ENVIRONMENT AND ECONOMY OVERVIEW AND SCRUTINY COMMITTEE

Date of Meeting	Tuesday, 16th July 2024
Report Subject	The Council's Transition to a Restricted Capacity Residual Waste Collection Model
Cabinet Member	Deputy Leader of the Council and Cabinet Member for Streetscene and Transportation
Report Author	Chief Officer, Streetscene and Transportation
Type of Report	Strategic

EXECUTIVE SUMMARY

From 2024/2025, the statutory target for the amount of waste prepared for reuse, recycled and composted has increased to 70%, having previously been set at 64% in the preceding years as part of Welsh Government's "Beyond Recycling" Strategy.

However, as a Council, Flintshire did not manage to achieve the previous statutory target of 64% in any of the preceding four years and, without significant service change, will not meet the 70% target required by 2025. This could lead to further significant financial penalties being imposed by Welsh Government, which are already expected to be in excess of £1million for 2021/22 and 2022/23.

Following the public consultation in early 2024 and the Council's adoption of the Resource and Waste Strategy in March 2024, a recommendation was approved by Cabinet to consider a further report in June 2024 to outline the Council's transition to a restricted capacity residual waste collection model, which was committed to in Priority Two of the Strategy and recognised as an effective method of reducing residual waste and maximising recycling collected.

To support with this, the Council engaged with WRAP Cymru, Local Partnerships and their consultants, WPS and CRS, to undertake a modelling exercise to simulate different residual waste collection methods for the purpose of identifying the optimum model for:

1. maximising recycling potential and improving performance.
2. reducing our impact on the environment by reducing greenhouse gas emissions
3. reducing operational costs

That exercise has now drawn to a close and consideration must now be given to the outcome of the modelling work and the most effective collection model to be utilised. The purpose of this report is to outline the modelling work undertaken and present the proposed collection model to be adopted by the Council in order to achieve the statutory target of 70%.

RECOMMENDATIONS	
1	That Scrutiny acknowledges and supports the outcomes of the modelling work undertaken on restricting the capacity of residual waste collections.
2	That Scrutiny supports a transition to the most effective service delivery model of retaining a comprehensive weekly recycling collection service and reducing residual waste collections to once every four weeks while retaining the 180L black wheeled bin to realise maximum recycling performance increase, greenhouse gas emission reduction and cost reduction.

REPORT DETAILS

1.00 Outcome of Recycling and Waste Modelling Exercise

1.01 Background and Context

The recycling rate in Flintshire of 62.77% (2023/24) was again below the level required to achieve the target of 64% (previous target) and well below the level required to achieve the current target of 70%.

The table below shows Flintshire's performance over the last four years, where we have continually missed the target, year after year.

Year	Target	Actual Performance
2020/21	64%	63.98%
2021/22	64%	60.08%
2022/23	64%	61.51%
2023/24	64%	62.77% (awaiting verification by NRW)

1.02 The Waste (Wales) Measure (2010) made the targets for reuse, recycling and composting statutory from 2012-13. This status allows Welsh Government to levy financial penalties against Councils that fail to achieve them. The statutory targets are weight based and have increased gradually over time.

We have continually reported that the Council faces significant fines for not achieving the statutory recycling targets during 2021/22 and 2022/23. The fines for missing the targets over these two financial years equate to more than £1million.

Following the 2023/24 end-of-year reporting, it is known that Flintshire has again not achieved the statutory recycling target resulting in the possibility of a further significant financial penalty.

From April 2024, the target has now increased to 70% and the Council faces further fines per annum, based on current recycling levels, which could exceed £1million annually.

1.03 Waste Data Analysis

Compositional analysis for the residual waste stream was undertaken in 2022. This information shows that, despite providing a comprehensive weekly recycling collection service, supported by additional provision at five household recycling centres (HRCs), a number of residents continue to place valuable recyclable

materials into the residual waste bin where they are then lost from recycling and cost the authority a significant amount of money to dispose of.

Using data from 2022/23, to achieve the 70% recycling target, we need to divert 7,600 tonnes of material from the residual waste stream to the existing kerbside recycling services or HRCs.

The compositional analysis shows that 13,410 tonnes of material in the residual waste bin could have been recycled using the existing services and, of this, 6,940 tonnes was food waste. The following table summarises the materials found in the black bin.

Materials	% of Kerbside Residual	Mass of Materials (t)
Food Waste	30%	6,940
Dry Recycling	13%	3,010
Other Recycling	10%	2,310
Garden Waste	3%	690
Absorbent Hygiene Products (AHP)	2%	460

The remaining 42%, 9,710 tonnes, is non-recyclable waste that was correctly presented in the residual waste bin.

Having analysed the compositional analysis, a separate review was undertaken on the recycling performance of kerbside collected waste alone. This has demonstrated that, over the last six years, the kerbside recycling performance has remained consistent between 49% and 51% (see **Appendix 1)**, whilst the overall recycling performance (the recycling performance capturing all the recyclable materials collected by the Council) has fluctuated between 60% and 69%.

The analysis does show variations in tonnages collected, with increased yields being seen in 2020/21 due to the impact of the COVID pandemic, for example, however, the performance is unaffected and remains static.

This indicates that, while the current kerbside collection model remains the same, as it is now, there will not be any significant improvement in the recycling performance and capture of vital resources from the residual waste stream.

1.04 <u>Council Risk and Assurance</u>

Due to the current risk of infraction fines and inability to achieve statutory targets, this has been highlighted as a strategic risk rated RED for the Authority.

As this has been reported as a strategic RED risk, an internal audit was undertaken on the service during 2023-2024 to identify the reasons for the failure to meet recycling targets and provide assurance that the Council is taking effective steps to mitigate the risk.

This audit has an assurance rating of RED with four clear actions identified that the Council will take to mitigate the potential of fines and increase recycling performance. A copy of the internal audit report is presented in **Appendix 2** and will be presented to the Governance and Audit Committee in July 2024.

1.05	Welsh Government Position The Cabinet Secretary for Climate Change and Rural Affairs has still yet to decide whether to impose any fines for 2021/2022 and 2022/2023 and, as such, is monitoring Flintshire's performance and actions closely. In arriving at a decision, the Cabinet Secretary has stipulated that the Council must be committed to improving its performance to achieve the statutory minimum targets, which is of fundamental importance, and the plan needs to be credible, in terms of the actions proposed and the commitment from the Authority in place to deliver them. To assist the Council in developing its plan, Welsh Government commissioned the support of its professional advisors, WRAP Cymru and Local Partnerships, who were engaged to support officers in the review of the Council's strategy and identify any opportunities for operational improvement and efficiency. This work led to the development of a Resource and Waste Strategy **(Appendix 3)** which was adopted by the Council in March 2024. This Strategy demonstrates a strategic approach to address the performance of the Authority and mitigate against the risk of fines. The Strategy has been developed in line with the waste hierarchy, supporting the principles of waste prevention and minimisation, supporting re-use, recycling and finally residual recovery and landfill for items not suitable for re-use or recycling. The Strategy outlines the global, national, and local context including drivers for change so that our residents are fully informed as to why there is a need to focus on recycling performance, infraction fines and waste compositional analysis. It also considers upcoming legislative and policy change such as the introduction of Extended Producer Responsibility, Deposit Return schemes and the inclusion of Energy from Waste (EfW) being included in the Emissions Trading Scheme (ETS). All of which will impact the materials that we collect, our performance, and ultimately the cost of disposal. As detailed in the Cabinet report of 12th March 2024, a recommendation was approved to bring a further report on the Council's transition to restricting the capacity of the residual waste collected, as committed to in Priority Two of the Strategy, a fundamental action for achieving the statutory recycling target of 70%. This report now outlines the modelling exercise that has been undertaken on Flintshire's collection services in order to identify the most efficient collection model.
1.06	Recycling and Waste Modelling In December 2023, WSP, in conjunction with CRS, were appointed by WRAP Cymru to support Flintshire in the review of options to improve its recycling performance through the assessment of three different collection models. The exercise that took place sought to identify the most efficient and effective model focusing on three aspects: 1. maximising recycling potential and improving performance. 2. reducing our impact on the environment by reducing greenhouse gas emissions 3. reducing operational costs

The options put forward for modelling were based around the restriction of residual waste, as evidenced data demonstrates that this method increases the capture rate of dry recycling and food waste at the kerbside.

As we intended to change the existing operational shift patterns and remove Saturday collections in the future, the modelling options have factored in a change from a six-day working week to a five-day working week, Monday to Friday.

The table below sets out the 'baseline' position, based on Flintshire's current collection methodology (fortnightly collection with a 180L black wheeled bin on a six-day collection), and an 'enhanced baseline' (fortnightly collection with a 180L black wheeled bin on a five-day collection) with three modelled options for consideration, 1a, 2a and 3a.

Option	Description
Baseline (existing)	180L Fortnightly - 6 day working week (90L capacity per week)
Enhanced Baseline	180L Fortnightly - 5 day working week (90L capacity per week)
Option 1a	180L black wheeled bin collected 3 weekly - 5 day working week (60L capacity per week)
Option 2a	180L black wheeled bin collected 4 weekly - 5 day working week (45L capacity per week)
Option 3a	120L black wheeled bin collected fortnightly - 5 day working week (60L capacity per week)

1.07 The modelling of options 1a, 2a and 3a has been undertaken on the enhanced baseline position as the service intends to transition to a five-day working week for several operational efficiency reasons, which are namely to: -

- Improve recruitment opportunities.
- Reduce leave requests for the same working day.
- Decrease the impact of sickness absence.
- Reduce reliance on agency staff.
- Improved service delivery
- Reduce operational impact from residents being at home (e.g., access obstruction from parked cars)
- Allow for flexibility to change collection days (Christmas/New Year/adverse weather)
- Allow for vehicle maintenance on non-working days.
- Streetscene contact centre does not operate on the weekend restricting support to customers on a Saturday collection day.

1.08 <u>Modelling Process</u>
The three options were modelled using WRAP's Kerbside Analysis Tool (KAT). This uses a combination of actual data from our existing collection service, such as vehicle and resourcing levels, unit costs, and material yields, and combines them with evidence-based assumptions drawn from reliable data sets from other local authorities. KAT is an established and widely used tool which has supported many councils to assess and implement changes to waste collections.

	Appendix 4 provides further detail on what data was provided for the modelling exercise to take place, how the assumptions were calculated, and the methodology for calculation. Making use of WRAP's "CarbonWARM" emission factors, the greenhouse gas reductions from each option were also calculated.
1.09	<u>Modelling Outcomes - Recycling Performance</u> The modelling exercise has identified that Option 2a (180L black wheeled bin collected 4 weekly - 5 day working week (45L capacity per week)) achieves the highest performance increase at 5.9 percentage points, against the Enhanced Baseline. The greatest restriction on available weekly residual capacity results in the highest diversion of food and dry recycling from the residual stream, while the 4-weekly collection frequency means that capture is maximised. Option 1a (180L black wheeled bin collected 3 weekly - 5 day working week (60L capacity per week)) and option 3a (120L black wheeled bin collected fortnightly - 5 day working week (60L capacity per week)) exhibit similar performance increases at 4.5 and 4.3 percentage points respectively, with Option 3a expected to be slightly lower due to the more frequent residual waste collection, resulting in less uptake of weekly food waste recycling services. The following table sets out the change in recycling yields, overall waste arisings and performance that the modelling has calculated:

Option	Mass Reused & Recycled (t)	Mass Composted (t)	Total Municipal Arisings (t)	Re-use, Recycling & Composting Rate %	Change relative to Baseline - % Points
Baseline	27,314	16,689	71,542	**61.5%**	
Enhanced Baseline	27,314	16,689	71,542	**61.5%**	0.0%
Option 1a – 180L 3 weekly	28,347	18,769	71,350	**66.0%**	4.5%
Option 2a – 180L 4 weekly	28,580	19,417	71,217	**67.4%**	5.9%
Option 3a – 120L fortnightly	28,345	18,623	71,370	**65.8%**	4.3%

The potential increase in recycling performance is based on 2022/23 data when the recycling rate was 61.51%. Applying the potential increase on to 2023/24 performance, we could realise an improvement in performance of up to 68.67% (based on option 2a).

While Option 2a has identified the largest performance increase, this collection model does not fully achieve the statutory target of 70% on its own. This is why it is just one of several actions identified in the Resource and Waste Strategy aimed at achieving the target and meeting our strategic objectives.

Some actions from the strategy have already been implemented, some are at planning and proposal stage (such as this), and others will require investment and industry solutions to implement. The service will continue to work towards implementing those identified action throughout the six-year life cycle of the Strategy.

1.10 The table below provides further details of the individual waste stream yield increase or decrease for each option. This identifies higher yields of dry recycling (paper, card, tins, plastics, glass) and food waste, with significant decreases in residual waste.

Material Stream	Baseline Mass (t)	Enhanced Baseline Mass (t)	Option 1a Mass (t)	Option 2a Mass (t)	Option 3a Mass (t)
Kerbside Dry recycling	12,682	12,682	13,974 **+1292**	14,249 **+1567**	13,974 **+1292**
Food waste	4,480	4,480	7,146 **+2666**	7,976 **+3496**	6,958 **+2478**
Residual waste	22,855	22,855	18,898 **-3957**	17,792 **-5063**	19,085 **-3770**

1.11 Modelling Outcomes - Carbon Reduction

With respect to greenhouse gas (GHG) emissions, Option 2a sees the largest emission reduction of -2,045 tonnes Co2e, compared to -1,575 tonnes Co2e for Option 1a and -1,491 tonnes Co2e for Option 3a. This is predominantly due to the increased amount of recycling and food capture combined with the greatest reduction in residual waste sent to Energy from Waste (EfW).

Material	Enhanced Baseline	Option 1a 180L 3-weekly	Option 2a 180L 4-weekly	Option 3a 120L fortnightly
GHG Emission relative to EfW - Tonnes CO2e	-7,868	-9,372	-9,823	-9,364
Emissions from fuel - Tonnes CO2e	873	803	784	878
Total - Tonnes CO2e	-6,994	-8,569	-9,040	-8,486
Difference to Enhanced Baseline (t CO2e)	0	-1,575	-2,045	-1,491

1.12 Modelling Outcomes - Cost Reduction

The table below sets out the whole system costs for the three options against the baseline and enhanced baseline.

Activity	Baseline (£)	Enhanced Baseline (£)	Option 1a 180L 3-weekly (£)	Option 2a 180L 4-weekly (£)	Option 3a 120L fortnightly (£)
Collection	7,061,552	7,088,551	6,766,737	6,734,054	7,216,173
Containers	308,085	308,085	308,085	308,085	453,005
Treatment	3,367,624	3,367,624	3,008,880	2,921,497	3,019,882
Garden Waste Income	-1,077,000	-1,077,000	-1,077,000	-1,077,000	-1,077,000
Total	**9,660,261**	**9,687,260**	**9,006,702**	**8,886,636**	**9,612,060**
Difference		**+26,999**	**-653,559**	**-773,625**	**-48,201**

1.13	The key findings of the modelling were that: • Collection costs are lower for options with less frequent residual waste collections (Options 1a and 2a) due to reduced labour/resource costs. • Annualised container costs are higher for Option 3a where 120L bins would need to be purchased and provided to all households (additional capital written down over a 10-year period). • All options exhibit higher recycling incomes than the Baseline and Enhanced Baseline options due to increased diversion of recyclate from the residual waste stream. • Food waste treatment cost increases for the options and sensitivities with greater residual restriction as the increase in yields causes more to be diverted. Residual treatment costs reduce commensurately with the degree of residual restriction. Option 2a, which has the greatest residual restriction, sees treatment costs £440,000 lower than the Baseline.
1.14	**Conclusion** As can be seen from the modelling, Option 2a (180L bin collected every four weeks) achieves both the highest performance increase at 5.9 percentage points, as well as the largest projected financial saving at c.£770,000 per annum against the Baseline and c.£800,000 per annum against the Enhanced Baseline. The greatest restriction in available weekly residual capacity (45L capacity per week) results in higher diversion of food and dry recyclate from the residual stream, while the four weekly collection frequency means that capture is maximised. Reduced vehicle and staff numbers combined with increased material income and reduced processing costs results in the net annualised saving. Option 1a and 3a exhibit similar performance increases (between 4.3 and 4.5 percentage points), but option 1a (180L bin three weekly) does so at a considerably reduced cost, around £650,000 lower than the Enhanced Baseline and £600,000 lower than option 3a (120L bin fortnightly). With four weekly residual collections reducing costs and diverting more material from the residual waste stream, means that Option 2a therefore exhibits the lowest costs and best performance of all the three options. With respect to greenhouse gas emissions, Option 2a sees the largest emission reduction of -2,045 tonnes Co2e, compared to -1,575 tonnes Co2e for Option 1a and -1,491 tonnes Co2e for Option 3a. This is predominantly due to the reduction of waste sent to Energy from Waste (EfW). In order to achieve the objectives set out in the Resource and Waste Strategy that was adopted by County Council in March 2024, it is recommended that Option 2a is progressed and the Council transitions to a restricted capacity residual waste collection model, which was committed to in Priority Two of the Strategy and recognised as an effective method of reducing residual waste and maximising recycling collected.
1.15	If Option 2a is approved for adoption and transition, then a further report will be provided to the Committee to outline the details of how the service change will be delivered, along with an implementation plan and communications plan. This will be accompanied by a revised Household Waste Collection and Household Recycling Centre Operations Policy.

2.00	**RESOURCE IMPLICATIONS**
2.01	The work is being supported by Local Partnerships and Waste Resources Action Programme (WRAP) Cymru.

3.00	**IMPACT ASSESSMENT AND RISK MANAGEMENT**
3.01	A full Integrated Impact Assessment has been undertaken on the Resources and Waste Strategy and has assisted in informing the following:

Ways of Working (Sustainable Development) Principles Impact

Long-term	The proposals will drive improvements to recycling performance and achieving a Circular Economy. Through proactive engagement and education, we will drive behavioural change. Reducing the Council's carbon emissions to support the climate change agenda for future generations. Working towards Net Zero 2030 targets and long term financial savings for the authority.
Prevention	The proposals will help prevent the increasing amounts of waste generated and therefore reduce the Council carbon footprint. Wastes that are odour or perceived as unhygienic in nature will be collected most frequently to minimise impact on our residents.
Integration	Through the provision of positive engagement in multi languages we ensure inclusion of all within our communities with our services. Reviewing and updating our assisted waste process will ensure everyone in our community can engage with the services we provide. Reviewing services at flats and houses of multiple occupancy we will include all of Flintshire's residents to partake in the service.
Collaboration	The proposal requires further work with Welsh Government, and partners, to find sustainable solutions for nonrecyclable materials. Working collaboratively with businesses, third sector, schools and charities to deliver objectives. Working collaboratively, we will ensure preparedness for new and changing legislations.
Involvement	Improved engagement with Flintshire residents, businesses, schools, third sector and charities to ensure they understand their responsibilities and ensure waste minimisation, reuse and recycling before disposal. Through the provision of positive engagement in multi languages we ensure inclusion of all within our communities with our services. Reviewing and updating our assisted waste process will ensure everyone in our community can engage with the services we provide.

	Well-being Goals Impact Prosperous Wales: Positive – improving waste minimisation, reuse and recycling of recycling materials resulting in world leaders in recycling performance Resilient Wales: Positive – Less demand for raw materials, promoting Circular Economy and greener spaces. Decarbonising our infrastructure and providing county-based disposal solutions. Healthier Wales: Positive – reducing vehicle movements and emissions and allowing for the responsible management and disposal of controlled waste More equal Wales: No impact Cohesive Wales: Positive – building community engagement with residents, businesses, third sector, schools and charities to deliver objectives. Vibrant Wales: Positive – improving waste minimisation, reuse and recycling of recycling materials and working towards carbon reduction Globally responsible Wales: Positive - reducing the reliance on the extraction of raw materials and destruction of natural habitats and ecosystems by the reprocessing of recyclable materials. By eliminating, minimising, reusing or recycling waste materials we will reduce carbon emissions.
3.02	We are highly unlikely to achieve the statutory recycling targets without making significant changes to services in order to improve recycling performance and reduce the amount of waste being presented in the residual waste bin.
3.03	The risk of not achieving the statutory recycling targets could result in a significant financial penalty for the Council (£200 for every tonne not recycled) if Welsh Government were to choose to levy the infraction fines. This equates to more than £1million for failing to achieve the targets in 2021/2022 and 2022/2023, and potentially additional significant financial penalties in excess of this figure for 2023/24 and from 2024/25, for which there is no available budget. This would equate to a 1% rise in council tax per annum.
3.04	The disposal of residual waste costs the Council £3.4m a year, as well as increasing the previously mentioned risk of an infraction fine. If the Council stopped disposing of enough residual waste to meet the 70% target (7,600 tonnes), this would reduce the Council's spend on residual waste disposal.
3.05	The lack of appetite by Flintshire customers to improve recycling performance and implement changes could result in the loss of the Sustainable Waste Management Grant from Welsh Government to invest in Flintshire. The value of this grant to Flintshire is currently £0.742m per annum.
3.06	Negative public impression of the service will be managed through positive and proactive engagement, which is a key theme through each of the priorities within the strategy.
3.07	An increase in fly tipping is not anticipated following a transition to a reduced capacity collection model. This is based on evidence from other local authorities in Wales that have introduced a restricted residual waste capacity policy.

	By using the weekly food and recycling collections along with the fortnightly garden collections, there is enough room in the black bin for residual waste. The typical fly-tipped waste (i.e. bulky items such as mattresses, tyres, white goods, chairs and sofas) are most often items that would not typically fit in a wheeled bin. Bulky waste can be taken to the HRCs or collected through our bulky waste collection service and our residents are already in receipt of the solution to their waste disposal needs by way of a comprehensive weekly recycling collection service. By placing their recycling into the appropriate container, which will be collected from their property weekly, there would be no reason for them to take the decision to commit an illegal activity to manage their domestic waste. Following a similar service change in another regional local authority, this was evidenced with no increase in fly tipping observed. Nevertheless, a piece of work would be undertaken prior to a service change to ensure that residents have the correct recycling containers available to them and a detailed communications plan will be developed and presented to the Committee in advance of any approved changes. Should a fly tipping event take place then the Council's in-house civil parking and environmental enforcement team would undertake the necessary investigation to identify potential offenders. The householder's 'duty of care' responsibilities will also be shared through the communications plan so that residents are aware of their personal responsibilities for waste.
3.08	Households of 6 or more people can request a larger 240L wheeled bin as long as they can demonstrate that they are recycling all that they can. All households can request extra recycling bags or containers and it is easy to recycle more.

4.00	**CONSULTATIONS REQUIRED / CARRIED OUT**
4.01	Deputy Leader of the Council and Cabinet Member for Streetscene and Regional Transport Strategy has taken place.
4.02	Flintshire residents were consulted on the Resources & Waste Strategy and a communications plan will be developed if the proposals are approved.
4.03	Elected members were consulted on the Resources & Waste Strategy and a communications plan will be developed if the proposals are approved.
4.04	Town and Community Councils were consulted on the Resources & Waste Strategy and a communications plan will be developed if the proposals are approved.
4.05	Members of the Senedd were consulted on the Resources & Waste Strategy and a communications plan will be developed if the proposals are approved.
4.06	Members of Parliament were consulted on the Resources & Waste Strategy and a communications plan will be developed if the proposals are approved.
4.07	Flintshire County Council officers and employees were consulted on the Resources & Waste Strategy and a communications plan will be developed if the proposals are approved.

4.08	Groups with protected characteristics were consulted on the Resources & Waste Strategy and a communications plan will be developed if the proposals are approved.
4.09	Environment & Economy Overview & Scrutiny Committee – to be held on 16th July 2024

5.00	**APPENDICES**
5.01	Appendix 1 – Recycling Performance of Kerbside Collected Waste
5.02	Appendix 2 – Internal Audit Report
5.03	Appendix 3 – Resource and Waste Strategy
5.04	Appendix 4 – KAT Modelling Methodology

6.00	**LIST OF ACCESSIBLE BACKGROUND DOCUMENTS**
6.01	Towards Zero Waste Municipal Waste Sector Plan - Collections blueprint Beyond Recycling Strategy Climate Change Strategy Council Plan Cabinet Report - Resource and Waste Strategy WSP Consultants: https://www.wsp.com/en-gb

7.00	**CONTACT OFFICER DETAILS**
7.01	**Contact Officer:** Ruth Tulley, Regulatory Services Manager **Telephone:** 01352 704796 **E-mail:** ruth.tulley@flintshire.gov.uk

8.00	**GLOSSARY OF TERMS**
8.01	**Residual Waste** Materials that remain following efforts to reduce, reuse, recycle or compost. Commonly known as ‘general waste’ or ‘black bin waste’. **Dry Recycling** Recyclable items collected such as, cardboard, paper, tin cans, plastic bottles/tubs/trays, glass bottles/jars, waxed cartons, aerosols **Kerbside Collections** the collection of recycling and waste from residential properties **Household Recycling Centres** Waste disposal centres where residents can dispose of domestic waste and recycling items that are not collected at the Kerbside.

	Net Zero The balance between the amount of greenhouse gases being produced and the amount that are being removed from the atmosphere. **Circular Economy** Extending the life cycle of products by reusing, regenerating, sharing, repairing, and recycling existing materials. **Waste Composition** The types and volumes of materials found in a waste stream. **Resources** Materials, such as glass, plastic, paper fibres, that can be utilised to produce new items. **Infraction fine** a financial penalty imposed by government for not meeting statutory recycling targets. **Fly tipping** the illegal deposit of waste on to land.