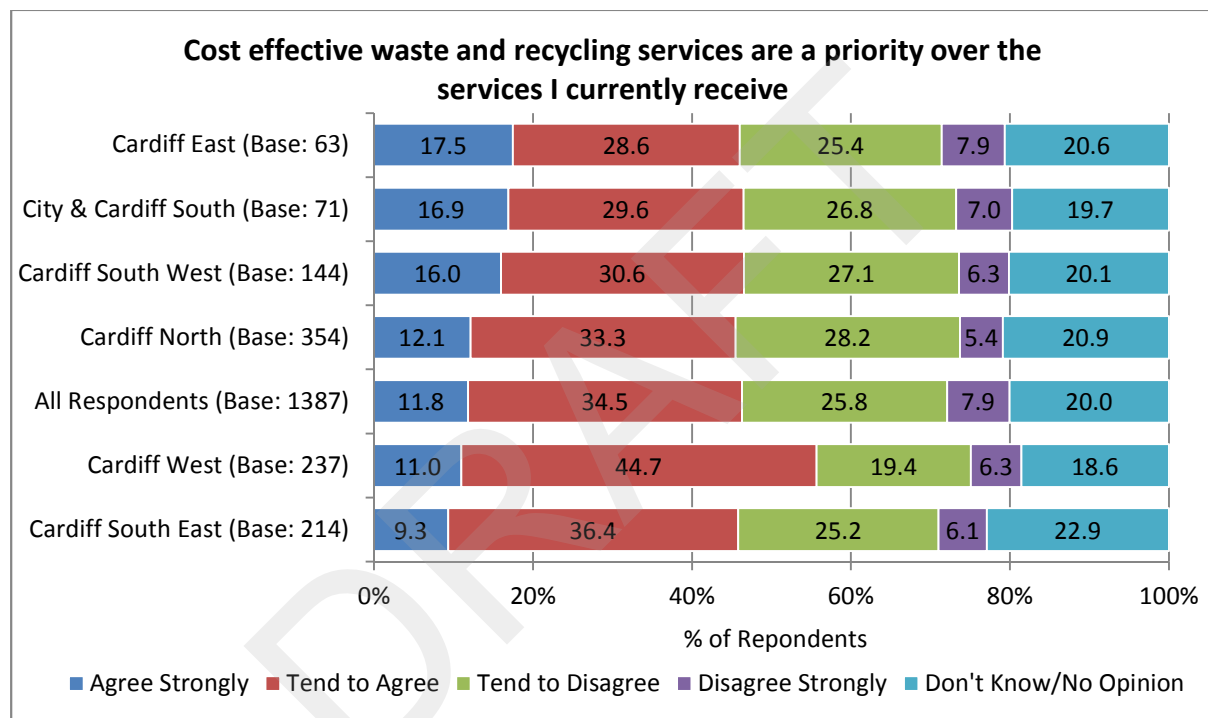


Over a third (36.6%) of residents from City & Cardiff South felt that they could recycle more than they currently do, including 16.9% that strongly agreed. In contrast, three-quarters (75.6%) of Cardiff North's respondents felt that they already recycled what they could, with almost a third (32.2%) strongly disagreeing with the statement.

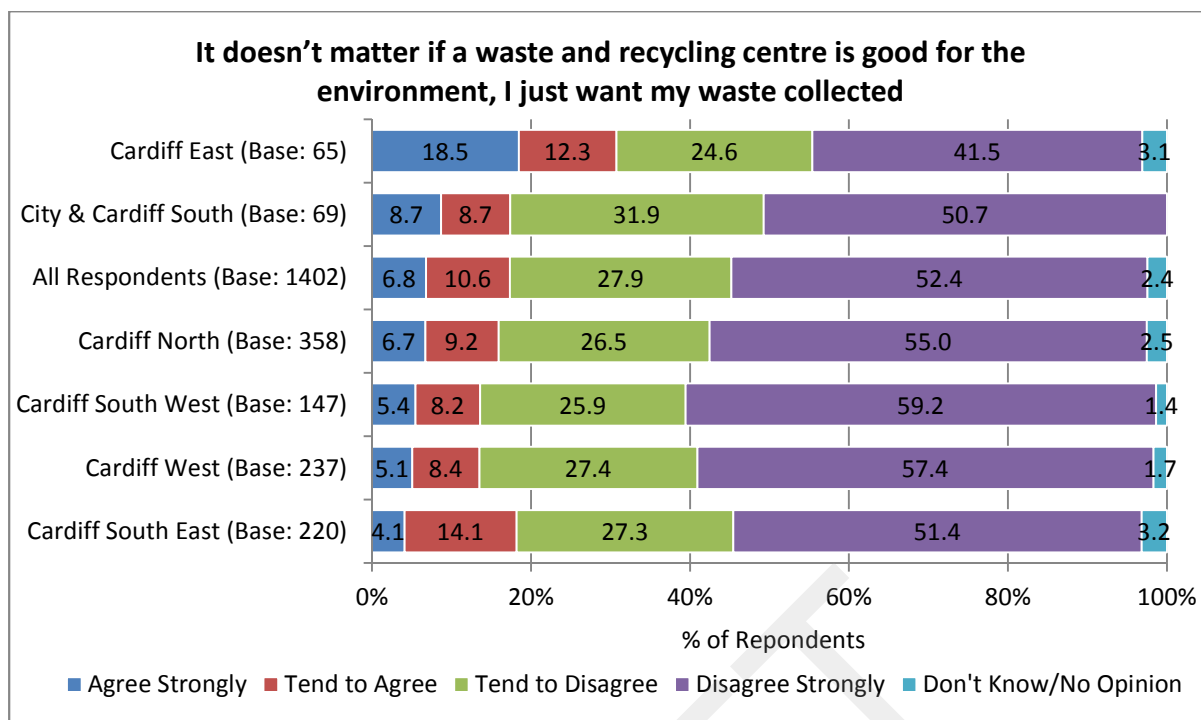


In excess of three-quarters of respondents from each of the NPAs disagreed with the statement “I don’t care what happens to my recycling”. This rose to more than nine-tenths in both Cardiff West (91.1%) and Cardiff South West (91.0%). However, almost a fifth (18.8%) of Cardiff East’s respondents agreed with the statement.

Cardiff West (55.7%) was the only NPA where more than half of their respondents agreed that cost effective and recycling services are a priority over the services they currently receive. In each of the other five NPAs around a third disagreed with the statement to some extent. Meanwhile, approximately a fifth of those completing the questionnaire in each of the NPAs indicated that they did not know or had no opinion.



Three-tenths (30.8%) of respondents from Cardiff East agreed that “it doesn’t matter if a waste and recycling centre is good for the environment, I just want my waste collected”. However, more than three-quarters of respondents from the other five NPAs disagreed with the statement, with a high of 85.0% in Cardiff South West, including 59.2% that strongly disagreed.



Q5. Do you think the Council should encourage people to recycle more through service charges, supporting them through information and enforcing those that don't recycle, even if it costs more to deliver these objectives?

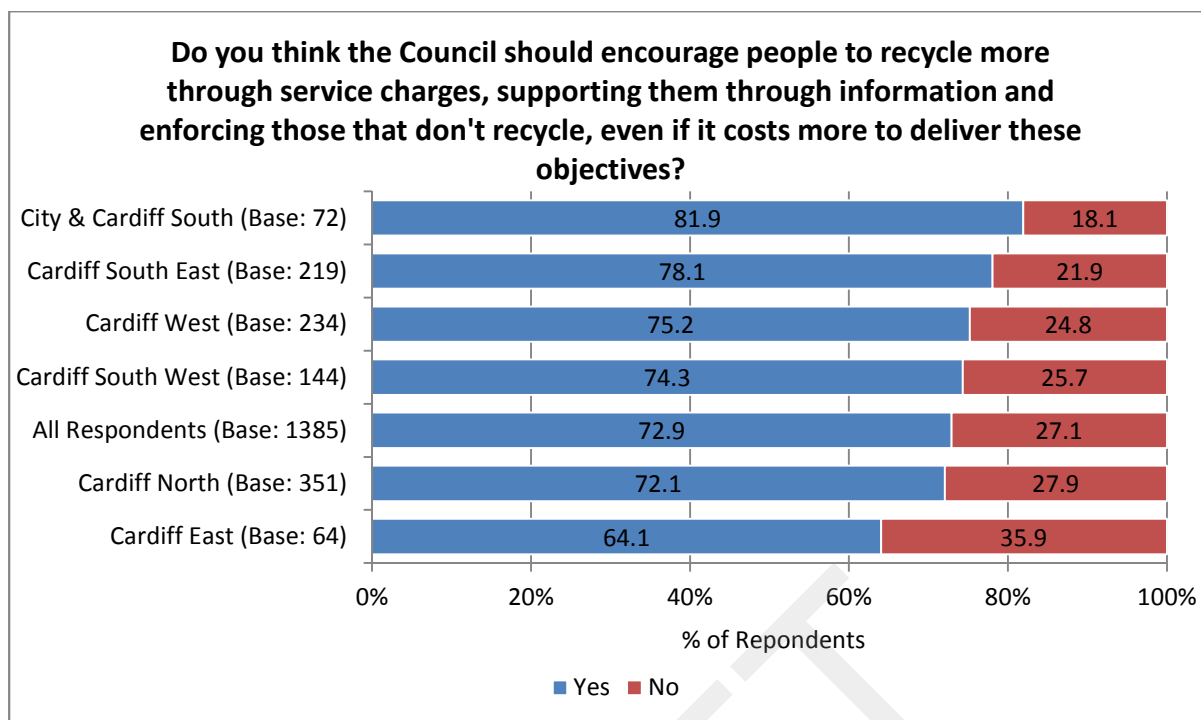
Overall

Almost three-quarters (72.9%) of respondents thought that the Council should encourage people to recycle more through service charges, supporting them through information and enforcing those that don't recycle, even if it costs more to deliver these objectives.

Response	No.	%
Yes	1,010	72.9
No	375	27.1
TOTAL RESPONDENTS	1,385	100.0

Neighbourhood Partnership Area

Across the NPAs this proportion ranged from less than two-thirds in Cardiff East (64.1%) to more than four-fifths in City & Cardiff South (81.9%).



Q6. Should the Council take action or penalise those that don't recycle?

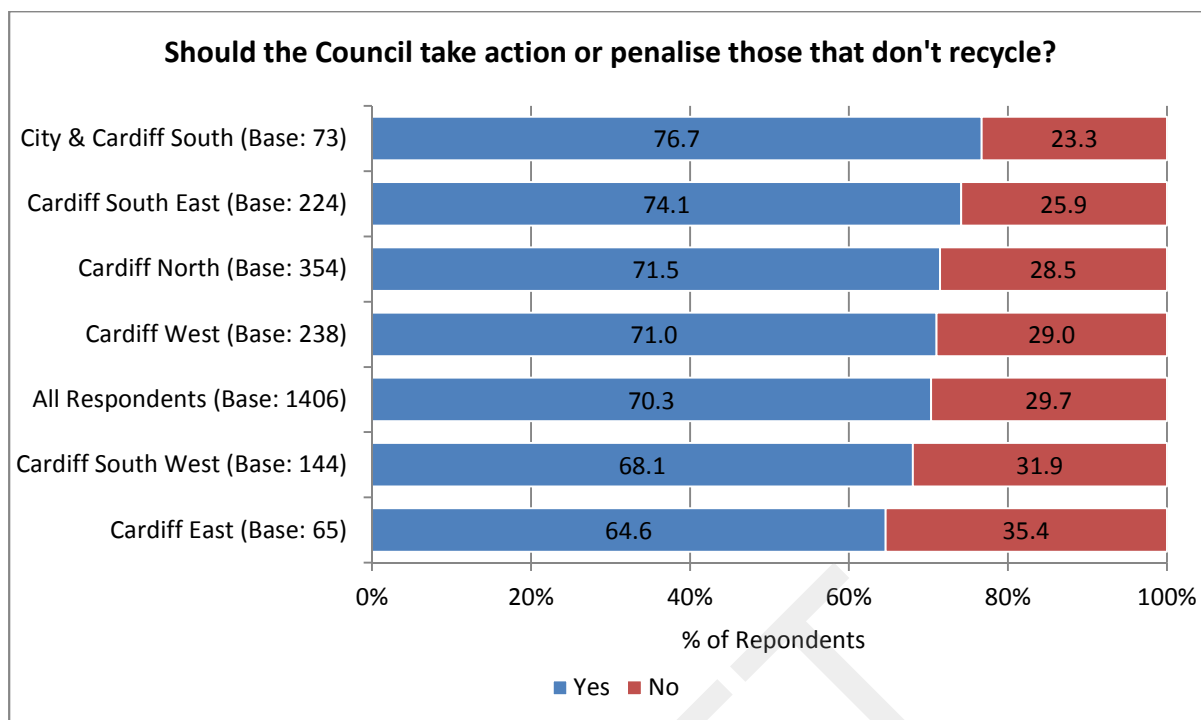
Overall

Seven-tenths (70.3%) of respondents felt that the Council should take action or penalise those that don't recycle.

Response	No.	%
Yes	989	70.3
No	417	29.7
TOTAL RESPONDENTS	1,406	100.0

Neighbourhood Partnership Area

The proportion that believed the Council should take action or penalise those that don't recycle varied from 64.6% in Cardiff East to 76.7% in City & Cardiff South.



HOUSEHOLD WASTE RECYCLING CENTRES (HWRCs)

Q7. Do you use Household Waste & Recycling Centres?

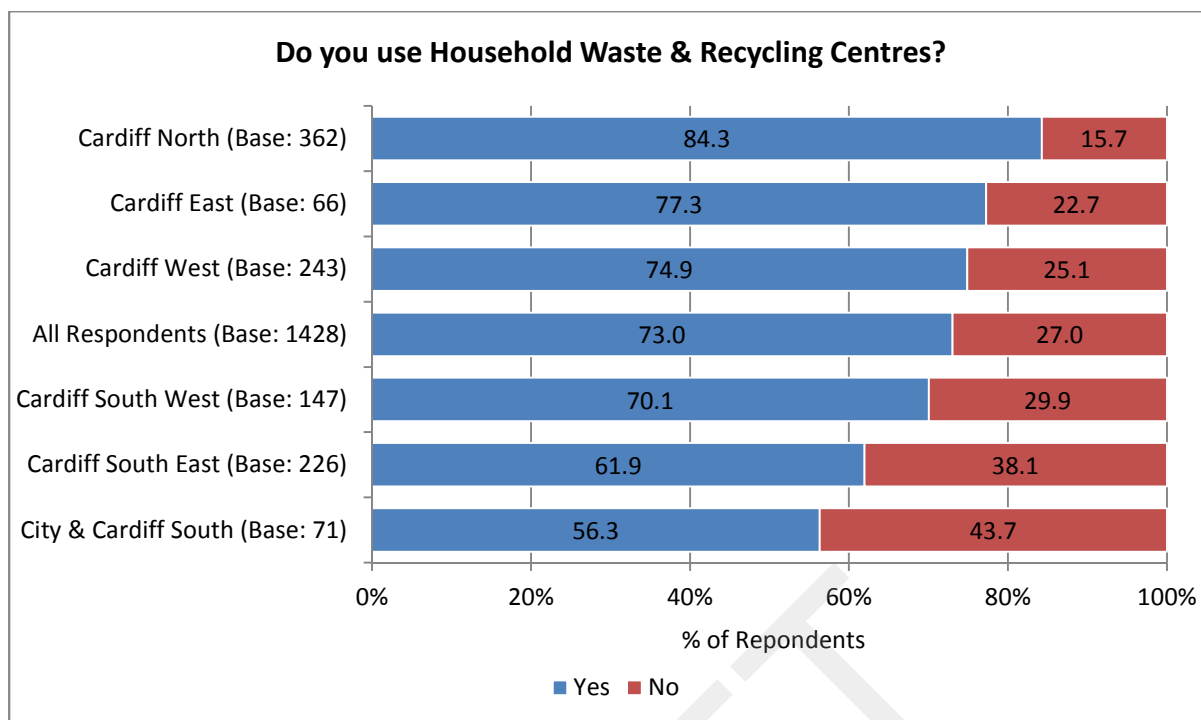
Overall

Just under three-quarters (73.0%) of those completing the survey said that they used the Household Waste & Recycling Centres (HWRCs).

Response	No.	%
Yes	1,043	73.0
No	385	27.0
TOTAL RESPONDENTS	1,428	100.0

Neighbourhood Partnership Area

More than four-fifths (84.3%) of respondents from Cardiff North use the HWRCs. However, this figure fell to just 56.3% for City & Cardiff South.



Q8. Which of the following sites do you use?

Overall

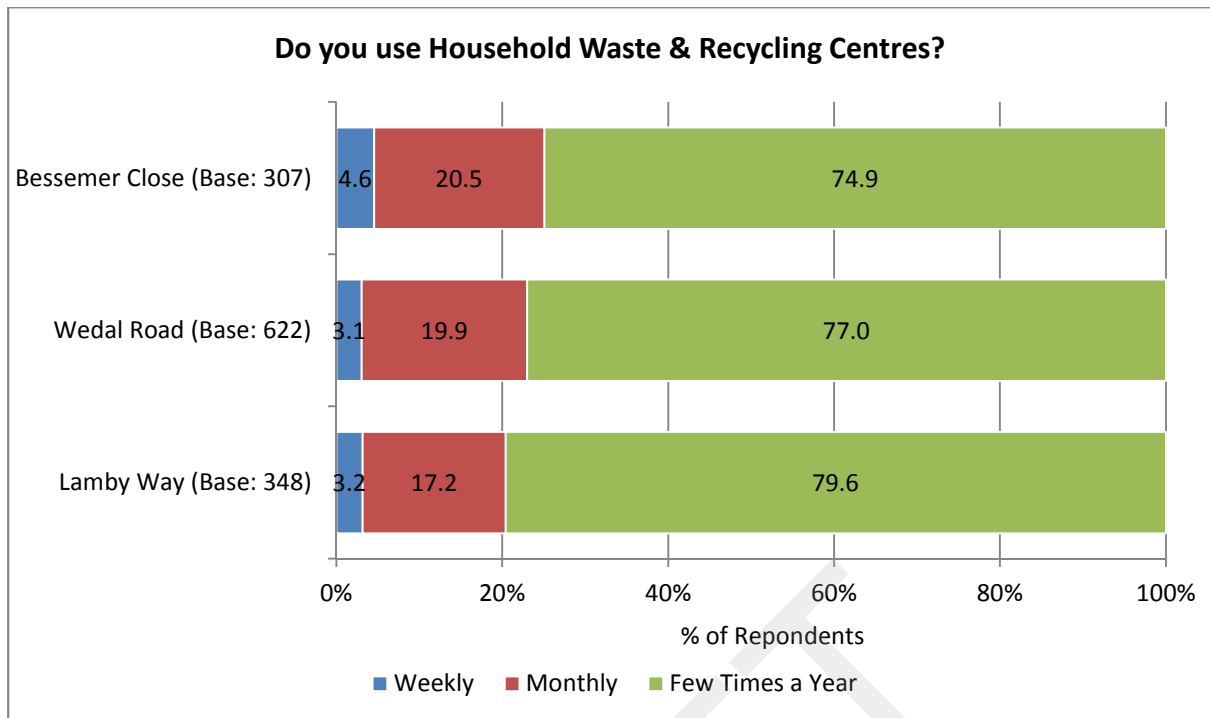
Of the 1,026 respondents who indicated they used one or more of the three sites at least a few times a year, three-fifths said that they used Wedal Road (60.6%), a third used Lamby Way (33.9%), and three-tenths used Bessemer Close (29.9%).

HWRC Site	No.	%
Wedal Road	622	60.6
Lamby Way	348	33.9
Bessemer Close	307	29.9
TOTAL RESPONDENTS	1,026	–

NB. Percentages do not sum to 100% because respondents could give more than one answer

Frequency of Use

A quarter (25.1%) of respondents that used Bessemer Close at least a few times a year stated that they used it weekly (4.6%) or monthly (20.5%). This figure was slightly lower (23.0%) for Wedal Road, and dropped to around a fifth (20.4%) for Lamby Way.



NB. Chart above excludes those respondents who stated they never used the site – Lamby Way (174 respondents never used the site), Wedal Road (116), Bessemer Close (183).

Q9. In order to reduce operating costs, the Council need to explore the reduction in opening hours. What days of the week are you most likely to visit and when?

Overall

Just over two-fifths of the respondents who said that they used the HWRCs are likely to visit them on each of the weekdays; ranging from 41.2% for Tuesday to 44.2% for both Monday and Friday. Evenings (5pm-6.40pm) is the most common time on each of these days, with around a fifth of respondents choosing this time on each of the weekdays, although the proportions do not differ greatly from those of the earlier two timeslots.

Usage rates nearly double at the weekend, with almost four-fifths indicating that they are likely to visit the HWRCs on a Saturday (79.2%) and a Sunday (76.3%). For both of these days the PM (12pm-4pm) timeslot is the most common with around three-fifths selecting this option: 61.2% for Saturday, 59.9% for Sunday. This is followed by the AM (7am-12pm) slot which approximately half of respondents selected: 50.4% for Saturday, 47.4% for Sunday. The least popular timeslot at weekends is the Evening (5pm-6.40pm): 28.5% for Saturday, 27.1% for Sunday.

Timeslot	No. Respondents	%
Monday:	440	44.2
AM (7am-12pm)	176	17.7
PM (12pm-4pm)	189	19.0
Evening (5pm-6.40pm)	198	19.9
Tuesday:	410	41.2
AM (7am-12pm)	150	15.1
PM (12pm-4pm)	170	17.1
Evening (5pm-6.40pm)	192	19.3
Wednesday:	419	42.1
AM (7am-12pm)	155	15.6
PM (12pm-4pm)	175	17.6
Evening (5pm-6.40pm)	201	20.2
Thursday:	420	42.2
AM (7am-12pm)	148	14.9
PM (12pm-4pm)	172	17.3
Evening (5pm-6.40pm)	205	20.6
Friday:	440	44.2
AM (7am-12pm)	155	15.6
PM (12pm-4pm)	193	19.4
Evening (5pm-6.40pm)	217	21.8
Saturday:	788	79.2
AM (7am-12pm)	501	50.4
PM (12pm-4pm)	609	61.2
Evening (5pm-6.40pm)	284	28.5
Sunday:	759	76.3
AM (7am-12pm)	472	47.4
PM (12pm-4pm)	596	59.9
Evening (5pm-6.40pm)	270	27.1
TOTAL RESPONDENTS	995	-

NB. Daily totals may not equal the sum of the three timeslots, as respondents could select more than one timeslot per day. Similarly, the totals for each of the seven days do not sum to the number of total respondents to the question.

Q10. Could the Council improve the site layout and signage to encourage you to recycle more?

Overall

Almost a third (31.5%) of respondents that use the HWRCs said that the site layout and signage could be improved to encourage them to recycle more, while 46.8% disagreed and 21.7% did not know.

Response	No.	%
Yes	317	31.5
No	471	46.8
Don't Know	219	21.7
TOTAL RESPONDENTS	1,017	100.0

If Yes:

Overall

The site respondents were most likely to say needed improvement in this way was Wedal Road (61.8%). This was well above the equivalent proportions for Lamby Way (31.5%) and Bessemer Close (25.5%). However, these figures could be influenced by the number of people that use each site, with Wedal Way around twice as likely to be visited than the other two locations (see responses to Q8 on p21).

HWRC Site	No.	%
Wedal Road	194	61.8
Lamby Way	99	31.5
Bessemer Close	80	25.5
TOTAL RESPONDENTS	314	-

NB. Percentages do not sum to 100% because respondents could give more than one answer

Q11. Would you like to be able to recycle more items when you visit your local HWRC?

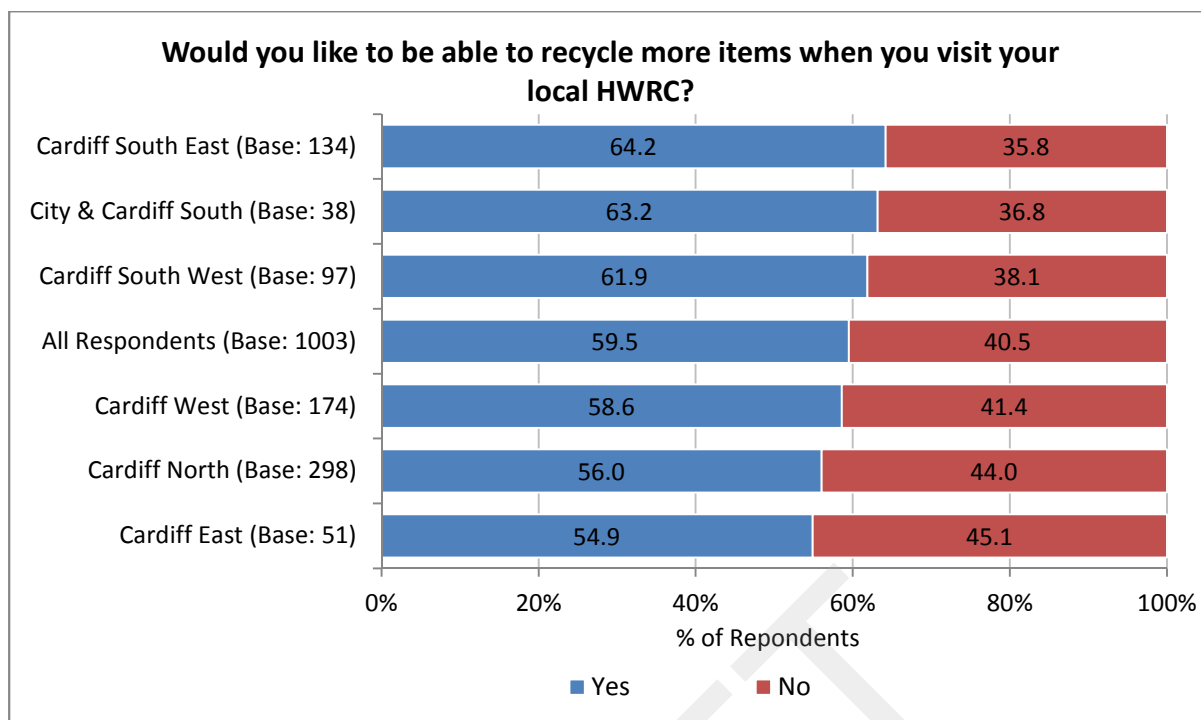
Overall

Three-fifths (59.5%) of respondents that use the HWRCs would like to be able to recycle more items at their local site.

Response	No.	%
Yes	597	59.5
No	406	40.5
TOTAL RESPONDENTS	1,003	100.0

Neighbourhood Partnership Area

Respondents from Cardiff South East (64.2%) would most like to be able to recycle more items at their local HWRC. This compared with a low of 54.9% in Cardiff East.



If 'Yes', which items?

Overall

Just over half of respondents would that use HWRCs like to be able to recycle carpets (53.0%), compared to 49.4% for mattresses and 47.0% for toys. More than half would also like to recycle other items (53.5%).

Item	No.	%
Carpets	286	53.0
Mattresses	267	49.4
Toys	254	47.0
Other	289	53.5
TOTAL RESPONDENTS	540	–

NB. Percentages do not sum to 100% because respondents could give more than one answer

Q12. Do you think Cardiff HWRC facilities should be for Cardiff residents only?

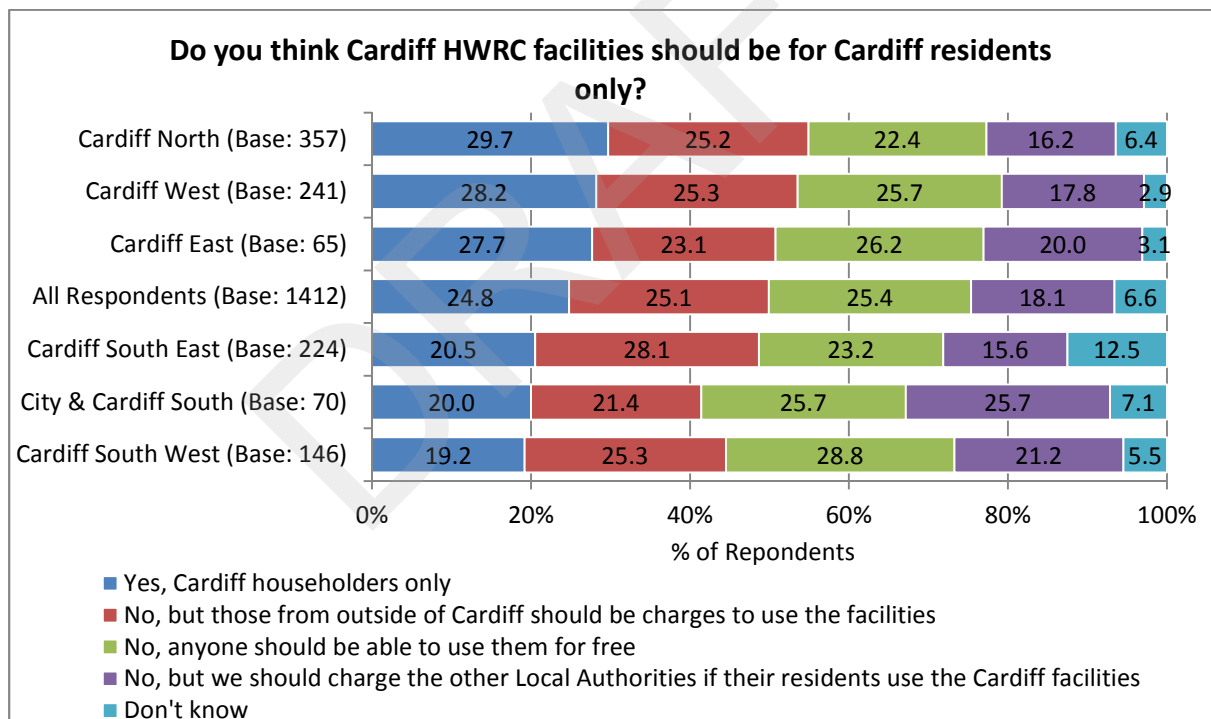
Overall

A quarter of respondents felt that Cardiff HWRC facilities should be for Cardiff householders only (24.8%), while similar proportions thought that anyone should be able to use them (25.4%) or that those from outside the city should be charged to use them (25.1%). Less than a fifth would like other local authorities to be charged if their residents use the facilities (18.1%).

HWRC Use Response	No.	%
No, anyone should be able to use them for free	359	25.4
No, but those from outside of Cardiff should be charged to use the facilities	355	25.1
Yes, Cardiff householders only	350	24.8
No, but we should charge the other Local Authorities if their residents use the Cardiff facilities	255	18.1
Don't know	93	6.6
TOTAL RESPONDENTS	1,412	100.0

Neighbourhood Partnership Area

Cardiff North respondents were most likely to think that the HWRCs should be for Cardiff householders only (29.7%). Cardiff South East respondents were most in favour of charging those from outside the city to use them (28.1%). Cardiff South West had the highest proportion that felt they should be free for anyone to use (28.8%). Respondents from City & Cardiff South were most likely to want to charge other local authorities for their residents using the facilities (25.7%).



Q13. I'd like more help to understand what can be recycled and where to put things at the HWRCs?

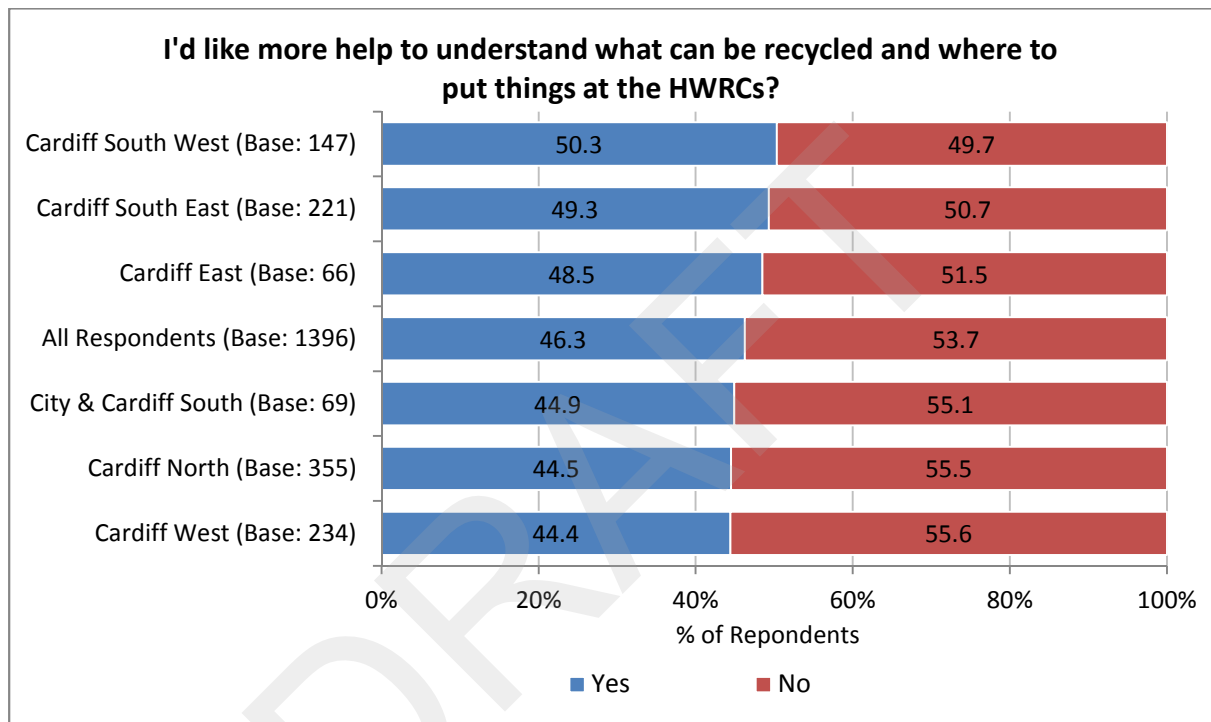
Overall

Almost half (46.3%) of respondents would like more help to understand what can be recycled and where to put things at HWRCs.

Response	No.	%
Yes	646	46.3
No	750	53.7
TOTAL RESPONDENTS	1,396	100.0

Neighbourhood Partnership Area

Respondents from Cardiff South West (50.3%) were most likely to want more help, compared to 44.4% for Cardiff West.



Q14. Cardiff Council are looking to have a reuse shop on a HWRC site. If there was a reuse shop would you use it or donate items?

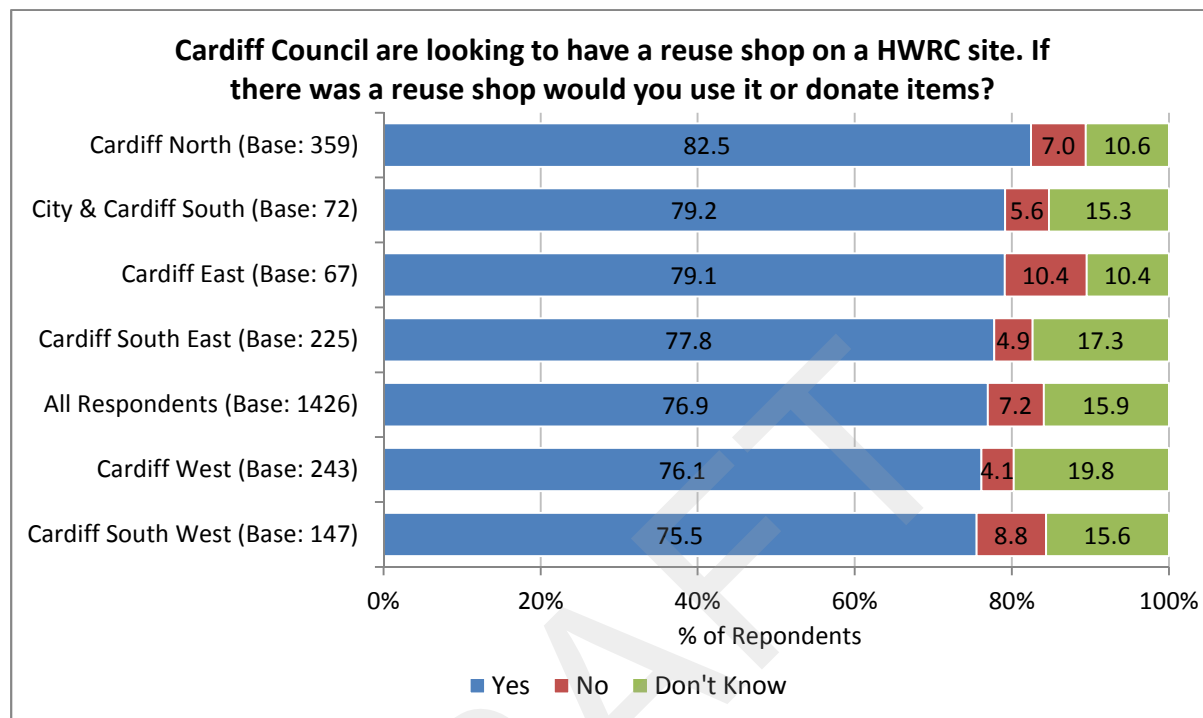
Overall

More than three-quarters (76.9%) of respondents would use a reuse shop on a HWRC site or donate items.

Response	No.	%
Yes	1,097	76.9
No	102	7.2
Don't Know	227	15.9
TOTAL RESPONDENTS	1,426	100.0

Neighbourhood Partnership Area

Over three-quarters of respondents from each of the NPAs said they would use or donate to a reuse shop on a HWRC site, with this figure reaching 82.5% in Cardiff North. Cardiff East residents were most likely to say they would not use it (10.4%).



BRING SITES

Q15. Do you use local bring site/bottle banks?

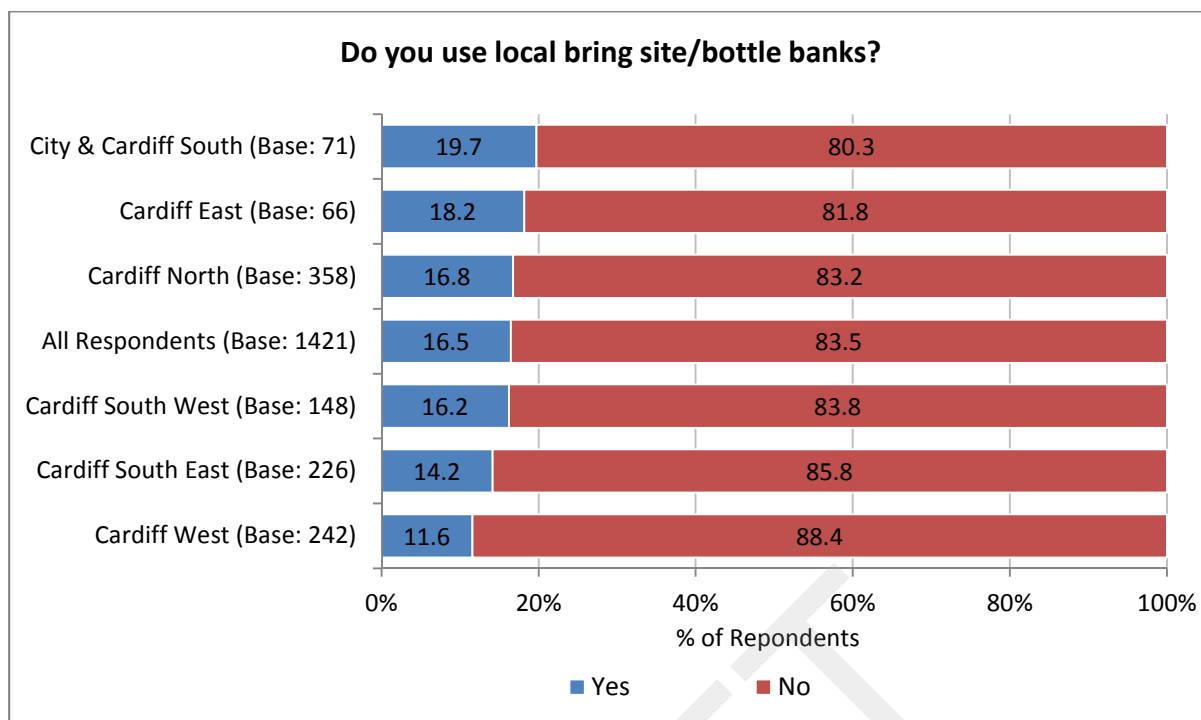
Overall

Only around a sixth (16.5%) of those completing the questionnaire indicated that they use local bring site/bottle banks.

Response	No.	%
Yes	234	16.5
No	1,187	83.5
TOTAL RESPONDENTS	1,421	100.0

Neighbourhood Partnership Area

Less than a fifth of respondents in each of the NPAs use a bring site/bottle bank, with this proportion ranging from 11.6% in Cardiff West to 19.7% in City & Cardiff South.



Q16. Do you think there should be more bring sites or bottle banks across Cardiff?

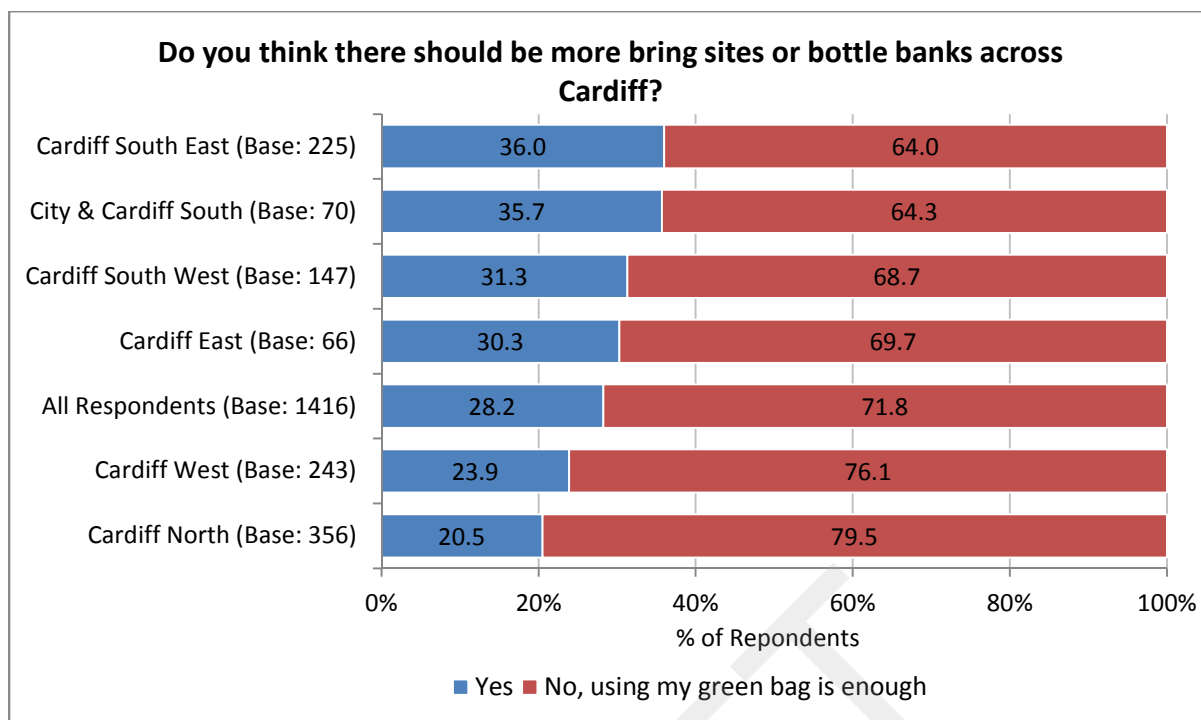
Overall

Less than three-tenths (28.2%) of respondents felt that there should be more bring sites or bottle banks across Cardiff.

Response	No.	%
Yes	400	28.2
No, using my green bag is enough	1,016	71.8
TOTAL RESPONDENTS	1,416	100.0

Neighbourhood Partnership Area

Cardiff South East residents (36.0%) were most likely to want more bring sites/bottle banks across the city, compared with just 20.5% in Cardiff North.



WASTE RESTRICTIONS

Q17. If the green waste collections stopped in the winter months, would you consider paying for the 'opt in' service during the winter months (end of October until end of March)?

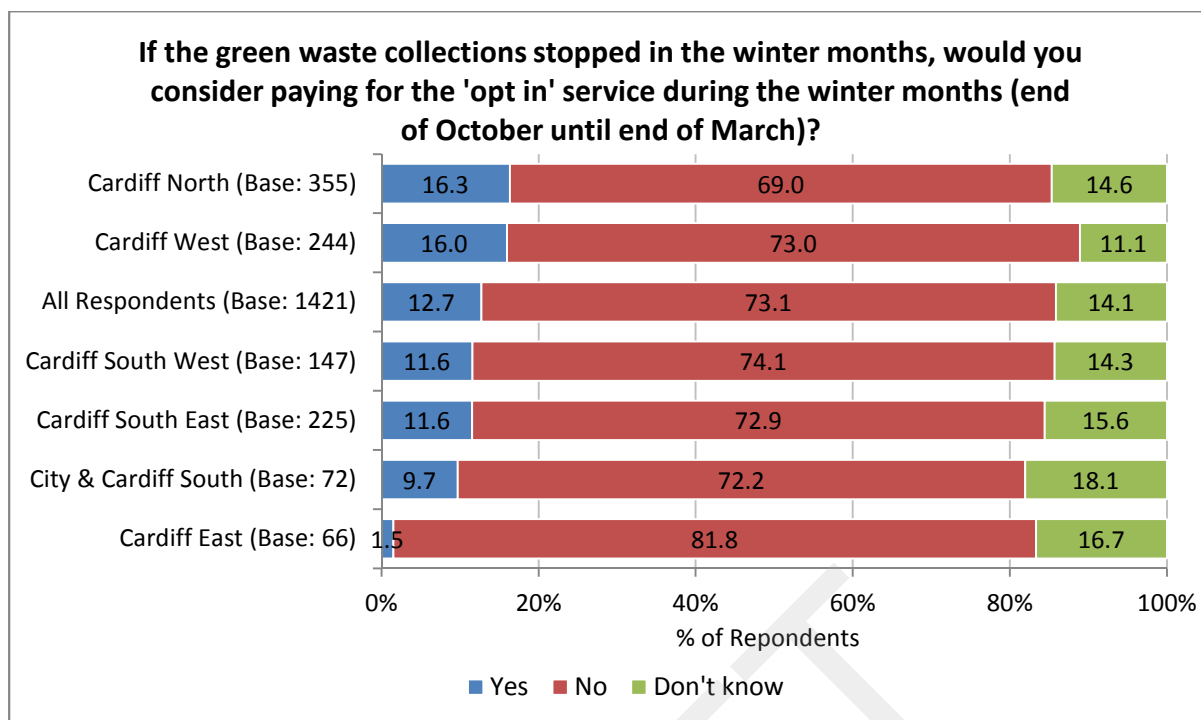
Overall

Only 12.7% would consider paying for the 'opt in' service for green waste collections, while around three-quarters (73.1) would not pay and 14.1% did not know.

Response	No.	%
Yes	181	12.7
No	1,039	73.1
Don't Know	201	14.1
TOTAL RESPONDENTS	1,421	100.0

Neighbourhood Partnership Area

Only 1.5% of respondents from Cardiff East would consider paying for the service, rising to 16.3% for Cardiff North.



HESSIAN SACKS IN TRI-BAG AREAS

Q18. Which is your preferred option for the collection of garden waste?

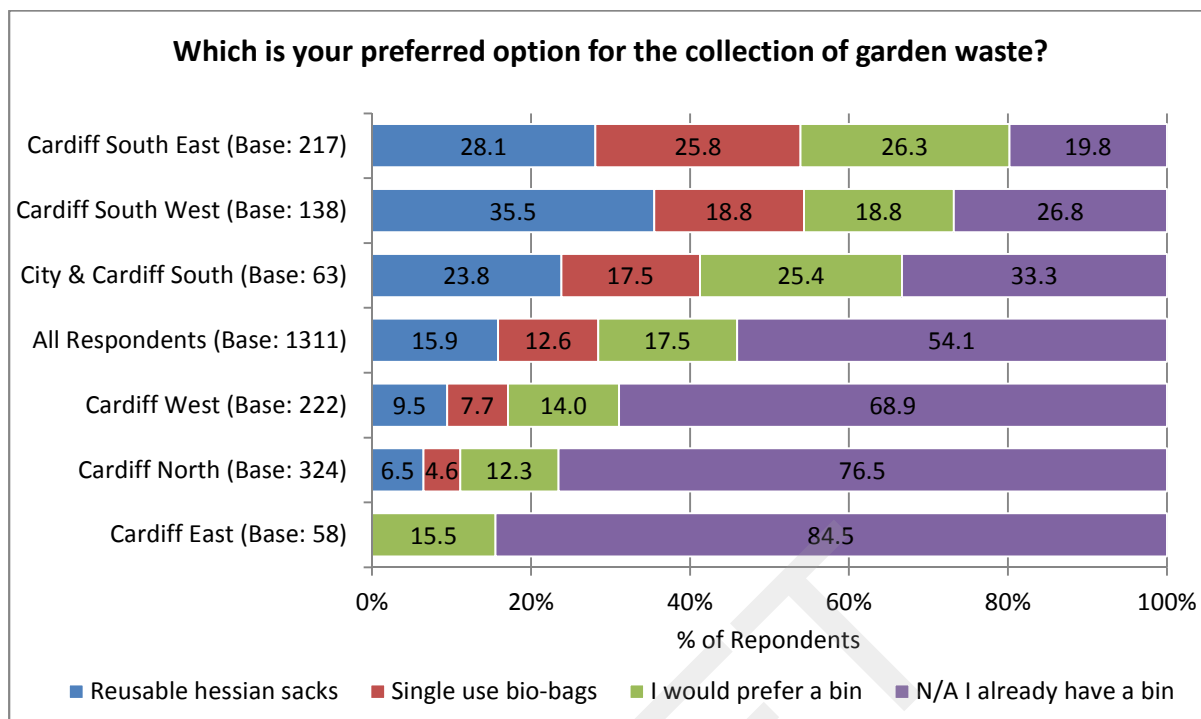
Overall

When asked to indicate their preferred option for the collection of garden waste, more than half stated that it was not applicable as they already had a bin (54.1%). Of the other three options, a bin (17.5%) was the popular choice, followed by reusable hessian sacks (15.9%) and single use bio-bags (12.6%).

Preferred Option	No.	%
N/A I already have a bin	709	54.1
I would prefer a bin	229	17.5
Reusable hessian sacks	208	15.9
Single use bio-bags	165	12.6
TOTAL RESPONDENTS	1,311	100.0

Neighbourhood Partnership Area

The proportion of residents that already had a garden waste bin varied greatly across the NPAs, ranging from just 19.8% in Cardiff South East to 84.5% in Cardiff East. Reusable hessian bags were most likely to be the preference by residents of Cardiff South West (35.5%), whereas no one in Cardiff East chose this option. Meanwhile, single use bio-bags and bins were most likely to be selected by those living in Cardiff South East: 25.8% and 26.3% of respondents respectively.



HOUSEHOLD KERBSIDE COLLECTIONS

Q19. If the council has to reduce the amount of general wastes they collect from me, I would prefer:

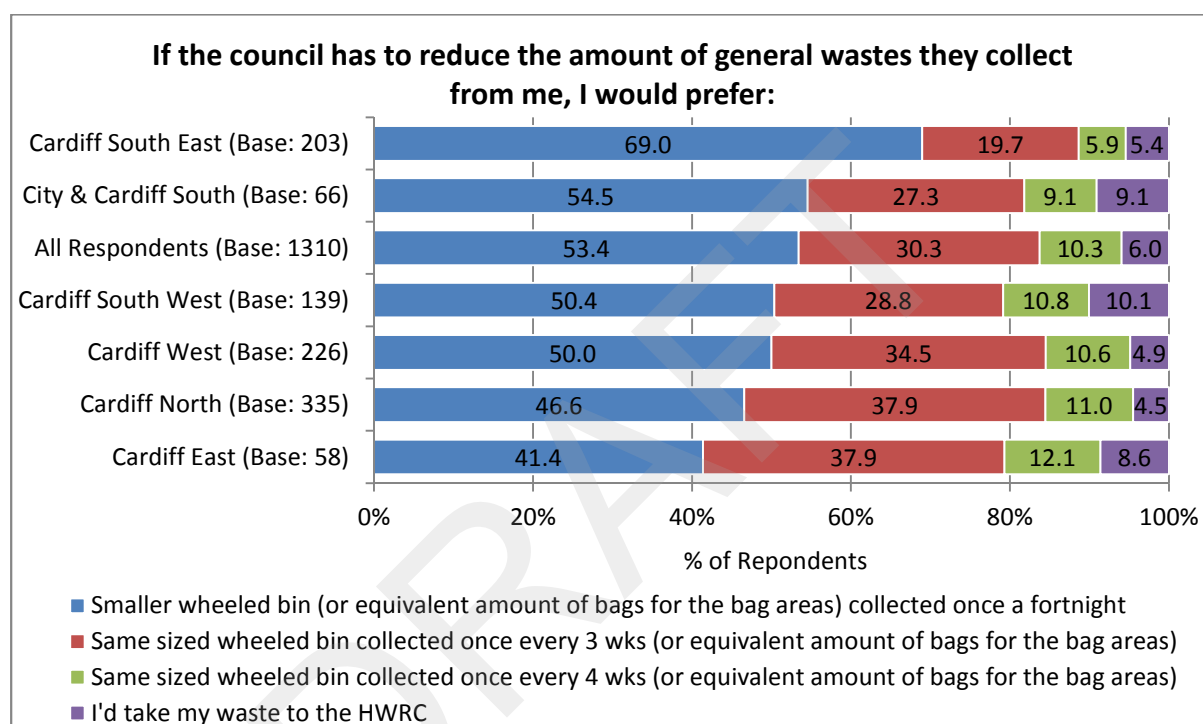
Overall

More than half of respondents (53.4%) stated that they would prefer a smaller wheeled bin (or equivalent amount of bags for bag areas) to be collected fortnightly if the council has to reduce the amount of general wastes collected. Three-tenths (30.3%) opted for the same sized bin/number of bags collected every three weeks, while a tenth (10.3%) chose the same sized bin/number of bags collected every four weeks. Just 6.0% would take their waste to the HWRC.

Preference	No.	%
A smaller wheeled bin (or equivalent amount of bags for the bag areas) collected once a fortnight	700	53.4
The same sized wheeled bin collected once every three weeks (or equivalent amount of bags for the bag areas)	397	30.3
The same sized wheeled bin collected once every four weeks (or equivalent amount of bags for the bag areas)	135	10.3
I'd take my waste to the HWRC	78	6.0
TOTAL RESPONDENTS	1,310	100.0

Neighbourhood Partnership Area

A smaller wheeled bin (or the equivalent amount of bags) was the option most selected in each of the NPAs, although this proportion ranged from 41.4% in Cardiff East to 69.0% in Cardiff South East. The percentage preferring the same sized wheeled bin/number of bags collected every three weeks varied from 19.7% in Cardiff South East to 37.9% in both Cardiff North and Cardiff East. Cardiff East (12.1%) was also the NPA most likely to prefer the same sized wheeled bin/number of bags collected every four weeks. Respondents from Cardiff South West (10.1%) were most likely to take their waste to the HWRC.



Q20. Do you currently use the hygienic waste service to dispose of nappies?

Overall

Only 1.6% said that they currently use the hygienic waste service to dispose of nappies.

Response	No.	%
Yes	22	1.6
No	1,371	98.4
TOTAL RESPONDENTS	1,393	100.0

Q21. Do you think the Hygiene service for nappy and incontinence waste should be collected:

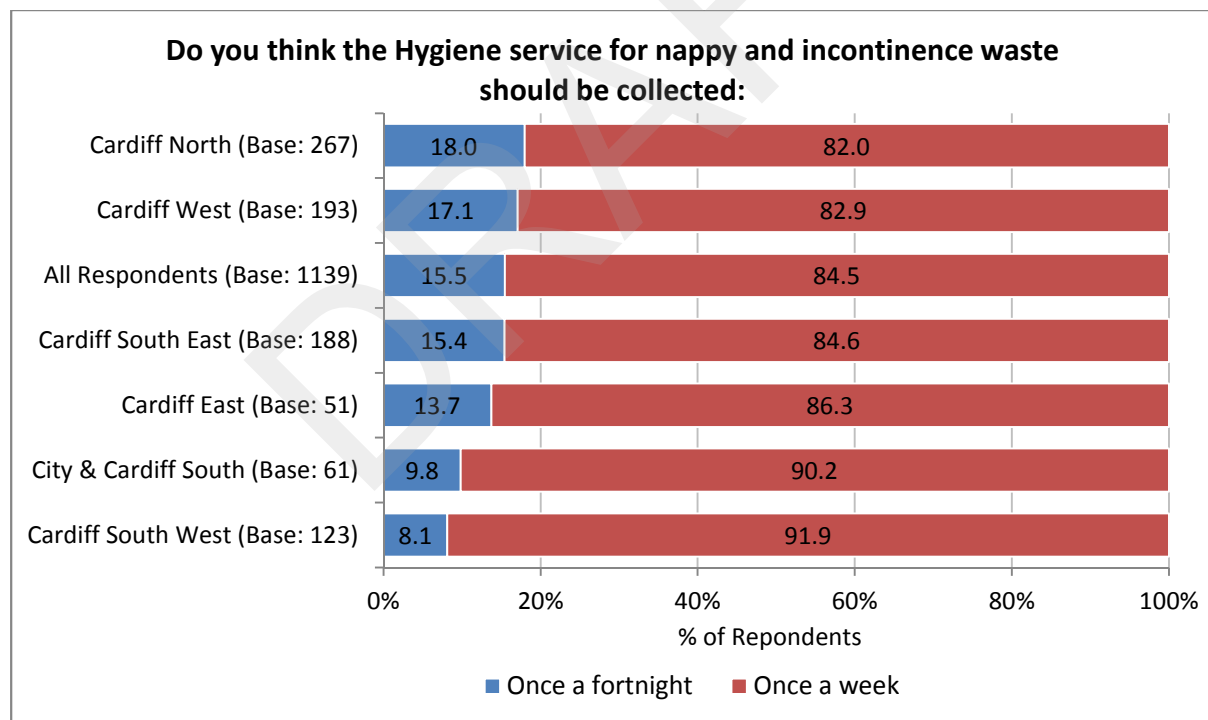
Overall

In terms of the frequency of hygiene waste collections, more than four-fifths (84.5%) believe that it should be collected weekly, compared with 15.5% that feel it should be collected fortnightly.

Frequency of Collection	No.	%
Once a fortnight	176	15.5
Once a week	963	84.5
TOTAL RESPONDENTS	1,139	100.0

Neighbourhood Partnership Area

Over four-fifths of respondents in each of the NPAs thought that the hygiene waste collections should be weekly and not fortnightly; ranging from 82.0% in Cardiff North to 91.9% in Cardiff South West.



Q22. The collection frequency for recycling (cans, glass, plastics, card & paper) should be:

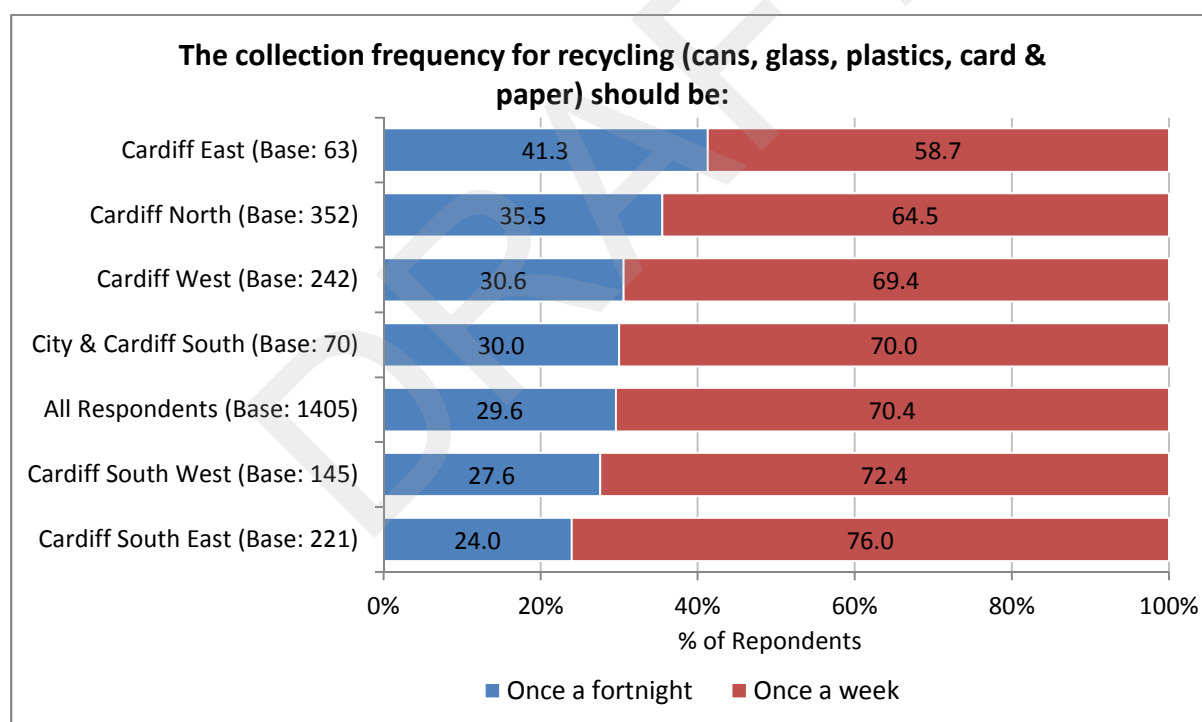
Overall

Seven-tenths (70.4%) of respondents thought that recycling should be collected weekly, while three-tenths (29.6%) chose fortnightly.

Frequency of Collection	No.	%
Once a fortnight	416	29.6
Once a week	989	70.4
TOTAL RESPONDENTS	1,405	100.0

Neighbourhood Partnership Area

Weekly recycling collections were the preferred option in each of the NPAs, although the proportion selecting this option ranged from 58.7% in Cardiff East to 76.0% in Cardiff South East.



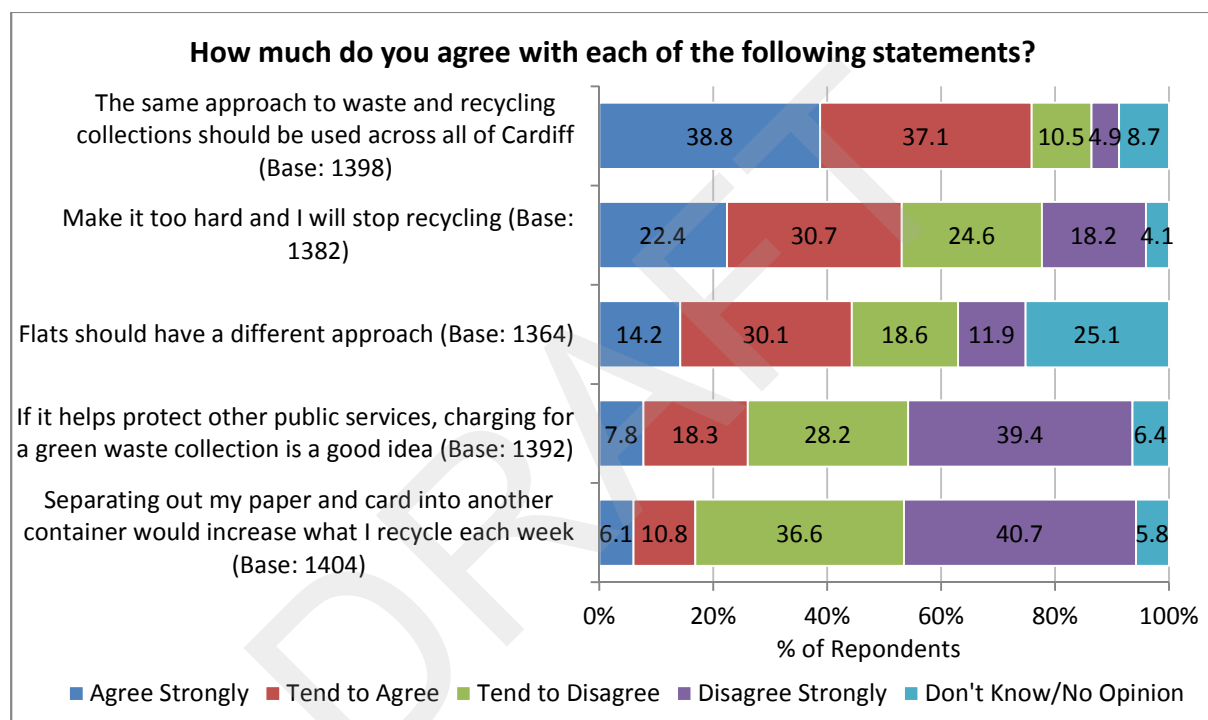
Q23. How much do you agree with each of the following statements?

Overall

Over three-quarters (75.9%) of respondents agreed that the same approach to waste and recycling should be used across all of Cardiff, including 38.8% that strongly agreed. The only other statement to be supported by more than half of the

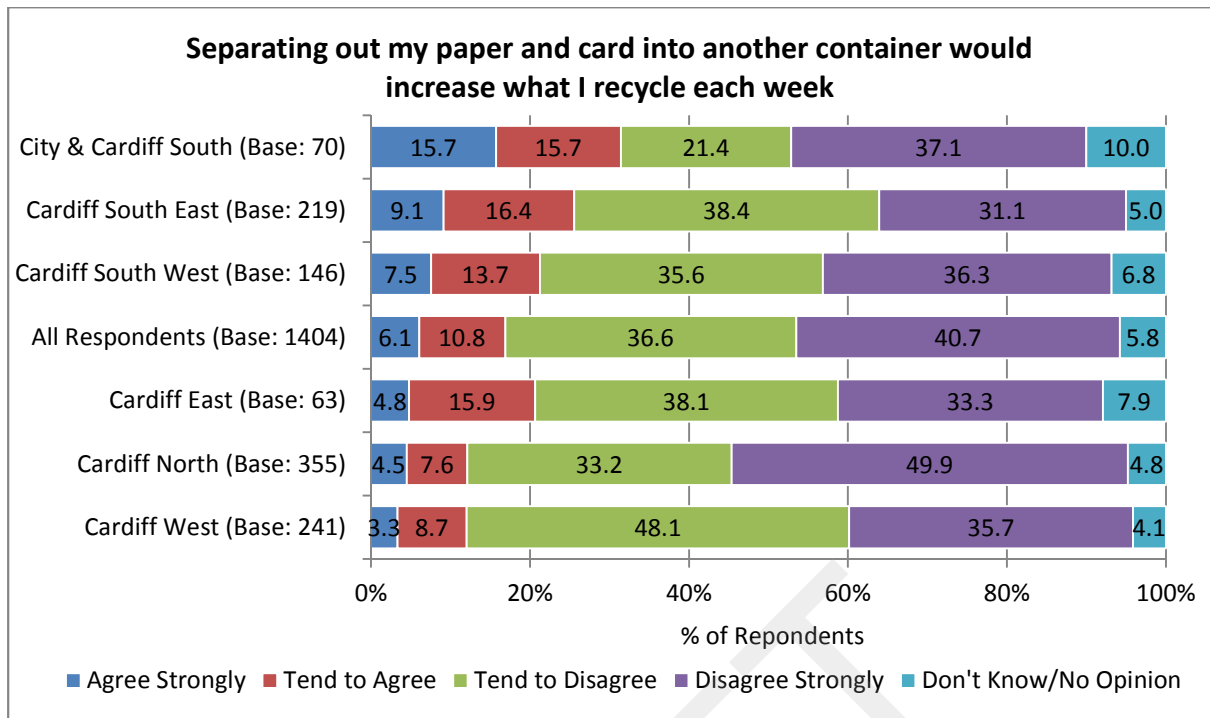
respondents was that they would stop recycling if it was made too hard: 53.1%, including 22.4% that strongly agree. Meanwhile, more than two-fifths (44.4%) agreed that flats should have a different approach, although a quarter did not know or had no opinion (25.1%).

Around two-thirds (67.5%) disagreed that charging for a green waste collection is a good idea if it helps to protect other public services, with two-fifths (39.4%) strongly disagreeing. Similarly, more than three-quarters (77.4%) did not agree that separating out their paper and card into another container would increase their weekly recycling, including two-fifths (40.7%) that strongly disagreed with the statement.

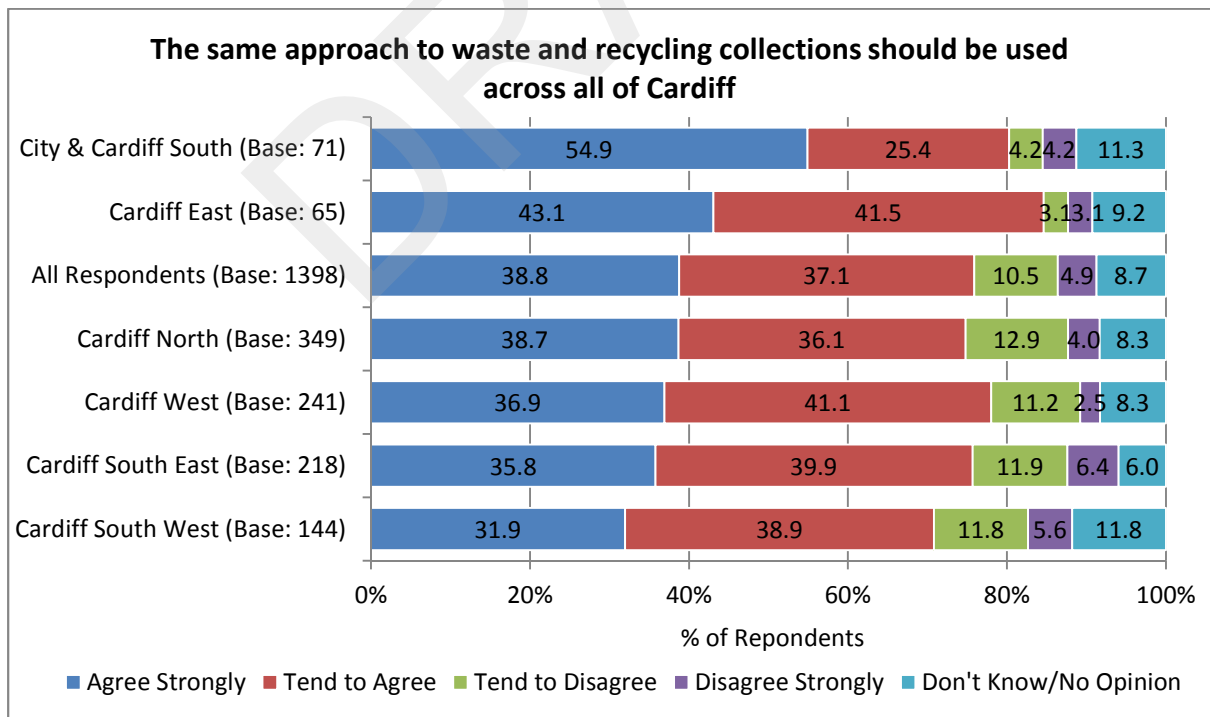


Neighbourhood Partnership Area

More than half of respondents from each of the NPAs disagreed that separating out their paper and card into another container would increase their weekly recycling, with disagreement highest in Cardiff West (83.8%) and Cardiff North (83.1%). In the latter this included 49.9% that strongly disagreed. In contrast, those from City & Cardiff South (31.4%) were most likely to agree.

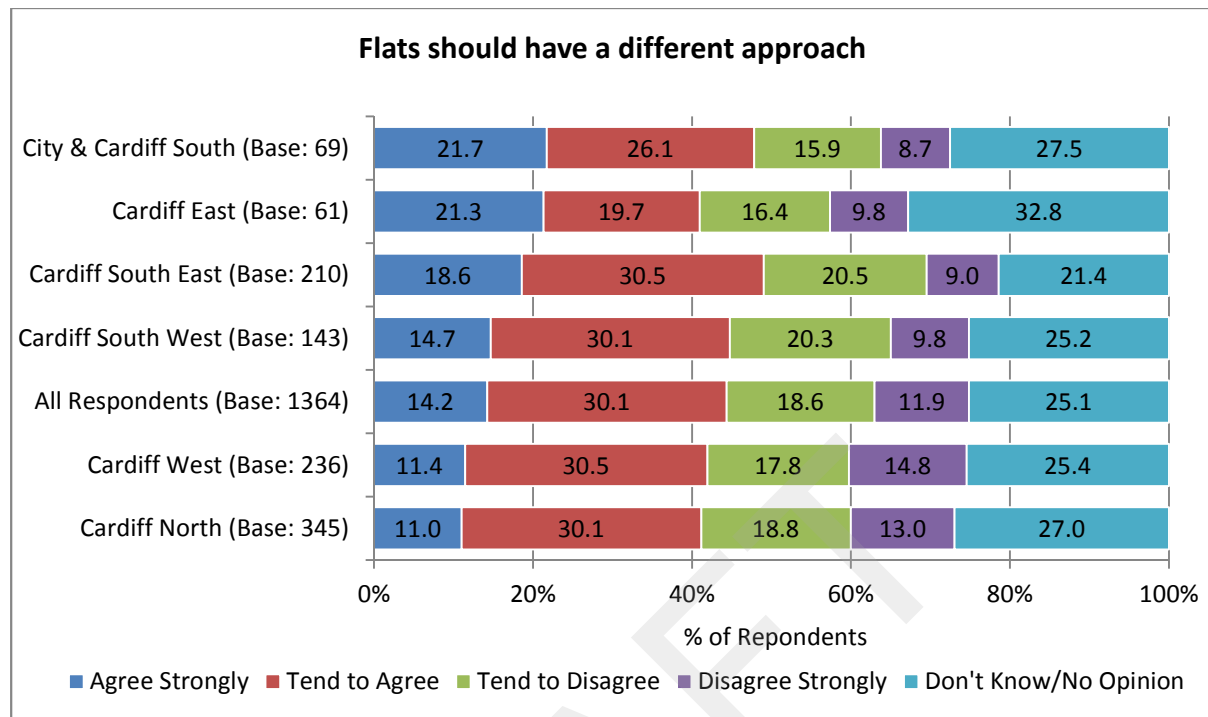


At least seven-tenths of respondents in each of the NPAs agreed that the same approach to waste and recycling should be used across all of Cardiff. This agreement was most prevalent in Cardiff East (84.6%), although City & Cardiff South had the largest proportion that strongly agreed (54.9%).

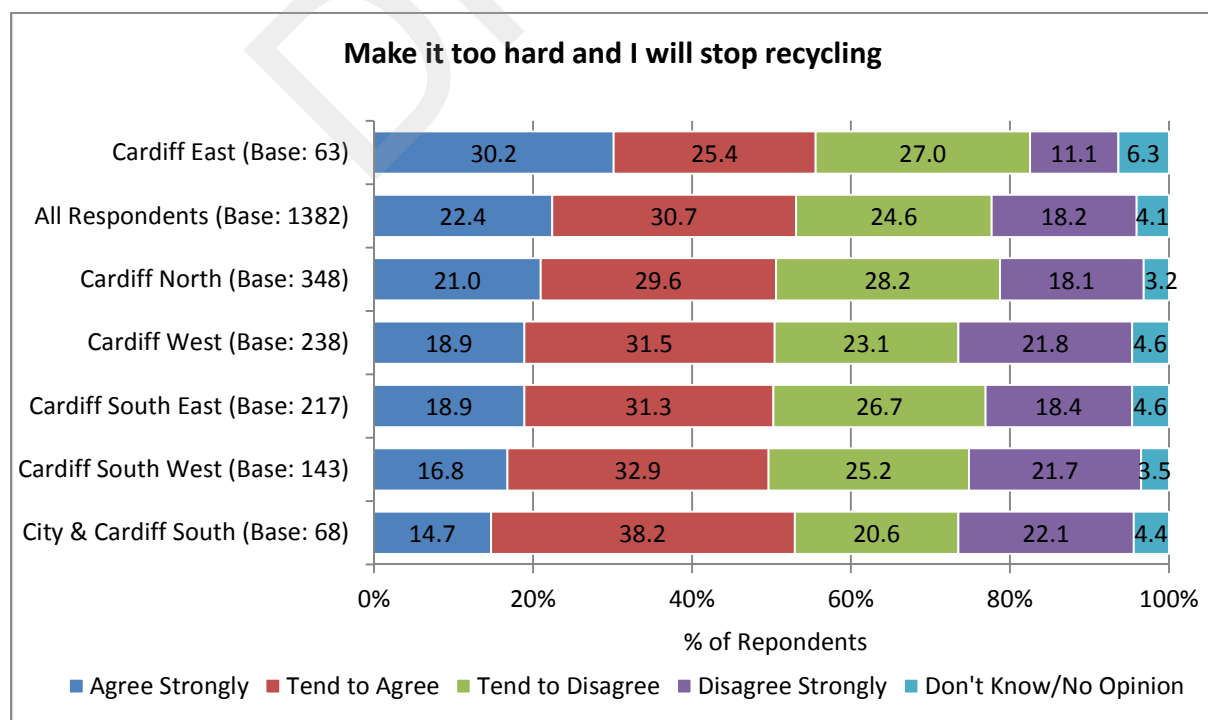


When asked whether flats should have a different approach, less than half of respondents from each NPA agreed to some extent, with Cardiff South East (49.0%)

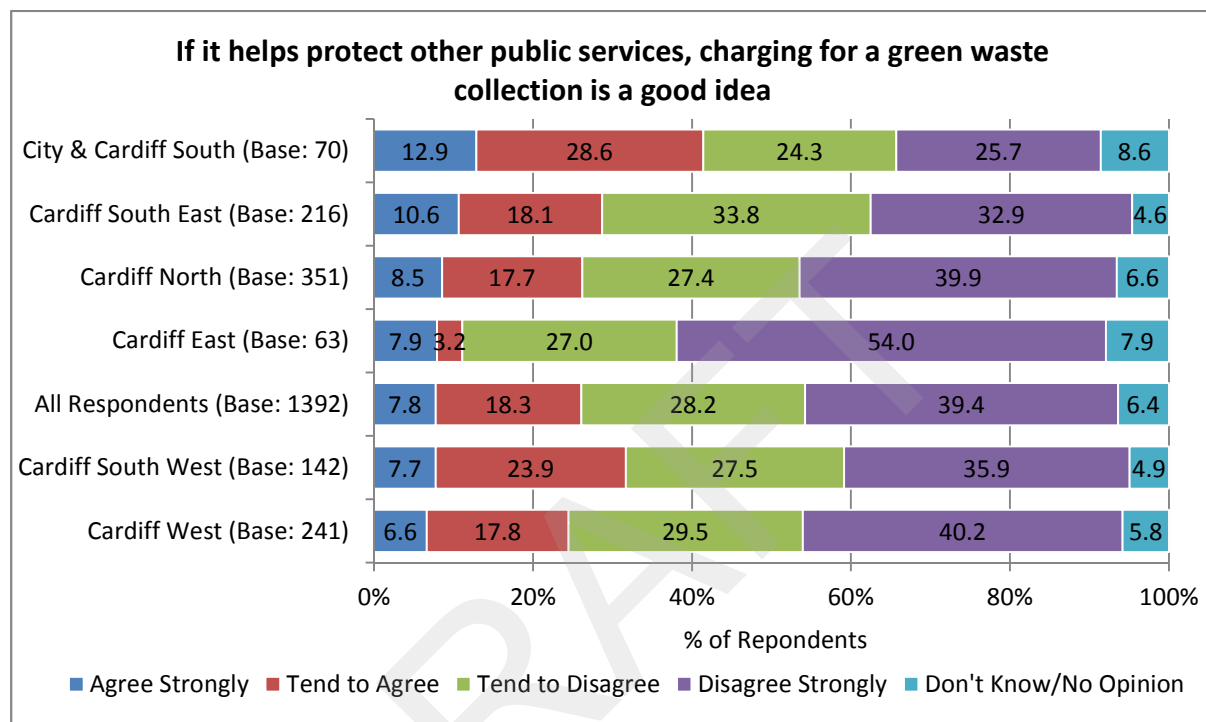
most likely to concur. However, at least a fifth in each area said that they did not know or had no opinion, with this figure reaching 32.8% in Cardiff East.



Around half of respondents from each NPA said they would stop recycling if it was made too hard, with residents of Cardiff East (30.2%) most likely to strongly agree. In contrast, more than a fifth in City & Cardiff South (22.1%), Cardiff West (21.8%) and Cardiff South West (21.7%) strongly disagreed with the statement.



The proportion of respondents who agreed that charging for a green waste collection is a good idea if it helps protect other public services ranged from a ninth in Cardiff East (11.1%) to around two-fifths in City & Cardiff South (41.4%). In contrast, at least half disagreed, and more than a quarter strongly disagreed, with the statement in each NPA. The percentage that strongly disagreed was highest in Cardiff East (54.0%), with more than half selecting this option.



Q24. Which of the following would you prefer to use for your recycling?

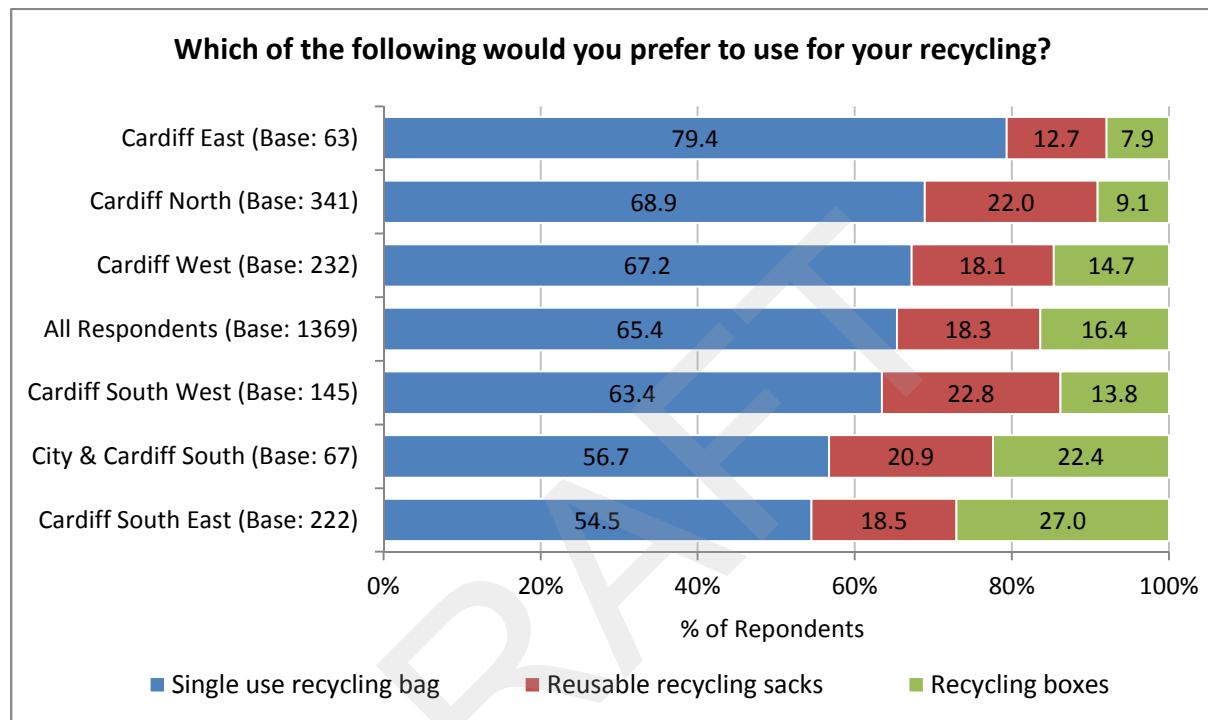
Overall

A single use recycling bag was the preferred choice for almost two-thirds (65.4%) of respondents; more than three times as popular as reusable sacks (18.3%) and around four times the figure for recycling boxes (16.4%).

Recycling Preference	No.	%
Single use recycling bag	895	65.4
Reusable recycling sacks	250	18.3
Recycling boxes	224	16.4
TOTAL RESPONDENTS	1,369	100.0

Neighbourhood Partnership Area

Single use bags was also the preferred option in each NPA; ranging from 54.5% in Cardiff South East to 79.4% in Cardiff East. Reusable sacks were most likely to be selected in Cardiff South West (22.8%) while recycling boxes were most popular in Cardiff South East (27.0%). Cardiff South East and City & Cardiff South were the only two NPAs where recycling boxes were more popular than reusable recycling sacks.



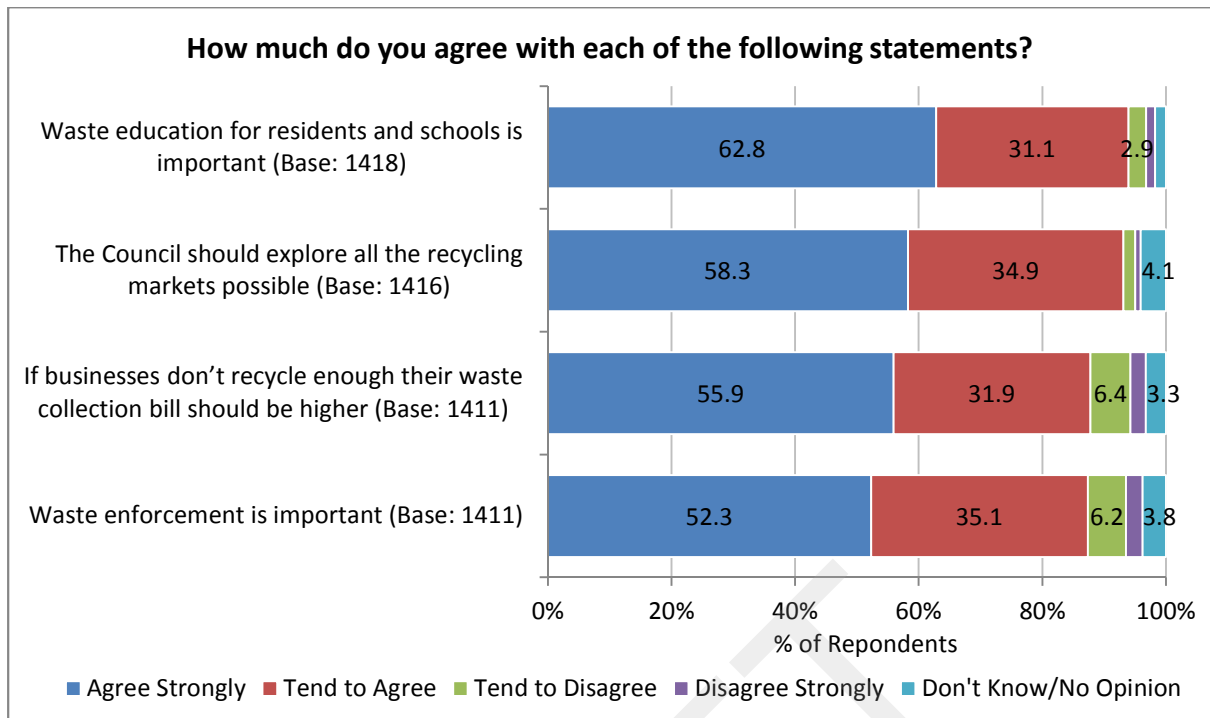
OTHER AREAS FOR RECYCLING

Q25. How much do you agree with the following statements?

Overall

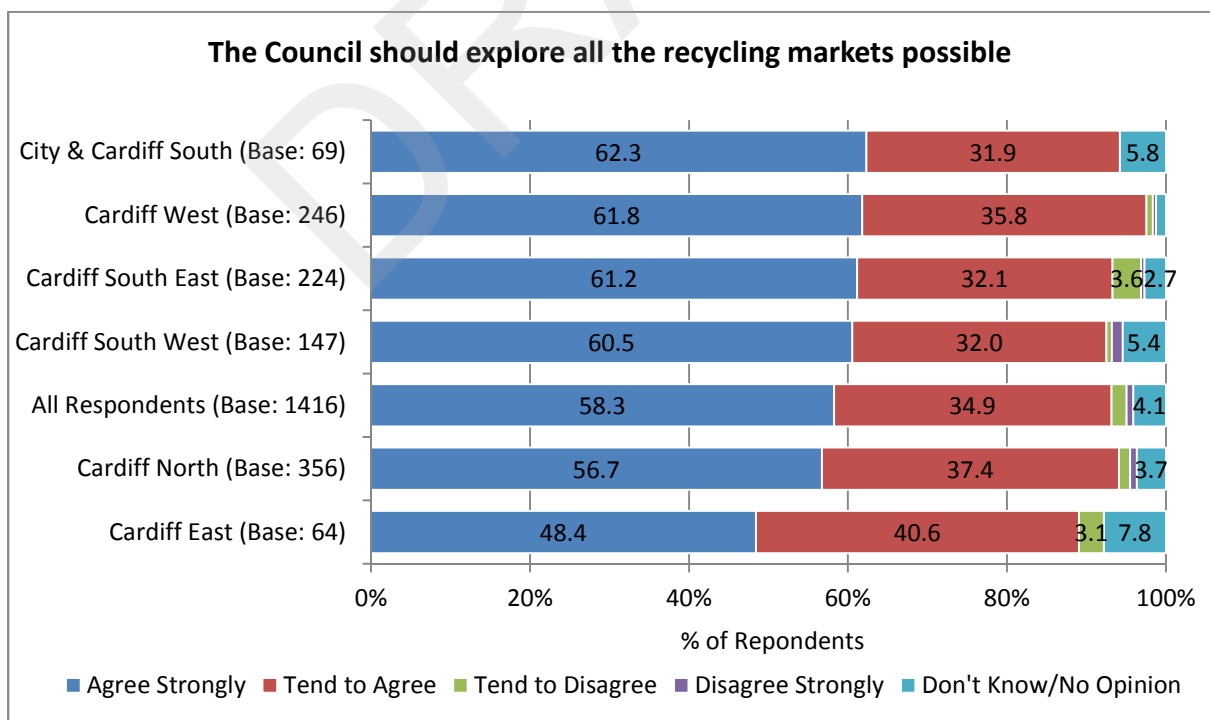
More than four-fifths of respondents concurred with each of the statements, while over half strongly agreed. However, support (93.9%) was greatest with regards to waste education being important for residents and schools, including 62.8% that strongly agreed. More than nine-tenths (93.1%) also agreed that the Council should explore all the recycling markets possible with 58.3% strongly agreeing.

If businesses don't recycle enough their waste collection bill should be higher was agreed with by 87.8%, including 55.9% that strongly agreed. Similarly, 87.4% thought that waste enforcement is important, with 52.3% strongly agreeing.



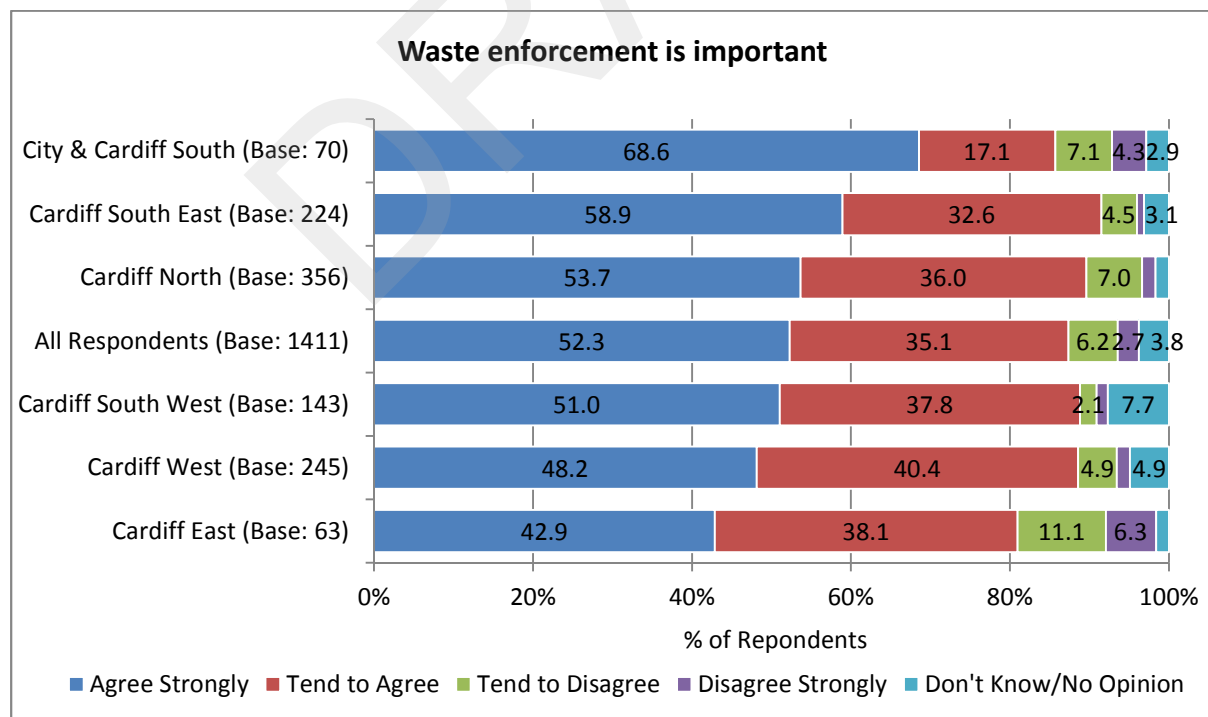
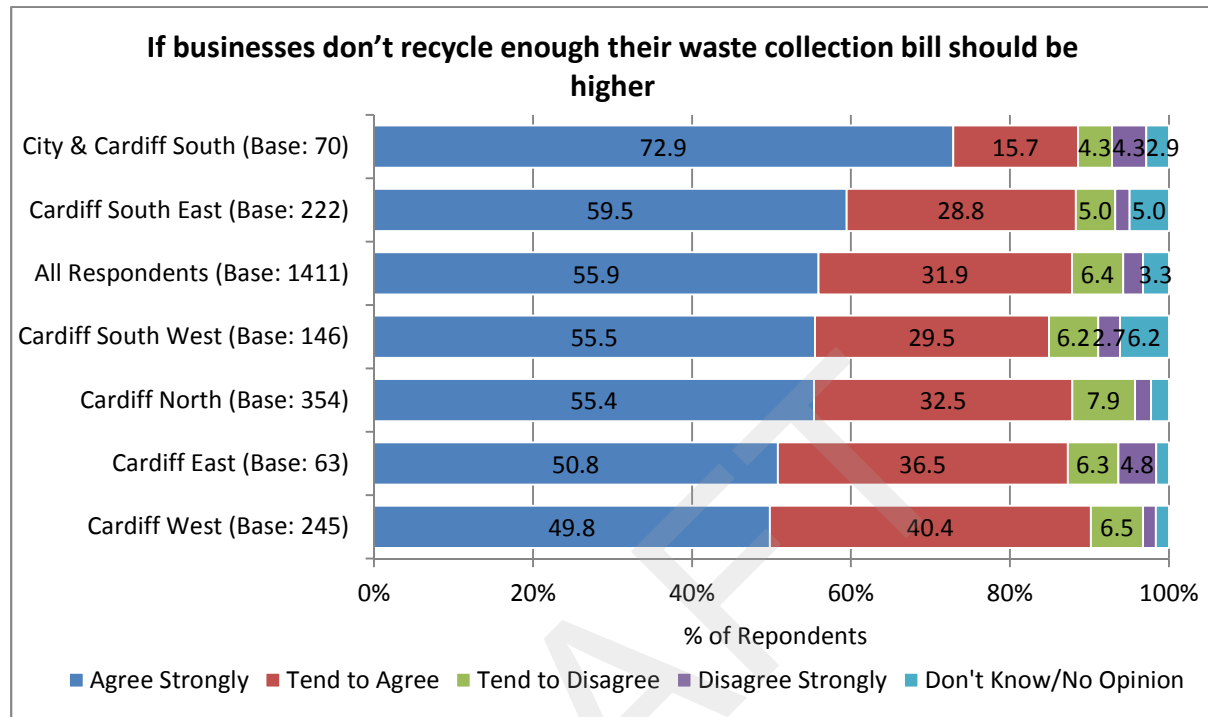
Neighbourhood Partnership Area

The proportion of respondents that agreed with the idea that the Council should explore all the recycling markets possible ranged from 89.1% in Cardiff East to 97.6% in Cardiff West. None of the respondents from City & Cardiff South disagreed.



Agreement levels were again high across the NPAs with regards to businesses facing a higher waste collection bill if they do not recycle enough, ranging from

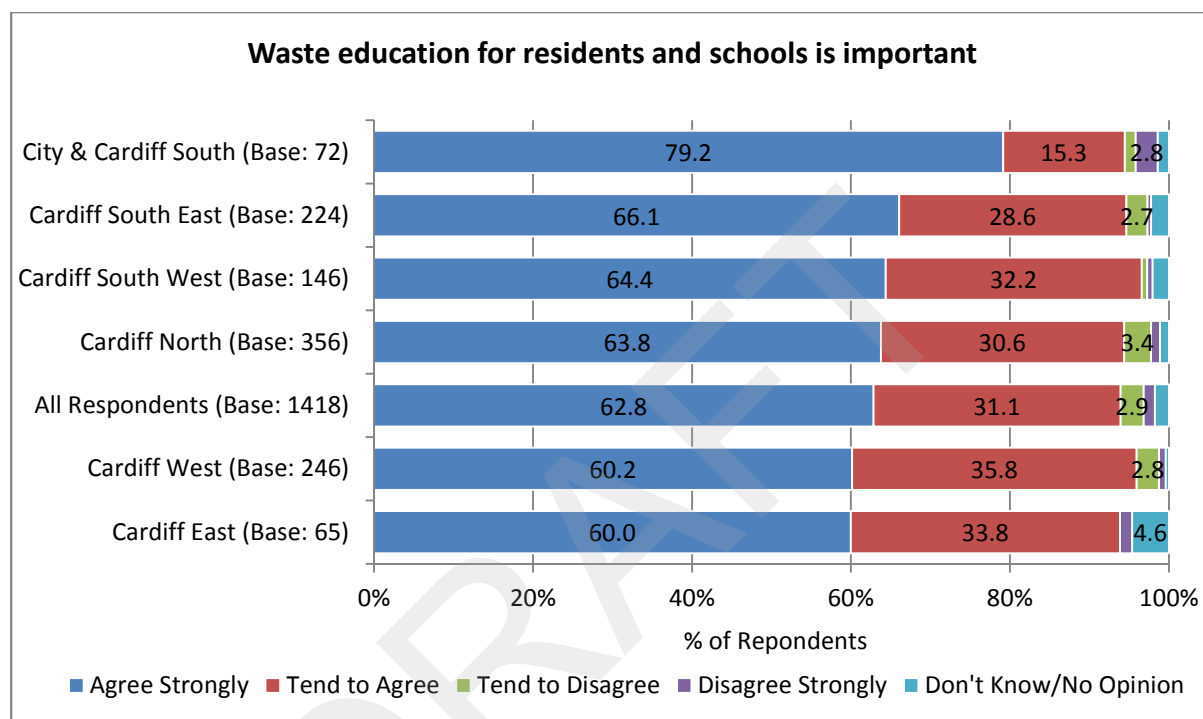
84.9% in Cardiff South West to 90.2% in Cardiff West. However, Cardiff West also had the smallest proportion strongly agreeing (49.8%) with the statement, compared with 72.9% in City & Cardiff South. Meanwhile, more than a tenth (11.1%) of respondents from Cardiff East disagreed with the proposal.



Over four-fifths of respondents in each of the NPAs agreed that waste enforcement is important, varying from a low of 81.0% in Cardiff East to a high of 91.5% in Cardiff

South East. However, more than a tenth disagreed in both Cardiff East (17.5%) and City & Cardiff South (11.4%).

Over nine-tenths of respondents agreed, and at least three-fifths strongly agreed, that waste education for residents and schools is important in each of the NPAs. City & Cardiff South (79.2%) had the greatest proportion strongly agreeing, although Cardiff South West (96.6%) saw the highest percentage supporting the statement to some extent.



OVERALL STRATEGY

Q26. Please choose the top three that are a priority to you:

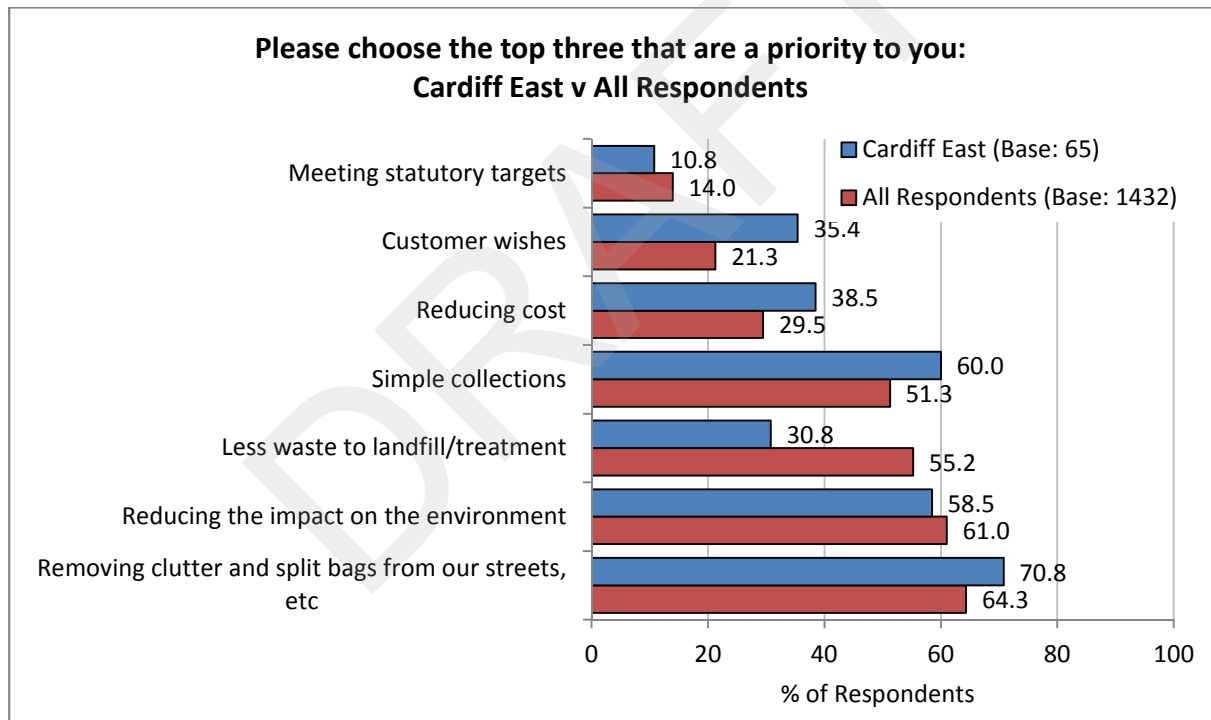
Overall

When asked to choose their top three priorities for the overall strategy, more than three-fifths selected the removal of clutter and split bags from the streets (64.3%) and reducing the impact on the environment (61.0%). Over half also highlighted sending less waste to landfill/treatment (55.2%) and simple collections (51.3%) as priorities. In contrast, reducing cost (29.5%), customer wishes (21.3%) and meeting statutory targets (14.0%) were deemed to be much less important.

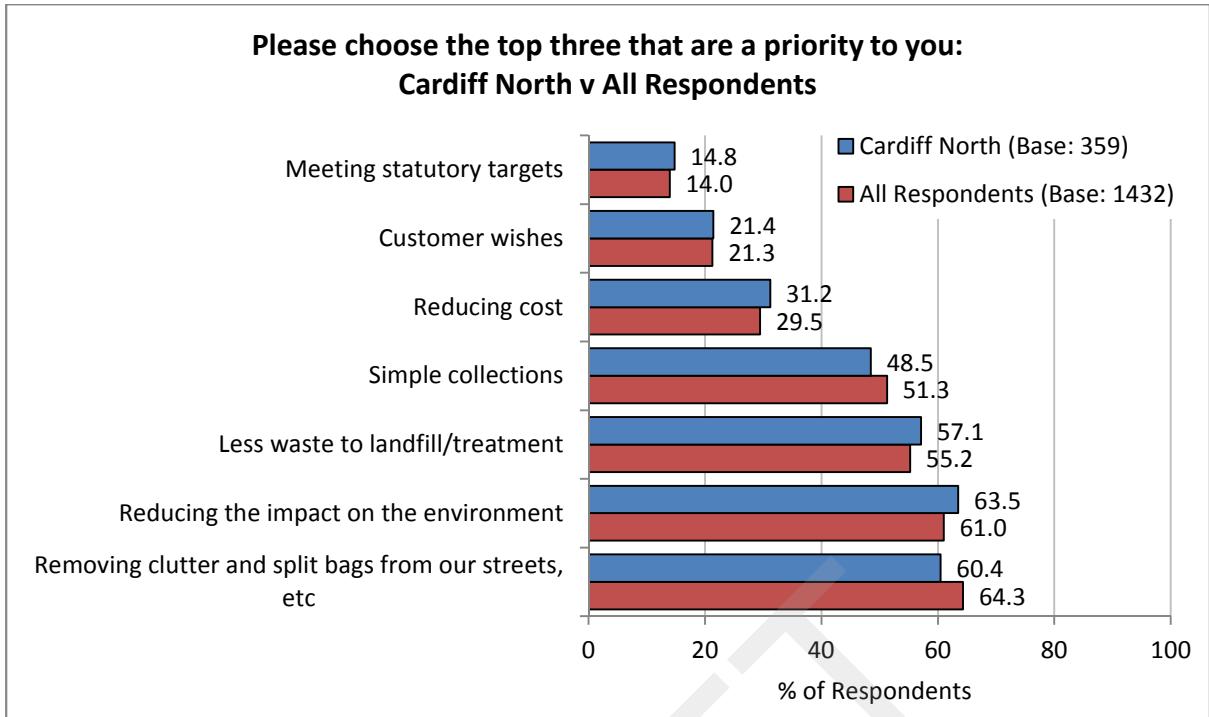
Priority	No.	%
Removing clutter and split bags from our streets, etc	921	64.3
Reducing the impact on the environment	874	61.0
Less waste to landfill/treatment	791	55.2
Simple collections	734	51.3
Reducing cost	422	29.5
Customer wishes	305	21.3
Meeting statutory targets	200	14.0
TOTAL RESPONDENTS	1,432	-

Neighbourhood Partnership Area

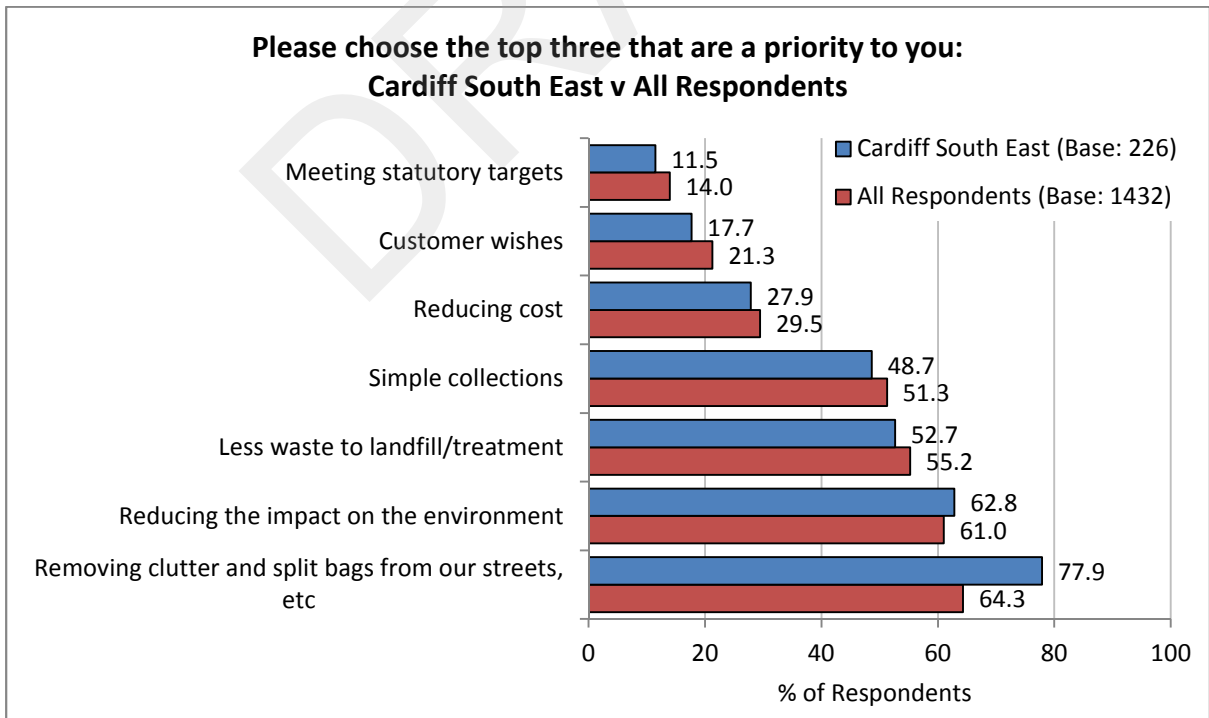
As with all respondents, the main priority in Cardiff East was removing clutter and split bags from the streets (70.8%). However, simple collections (60.0%) was identified as the second highest concern in the NPA. Meanwhile, sending less waste to landfill/treatment (30.8%) was deemed much less of an issue.



The priorities in Cardiff North were very similar to those of all respondents. However, whereas reducing the impact on the environment was the second biggest concern for all respondents, this was considered the main priority in the NPA (63.5%).

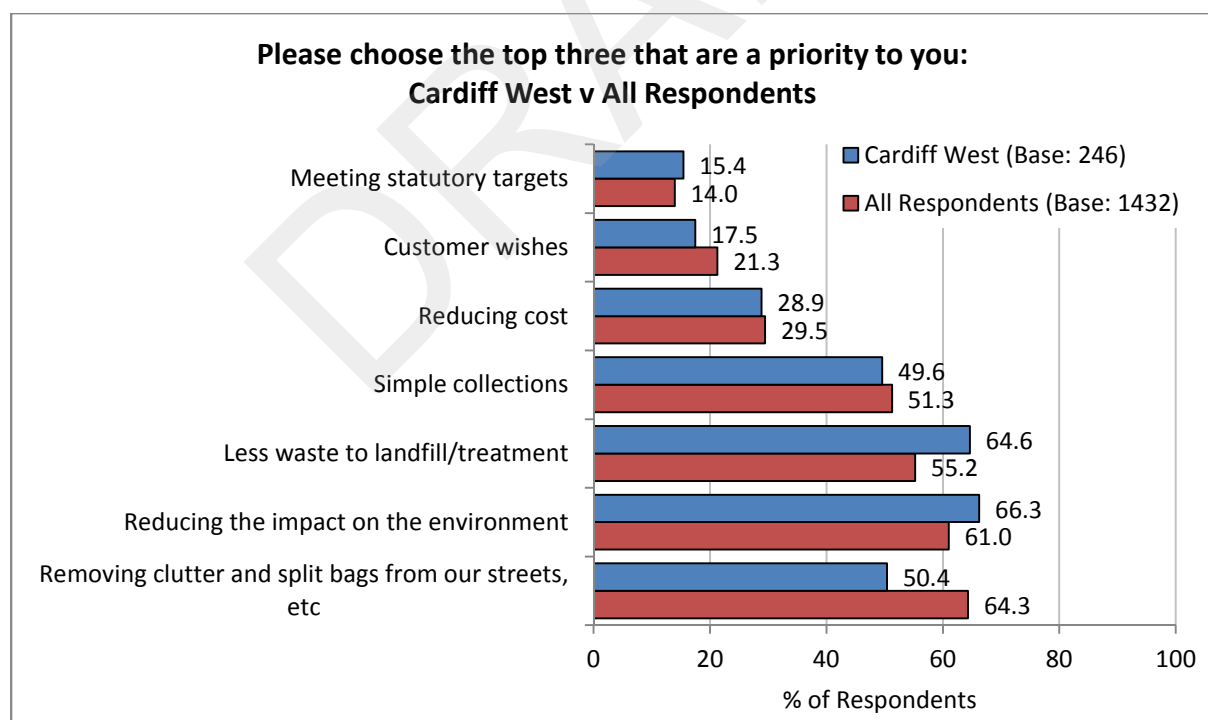
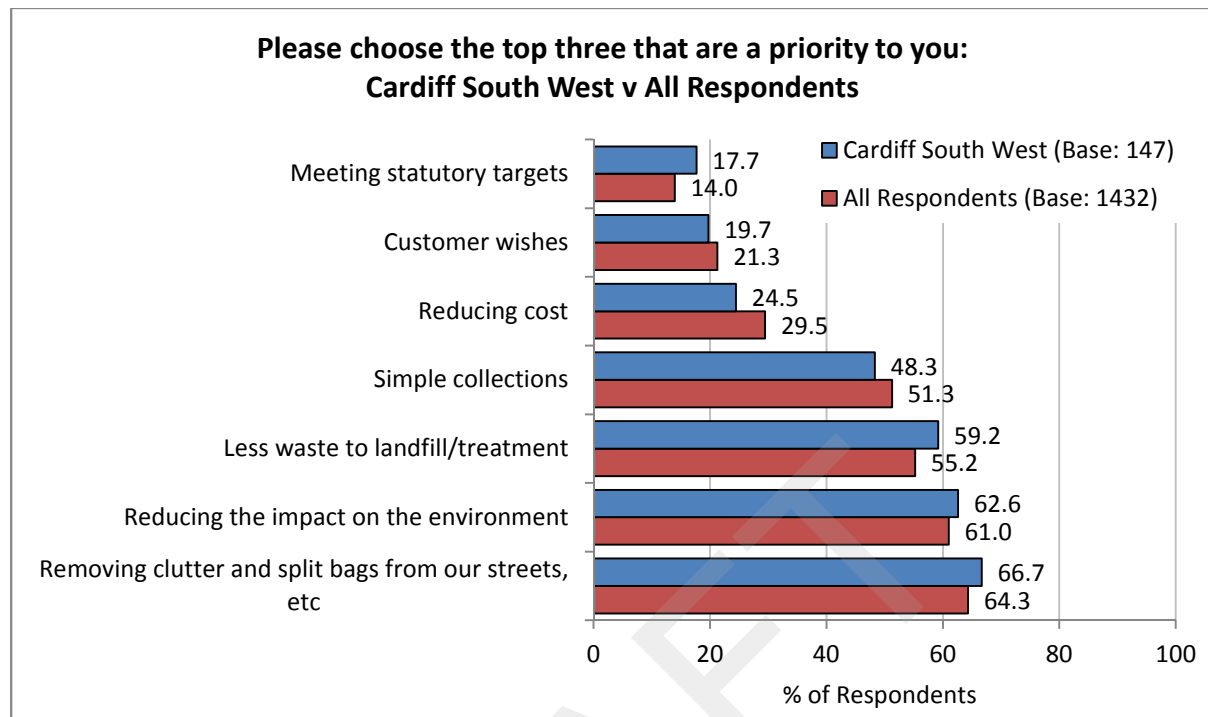


Cardiff South East’s priorities were again very similar to those of all respondents, including the removal of clutter and split bags from the streets being deemed the main concern, although the proportion selecting this was higher in the NPA (77.9%) than the survey average (64.3%).



The priorities in Cardiff South West were also very similar to all respondents with removing clutter and split bags from the streets (66.7%), reducing the impact on the

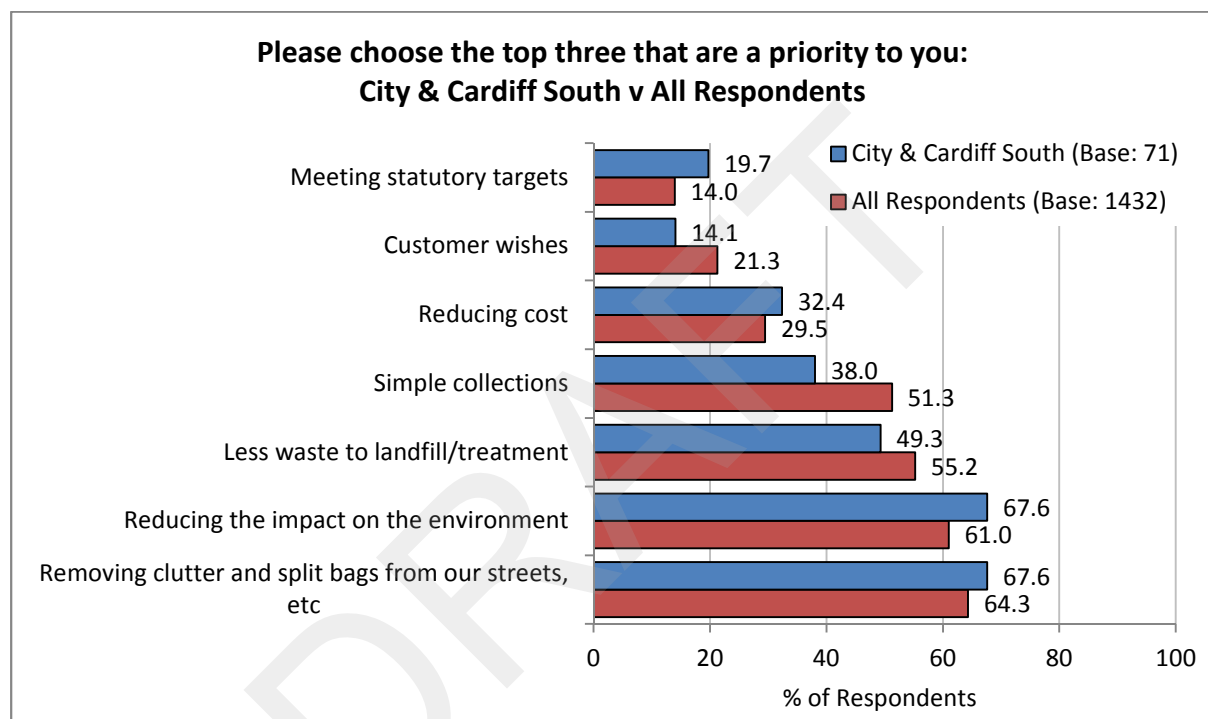
environment (62.6%) and less waste to landfill/treatment (59.2%) being the top three issues.



The three main priorities in Cardiff West were the same as for all respondents although they ranked in a different order. Reducing the impact on the environment (66.3%) was the biggest issue in the NPA, followed by sending less waste to landfill/treatment (64.6%), whereas these ranked second and third, respectively, for

all respondents. Removing clutter and split bags from the streets; the greatest concern for all respondents, was only deemed the third highest priority in the NPA (50.4%).

The joint-highest concerns in City & Cardiff South were removing clutter and split bags from the streets, and reducing the impact on the environment. Both were highlighted by around two-thirds (67.6%) of the NPAs respondents; above the comparative proportions for all respondents. Meanwhile, sending less waste to landfill/treatment (49.3%), simple collections (38.0%), and customer wishes (14.1%) were all seen as less of an issue in the NPA.



Q27. Do you have any other comments you'd like to make about these proposals?

Overall

When asked if they had any other comments to make about the proposals, the most common remarks were against 4 week collections and other proposals due to their negative impact, which was highlighted by almost two-fifths (39.2%) of respondents. This was followed by proposing ideas (22.5%) and improvements needed to support the general public (19.1%). More than a tenth also related to negative comments about the current waste service (14.4%) and penalties and fines enforcement (10.3%).

Comment	No.	%
Against 4 week collections and other proposals due to negative impact	248	39.2
Ideas	142	22.5
Improvements needed to support general public	121	19.1
Negative comments about current waste service	91	14.4
Miscellaneous	81	12.8
Penalties and fines enforcement	65	10.3
Reinstate closed recycling centres	51	8.1
Negative feeling towards consultation	41	6.5
Issues with rubbish in specific areas	37	5.9
Businesses to support recycling	37	5.9
Same rules for everyone	35	5.5
Against increased cost for waste collections	34	5.4
Negative feeling towards waste policy and ideas	32	5.1
Positive comments about current waste service	22	3.5
Support recycling ideas	20	3.2
Political, Council and management	19	3.0
Unfair penalties	14	2.2
TOTAL RESPONDENTS	632	–

NB. Percentages do not sum to 100% because some responses covered more than one category

RESPONDENT PROFILE

Q28. Gender: Are you?

There was a relatively even split between males (48.9%) and females (51.0%), while 0.1% identified themselves as transgender.

Gender	No.	%
Male	684	48.9
Female	713	51.0
Transgender	2	0.1
TOTAL RESPONDENTS	1,399	100.0

Q29. What was your age on your last birthday?

The most common age of the respondent was 45-54 (19.2%), although there was a fairly even split from between the 25-34 and 55-64 age groups. However, only 5.9% were aged 16-24, while none were under 16.

Age Group	No.	%
Under 16	0	0.0
16-24	83	5.9
25-34	247	17.4
35-44	262	18.5
45-54	272	19.2
55-64	254	17.9
65-74	186	13.1
75+	113	8.0
TOTAL RESPONDENTS	1,417	100.0

Q30. Including yourself, how many adults (aged 16 and over) live in your household?

More than half of the respondents lived in a household with two adults (54.4%), while around a quarter (24.0%) were the only person aged 16 and over.

No. Adults	No.	%
1	334	24.0
2	758	54.4
3	174	12.5
4	81	5.8
5+	46	3.3
TOTAL RESPONDENTS	1,393	100.0

Q31. And how many children (aged under 16) live in your household?

Just over three-quarters (76.6%) had no children in their household, whereas around a tenth had one child (11.1%) or two children (9.8%).

No. Children	No.	%
0	1,039	76.6
1	150	11.1
2	133	9.8
3	27	2.0
4	6	0.4
5+	1	0.1
TOTAL RESPONDENTS	1,356	100.0

Q32. Do you identify as a disabled person?

Around a tenth (10.8%) identified themselves as a disabled person.

Response	No.	%
Yes	150	10.8
No	1,200	86.6
Prefer not to say	36	2.6
TOTAL RESPONDENTS	1,386	100.0

Q33. Which of the following apply to you:

Over two-fifths of those that completed the question stated they had a long-standing illness or health condition (41.1%), while more than a quarter highlighted a mobility impairment (27.5%), and around a fifth were deaf/deafened/hard of hearing (19.0%).

Condition	No.	%
Long-standing illness or health condition (eg cancer, HIV, diabetes, asthma)	136	41.1
Mobility impairment	91	27.5
Prefer not to say	67	20.2
Deaf/Deafened/Hard of hearing	63	19.0
Mental Health difficulties	29	8.8
Visual impairment	20	6.0
Wheelchair user	15	4.5
Learning impairment/difficulties	4	1.2
Other	23	6.9
TOTAL RESPONDENTS	331	-

NB. Percentages do not sum to 100% because respondents could give more than one answer

Q34. Which of the following describes your household type?

Household Type	No.	%
Semi-detached	445	31.6
Mid-terrace	422	30.0
Detached	225	16.0
Flat	167	11.9
End-terrace	101	7.2
Bungalow	38	2.7
Other	10	0.7
TOTAL RESPONDENTS	1,408	100.0

The most common dwelling type of respondents was semi-detached (31.6%), followed by mid-terrace (30.0%). Meanwhile, 16.0% lived in a detached abode and 11.9% in a flat.

Q35. What is your ethnic group?

More than nine-tenths (93.5%) of respondents stated that they belonged to a white ethnic group, while 4.1% preferred not to say.

Ethnic Group	No.	%
White:	1,288	93.5
Welsh/English/Scottish/Northern Irish/British	1,239	90.0
Irish	9	0.7
Gypsy or Irish Traveller	0	0.0
Other	40	2.9
Mixed/Multiple Ethnic Groups:	13	0.9
White & Black Caribbean	4	0.3
White & Black African	2	0.1
White & Asian	3	0.2
Other	4	0.3
Asian/Asian British:	9	0.7
Indian	9	0.7
Pakistani	2	0.1
Bangladeshi	6	0.4
Chinese	1	0.1
Other	2	0.1
Black/African/Caribbean/Black British:	4	0.3
African	1	0.1
Caribbean	3	0.2
Other	0	0.0
Arab	3	0.2
Any other ethnic group	4	0.3
Prefer not to say	56	4.1
TOTAL RESPONDENTS	1,377	100.0