

Cyngor Gwynedd Waste and Recycling Strategy: 2025-2030



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Foreword

As a county, we have seen a reduction in the waste we produce, and at the same time an increase in the percentage we recycle. Over the last decade, the proportion of our waste that is recycled has risen from 55% to 65%, and that is mainly thanks to the efforts of our residents, businesses and our wider communities.

However, we have now reached a point where we will all have to go a step further to manage our waste more responsibly. We know that over half the contents of our green bins can already be recycled through services available from Cyngor Gwynedd.

At the same time, we are facing a global climate crisis. The Council recognised this in March 2019 by declaring a climate emergency, and since then we have been working to align all our services - including waste - with our wider environmental responsibilities.

The challenges ahead are significant, and tackling them will require innovation, ambition and an open attitude to change. That means not only continuing to reduce and recycle waste, but completely rethinking how we consider it - as a valuable resource rather than as a problem to be disposed of. Repair, reuse and adjustment must become the norm before considering recycling or disposal. We have already shown that this can be done locally, by turning food waste into electricity here in Gwynedd. Currently, 47% of our recycling materials go across the border to England, 1% to other countries in Europe, and 52% stay in Wales. However, apart from food and garden waste, only a very small proportion of the recycling materials are processed here in Gwynedd. If we are serious about creating a local circular economy, this must change.

A truly circular economy would not only reduce our environmental impact, but also bring direct economic and social benefits to our communities. Environmental justice goes hand in hand with social and economic justice - you cannot have one without the others. By keeping more of our waste local and treating it as a resource, we can support jobs, strengthen resilience and build community wellbeing. As they have been saying in England for a long time: "where there's muck, there's brass". This will require long-term thinking and cultural change, but it is essential if we are serious about the future of our communities.

This Strategy is just the beginning of the journey. By working together - as residents, communities and organisations - we can move towards a Gwynedd that is greener, fairer and truly circular.

Vision

Our vision is to create an environment where circular practices are common, residual (non-recyclable) waste is minimal, and Gwynedd plays a significant role in a greener Wales. As we look to the future, we recognise various specific issues and challenges that we, as a council, must address. Our aim is for Gwynedd to become a visionary council in preventing waste, maximising resources and managing our waste service efficiently. Working with our residents, businesses, and partners, we want our Waste and Recycling Strategy to enable a sustainable and green local economy, reducing the impacts of climate change, and safeguarding our future generations.

Strategic objectives

These objectives represent the ambitions of the Gwynedd Waste and Recycling Strategy. They aim to prepare our service for future challenges and opportunities, being financially stable, and meeting all statutory recycling targets. Our objectives are:

1. Reduce overall waste.
2. Increase reuse and repair.
3. Meet Welsh Government targets for recycling, reuse and composting 70% of our waste by 2025 and beyond.
4. Support the growth of a sustainable local circular economy which will create green jobs and bring wider benefits to Gwynedd.
5. Deliver a high-quality service where health, safety, welfare, and values of our staff, as well as customer care and satisfaction are integral to our core principles.
6. Become a Carbon Net Zero service by 2030.
7. Invest in our waste infrastructure to accommodate future service development and needs.

How are we currently performing?

Total volume of waste and recycling collected per year:

67,000 Tonnes



Our 2024/25 recycling rate

64.5%

The 2024/25 recycling target

70%

49,200

households provided with kerbside weekly food and recycling collections



Waste service cost of

£250 per household



300 Kg

of residual waste collected per household per year

2 old landfill sites have been transformed into havens for biodiversity and conservation

Seasonal subscription garden waste service to

17,000 residents

8 recycling centres



FREE



nappy / clinical collection service

2,000

commercial waste customers



Context and drivers for change

In Gwynedd we have made considerable progress in reducing the amount of waste we produce whilst increasing the amount we recycle. Between 2014/15 and 2024/25 our recycling rate has increased from 55% to over 64% whilst our 'black bag' waste has dropped by 10.9%.

We would like to thank residents, business and the community for their support and contribution to the success so far. As a council we no longer send any of our waste to landfill for disposal.

We have ambitions to build on this success, not only to increase Gwynedd's recycling rate but also manage our waste more sustainably. Our goal is to enhance reuse and repair moving to a circular economy. In this system, materials are valued as resources, kept in circulation for as long as possible, and disposal is minimised. This supports our efforts to protect and conserve the natural world and its limited resources. The circular economy has been shown to have significant benefits through saving money and creating new jobs in the areas of reuse, manufacturing, and materials innovation. It is an opportunity to reduce emissions, so protecting human health and increasing biodiversity. Circular economy and waste minimisation is also an opportunity for the council, to manage the waste and recycling services more economically, especially in a climate where all councils are facing uncertain financial outlooks with ever-increasing demand for core services.

We want to ensure that the building blocks are in place to enable change. We want to drive more circular activity and help residents and businesses to produce less waste. This will also reduce our carbon emissions and improve other environmental indicators.

Most of all, we want the people and businesses of Gwynedd to take pride in their waste services and actively participate in achieving our goals. Below is a summary of the context and drivers of change that will shape the direction of this strategy and the actions we need to take to mitigate them

Waste hierarchy

The waste hierarchy is a globally recognised principle, legally defined in the EU Waste Framework Directive (2008) which underpins legislation for waste management. It establishes an order of preference for managing and disposing of waste, prioritising actions that prevent waste generation and minimize environmental impact, and moving down to disposal as the last resort. Currently, our service manages waste through recycling, recovery, and disposal. We need to shift away from disposal and towards reuse, aiming for prevention and minimisation. Our strategy outlines how we intend to do this.

- **Prevention** – the prevention of waste centres on minimising the amount of waste we create as a society, purchasing less and using fewer materials during design and manufacturing processes.
- **Reuse** – reusing materials and products extends their lifecycle and prevents them from being disposed of unnecessarily, or potentially turned into a less sustainable product.
- **Recycling** – recycling focuses on the conversion of waste materials into new materials and products.
- **Other recovery** – the process of recovering some value from waste materials, for example food waste being turned into compost.
- **Disposal** – the last resort, where waste is landfilled, incinerated or turned into energy from waste.

Linear economy vs circular economy

As part of this strategy, we want to support Gwynedd in a shift towards a circular economy approach.

Shifting towards a circular economy and away from the linear 'take-make-use-dispose' model will deliver benefits through reduced waste and improved resource. A circular economy approach embeds the values of the materials we use as a resource by focusing on the need to keep the products or material in use for as long as possible. Reducing our consumption of raw materials supports efforts to tackle climate change, pollution and enhancing biodiversity. A circular economy approach also has the potential to deliver wider benefits to our communities, such as green jobs, better health and well-being and cleaner neighbourhoods.



Global context

Climate change & resources

Globally we are facing a climate emergency with sea levels rising at unprecedented levels, severe weather events are on the increase, all having an increasing negative impact on communities across the world, creating economic and environmental devastation.

Collectively we must take action to reduce greenhouse gas emissions and limit the increase in global temperatures to below 1.5°C of pre-industrial levels to reduce our impact on the environment. This strategy will support efforts to value resources by keeping them in circulation for longer and avoiding unnecessary consumption where possible, reduce the emissions from our operations so that the environment is protected for future generations.



National context

Beyond recycling

The Welsh Government has committed to creating a circular economy in Wales and achieving zero waste by 2050. To reach this goal, they are implementing various measures, such as developing infrastructure for materials that are not widely recycled, supporting businesses to enhance recycling efforts, and collaborating with local councils and key partners to establish recycling targets aligned with the zero-waste pathway by 2050.

Our strategy aims to assist residents and businesses in managing waste in the most sustainable way, where we reduce our waste, avoid over consumption and where materials are valued and kept in use for as long as possible to avoid disposal. This will support our efforts towards advancing Gwynedd towards a circular economy in line with the Welsh Governments Beyond Recycling Strategy.

Towards zero waste

The Welsh Government's Toward Zero Waste strategy outlines a set of objectives aimed at boosting recycling rates, minimising avoidable food waste, and reducing waste sent to landfills. It also establishes mandatory recycling targets for local authorities in Wales. By the 2024/25 period, Welsh councils are required to achieve a 70% recycling rate, with financial penalties imposed for each tonne below this target.

As a council with our current recycling rate of 64.5% we face a potential fine of £200 per tonne if we do not achieve the 70% target. This is equivalent to £750,000 based on 2022/23 tonnages. This strategy will therefore take steps towards increasing our recycling rate to 70% and beyond to avoid this cost, but most importantly to ensure that we are doing what is right.

Workplace recycling regulations

The Workplace Recycling Regulations came into effect on 6 April 2024 and is a legal requirement for all workplaces including businesses, the public sector, and charities to separate recyclable materials including food, paper, card, glass, metals, plastic, cartons, unsold textiles, and unsold small electrical equipment. The Regulations also impose a ban on food waste to sewer.

In April 2026, the Workplace Recycling Regulations will be expanded to collect small waste electronic equipment and textiles by April 2027.

As a council we will provide a compliant workplace recycling service to all business sector across Gwynedd. The service wants to create opportunities to improve our commercial waste collection service and support more businesses to recycle their waste.

We have over 2,000 commercial customers in Gwynedd, and we collect all waste streams typically generated by businesses, including paper and card, plastics and cans, food waste, glass, and residual waste. Our customers range from small corner shops and cafes to larger businesses and caravan parks. We currently collect 8,600 tonnes of commercial waste of which 53% can be recycled; we will work with businesses to increase this proportion and increase recycling levels to encourage a greener economy within Gwynedd. We want to increase our base level of customers as well as retaining our loyal customers by providing efficient, reliable, and a locally focused service.

As part of this strategy, we aim to continue to provide a compliant service, increase the number of business customers that we collect from and ensure that we are prepared for the expansion of the regulations to include small electricals and textiles.

Emissions trading scheme

Currently, our non-recyclable waste is sent to the Parc Adfer energy-from-waste facility in Deeside, Flintshire. At this facility, the waste is incinerated to generate electricity, which is then fed into the national grid. This process recovers energy from our waste, but also creates greenhouse gas emissions, which are a major contributor to climate change. From 2028 the UK Emissions Trading Scheme will be expanded to include the burning of fossil-based materials by energy from waste incinerators, including Parc Adfer. The intention of the emissions trading scheme are to reduce emissions and carbon footprints and should encourage the transition away from fossil-based fuels and promote cleaner and renewable technologies.

As a council this scheme will impact us if we do not take action to reduce the quantity of fossil-based materials such as plastic film, dense plastic, and textiles sent to the Parc Adfer facility.

The current cost to dispose of our residual waste is almost £5m per year. With the new proposed charges from ETS, it could cost an extra £1.5m each year if we do not take action to reduce fossil-based content from the non-recyclable waste.

Therefore, in this strategy we will seek to reduce the fossil-based materials from our non-recyclable waste stream to reduce the environmental and financial impacts of this scheme.

Extended producer responsibility

Extended Producer Responsibility (EPR) places the responsibility for managing the full lifecycle of packaging back onto producers. EPR aims to incentivise producers to design and produce packaging with recyclability and waste prevention in mind. This should increase the amount of household waste that can be recycled over time. The EPR framework means that producers of certain types of packaging pay into a fund to support councils with the cost of treatment or disposal of packaging that is not easily recyclable. The amount Gwynedd council receives depends on how efficiently and effectively we manage waste, and we could receive a penalty if we do not meet the required standards for this.

Extended producer responsibility for packaging (pEPR) was implemented on the 1 April 2025, and we need to consider the impacts of this reform. Gwynedd may see an increase in the amount and type of packaging we can recycle increasing the volumes of recycling that we collect. We therefore need to ensure that our waste transfer stations at Caernarfon and Harlech, where our collection vehicles unload the materials collected from the kerbside, can accommodate an increase in recycling volumes. Therefore, this strategy will set out how we intend to prepare for an increase in material volumes and types.

Deposit return schemes

The Welsh Government will introduce a Deposit Return Scheme (DRS) targeting both single use and reusable drinks containers with a small deposit, which is refunded upon the return of the container.

The DRS will help to reduce litter in Gwynedd as the included drinks containers will have a monetary value and therefore are less likely to be discarded. Including reusable drinks containers within Wales's DRS will support our society to move towards a circular economy in which drinks containers are kept in use for as long as possible before they are recycled into new drinks containers at the end of their life. The DRS may divert drinks containers away from kerbside waste and recycling streams to return points located at local shops. We therefore need to understand the impact on the council's services.

Wellbeing and future generations act

The Well-being of Future Generations Act aims to ensure that future generations in Wales have at least the same quality of life as we do now.

This strategy aims to focus on managing waste in line with the highest principles of the waste hierarchy which include waste prevention, reuse and recycling and moving materials towards a circular approach rather than linear. This is being done to preserve natural resources, reduce or eliminate the harmful release of greenhouse gases and protect the environment and nature for future generations.

In 2019 the council declared a climate emergency and published the Climate and Nature Emergency Plan in March 2022, and one headline from the plan is for us to reduce the carbon emissions from waste collections and processing.



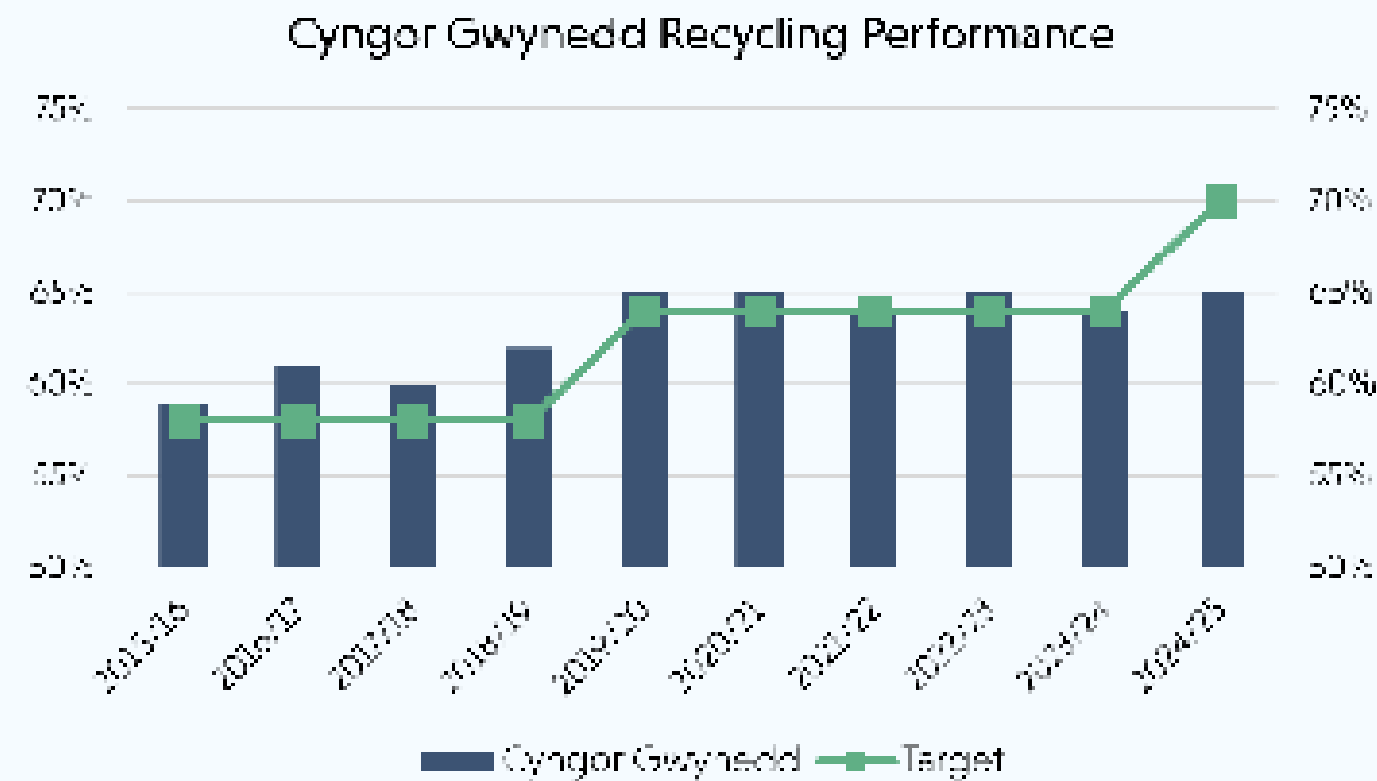
Local context

Recycling performance

The table below shows the recycling performance rate for Gwynedd between 2015 to 2024.

The Welsh Government statutory recycling targets are now set at 70% with potential fines for councils that fail to meet this target. Our current rate of 64.5% means that should we fail to increase our recycling rate to 70%, Gwynedd could have to pay significant fines for every tonne that is under the target rate

We therefore need to take action to increase our recycling rate and ensure that Gwynedd reaches the 70% target and avoid these fines.



Composition of non-recyclable waste in Gwynedd

A national study by WRAP Cymru in 2023 found that 57% of the materials that Gwynedd households disposed of in their green bin or black sacks could be recycled using existing services provided by Gwynedd Council. The breakdown of the materials in the non-recyclable green bin/black sacks can be seen in the diagram below. The largest proportion of this waste stream was food waste which represented 27% of the non-recyclable waste bin.

Disposing of recyclable material in the non-recyclable waste bin not only means that valuable resources are lost but also contributes to the release of greenhouse gas emissions, an unnecessary cost to dispose of this material and a potential loss in sales income from recyclable materials.

Each tonne of waste sent for disposal typically releases between 0.7 and 1.7 tonnes of carbon dioxide (CO₂), with this including the emissions from burning plastics, wood, paper, and food. Too much valuable material is being disposed of and as part of this strategy we want to work with households to focus on diverting and collecting more recyclable materials from the non-recyclable bin to support our aims to increase our recycling rate to above 70% and beyond ensuring that only items that cannot be recycled are discarded into the green bin.

57% of what goes into our green bins in Gwynedd actually could be recycled!



Cyngor Gwynedd Plan 2023-28

The Cyngor Gwynedd Plan 2023-28 outlines the vision and priorities for the council, with the delivery of several priorities linked to the waste and recycling service, which includes:

- A Green Gwynedd - supporting a reduction in carbon emissions, ensuring the service is prepared and resilient for the effects of climate change, as well as committing to the introduction of a new waste and recycling strategy to increase the county's recycling level to meet the national target of 70% by 2025.
- A Prosperous Gwynedd – supporting sustainable tourism for the benefit of communities, collaborating with partners to help promote and develop a more sustainable visitor economy.
- An Efficient Gwynedd – supporting the council in making the best use of all financial resources, including the impact of budget cuts.

Climate and Nature Emergency Plan

The Climate and Nature Emergency Plan outlines how we are working to realise our ambition of Cyngor Gwynedd being carbon Net Zero and ecologically positive by 2030.

Our Waste and Recycling Strategy will look to support this ambition throughout, whether it be addressing operational carbon emissions through starting to electrify our fleet, or to the wider impacts resource consumption has on society, such as minimising the food we waste.

Our ambition for mainstreaming more repair and reuse within the county by supporting borrowing and repair café's is a key step in lessening Gwynedd's contribution to the climate and nature emergencies.

Financial

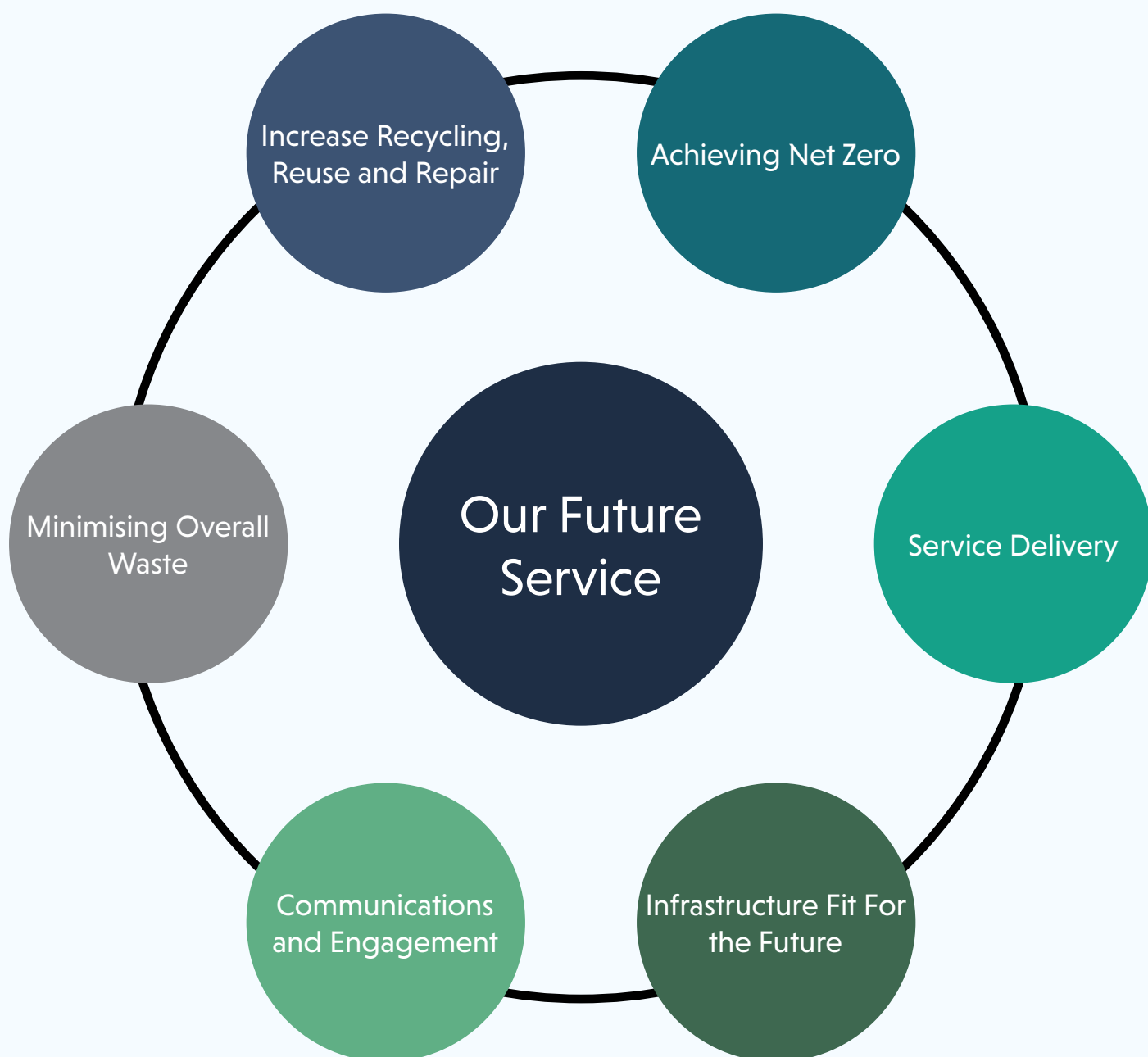
The cost of running all our council Services are increasing annually, leading to tough choices to balance the budget. Local authority budgets are getting tighter each year, so we need to find more savings. In waste and recycling, we must find ways to be more efficient and increase revenue while managing financial risks from not meeting recycling targets or emissions trading costs. This strategy aims to reduce these financial risks and find ways to boost our income whilst also delivering a comprehensive service such as maximising the potential of payments from the packaging EPR fund by ensuring our waste and recycling service is efficient and effective and meets the required standard to avoid penalties.

Waste infrastructure and fleet

Our waste transfer sites in Harlech and Caernarfon are where we take all the waste and recycling we collect, which is then sent to re-processors. These sites need to be updated to meet modern standards and to handle more recyclable materials in the future, helping us move towards carbon Net Zero operations.

We have nearly 60 heavy-goods vehicles and another 40 vehicles in our fleet. We need to find ways to reduce or eliminate emissions from these vehicles while still providing effective services.

Our future service needs to be delivered against the agreed objectives. The following key drivers align with each of these objectives and provide the additional detail for a delivery plan to be formulated alongside the strategy.





Key objective 1: Communications and engagement

A key part of achieving our strategic objectives is to ensure that residents, business and the wider community in Gwynedd are informed and engaged with our objectives. We need the help and commitment of every resident and business in Gwynedd to support us in achieving our vision within this strategy; it will take our collective efforts to reduce our waste, increase recycling and reduce our impact on the environment.

Key objective 1 is about having an effective communications and engagement plan which will enable us to support Gwynedd residents, workplaces, and communities in moving to a resource efficient, carbon Net Zero economy.

Pro-active engagement and communications with residents

To achieve this, we will create a yearly communication and engagement plan that includes:

- An outline of key activities and events.
- Highlights the main promotional topics and messages.
- Explains how we will aim to reach residents and businesses.

Focus on engaging residents through:

- Door knocking: Personal visits to homes.
- Roadshows: Traveling events to different areas.
- Council website: Information and updates online.
- Social media

This will help improve the reach of our engagement and make it easier for people to connect with our services

- Focus on tackling food waste through a continuous targeted communication campaign. This will not only focus on reducing food waste but ensure that we recycle as much of our food waste as possible. We will also focus on recycling food waste through local school educational programmes.
- Evaluate the impact of our communication and engagement campaigns by using surveys, customer feedback, and resident focus groups. This will help us understand how effective our efforts are and find ways to improve how we engage with residents and businesses.

- Promote national campaigns such as Love Food Hate Waste that provide advice and guidance on preventing food waste and supporting behaviour change and raising awareness.
- Use technology to support delivery of key messages around waste minimisation, recycling and reuse and visit residents and workplaces to resolve issues.
- Engage with key groups and communities to help ensure that they manage their waste effectively, to ensure all possible waste is recycled.

Kerbside collection service

We want to ensure residents and workplaces using our kerbside recycling services are aware of all the materials they can recycle and receive specific messages around service delivery.

We will achieve this by:

- Using data to identify low participating areas and conduct proactive engagement campaigns to support households that may be struggling to recycle and manage their waste. We will do this by providing advice, guidance literature, in person site visits to discuss and resolve issues and use social media to engage with a wider audience.
- Empowering our collection crews to proactively identify households and workplaces that may be struggling to manage their waste, so we can provide targeted support.
- Collaborating with partners within the higher education sector, to improve engagement and understanding for student populations by working with Bangor University to promote the importance of our service to students and seek to do more direct engagement and marketing with that demographic.

Key objective 1:

Communications and engagement

Recycling centres

Our Recycling Centres for household waste are an important part of our service to enable the disposal and recycling of larger items that cannot be collected at the kerbside. We want to use our recycling operatives at the recycling centres to help support the education of residents in how best to separate their waste and optimise it for reuse, repair, or recycling purposes.

To do this we will:

- Ensure our operatives are trained and well prepared to deliver these messages and understand the differing support service users may require.
- Where additional measures at recycling centres may be needed to support our ambitions to increase reuse and recycling, such as bag splitting. We will clearly explain why we are introducing these measures and communicate them well in advance.
- Recycling centres are an important touchpoint for residents, so we want to ensure signage and visual communications are clear and well located, removing any possible ambiguity around the options for residents using the site facilities.
- We want to review the accessibility of our recycling centres especially improving accessibility to certain cohorts of society, e.g., creating a 'quiet hour' for residents who find it difficult to book a slot at the centre via the current system.
- We will also seek ways to enhance the sites from a health and safety perspective, ensuring they are safe and user-friendly. Additionally, we aim to expand our capacity to recycle a wider variety of materials.

Tourism

A thriving local economy is important in making Gwynedd a great place to live and visit. Gwynedd is one of the most popular tourist destinations in the UK, with 7.8 million visitors in 2022, compared to a permanent population of 117,400. Whilst there are clearly huge benefits derived from tourism, the seasonal, temporary visitors create a significant volume of waste that needs effective management.

In peak season between March and October, when visitor numbers more than double, total waste collected increases by nearly 70% across the Gwynedd commercial waste service. We are dedicated to supporting tourism businesses to maximise recycling under the Workplace Recycling Regulations by developing a commercial service that simplifies the process for everyone involved. We aim to ensure businesses comply with Workplace Recycling reforms and any future legislative changes, and we will assist them in achieving compliance.

To do this we want to ensure that our collection crews delivering the service on the ground are effectively communicating the opportunities for businesses to contribute towards our recycling and reuse goals and delivering an exemplary service that shows the best of the Gwynedd waste and recycling service.

Enforcement

Managing our waste sustainably is a collective responsibility and we will actively engage with households and workplaces to support them if they are struggling. Where residents who have been supported refuse to manage their waste effectively, we will take a fair and reasonable three stage enforcement process to tackle service issues. This includes issuing an informative/warning letter and use our powers under the Environmental Protection Act 1990 - Section 46 Notices and Fixed Penalty Notices.



Key objective 2 :

Reduce, reuse and repair

Aligned to the delivery of all strategic objectives 1, 2 and 4: Reduce overall waste and increase reuse and repair support a green and sustainable local circular economy

We need to manage our resources in line with the waste hierarchy and move towards a circular economy approach, encourage more of our residents and businesses to move away from disposal, and instead seek to reduce, reuse or repair waste where possible to keep it in use for as long as possible.

Outlined below are our aims to support waste reduction, reuse, and repair.

Key objective 2:

Reduce, reuse and repair

Reduce overall waste

- Reduce overall waste arisings per person – currently 300kg per household.
- Encourage the reduction of single use items such as drinks bottles, coffee cups, plastic bags, wet wipes and sanitary products.
- Reduce food waste: With 27% of our household residual waste comprising of food that could potentially be recycled, we need to work with residents to ensure they fully realise the benefits to minimising food waste through behaviour change. This action to reduce food waste in non-recyclable waste would significantly reduce our carbon emissions. It would also avoid additional disposal costs and transport emissions as recycled food waste is sent to our anaerobic digestion facility in Gwynedd (Biogen) and non-recyclable waste is transported to the energy-from-waste facility at Parc Adfer in Flintshire for disposal.

Increase reuse and repair

Our ambition is to support a repair and reuse hub with the materials that comes directly through our Recycling Centres. To do this they need to be placed in the best locations, operate a sustainable commercial model where items are of good quality and are reasonably priced, and accessible for all in our community.

Some ideas have already been identified in our 'Climate and Nature Emergency Plan,' and we reiterate these here, but we will also consider additional initiatives to promote reuse and repair within the county, including:

- Seek to open a reuse shop at a recycling centre or in a town centre. We will continue to look for possible partnership arrangement in-house or externally with those that can offer skills and experience, as well as social value.
- Promote water refill locations in Gwynedd.
- Continue to promote reusable nappies with our real nappy starter pack.
- Engage and support households and businesses to reduce their waste and increase reuse.
- Increase the reuse of collected bulky waste collections from households.
- Create a 'drop off' locations or a re-use shop for the materials that come through our recycling centres. While recycling should be applauded, it is important that we reduce all types of waste, then repair and reuse it before recycling.
- Seek better engagement with students to manage their waste effectively and when they move in and out of the properties in between term dates.
- Work with other departments on projects such as borrowing libraries, food hubs and repair cafes.



Key objective 3 : Increase recycling

Aligned to the delivery of all Strategic Objective 3: Meet the Welsh Government targets for recycling, reuse and composting 70% of our waste from 2025.

We will focus on shifting the 57% of items placed in the non-recyclable bin that could be recycled using our comprehensive weekly kerbside recycling services. Disposing of recyclable waste not only incurs disposal costs but is also a waste of valuable resource that could be recycled again and support our circular economy ambitions as well as generate income.

We need to ensure that recyclable materials are not simply thrown away and have set out our objectives below to capture and recycle more materials from households and businesses.

Key objective 3: Increase recycling

Maximising household recycling

- Make recycling from home easier by providing households with reusable sacks to store and present their paper, cardboard, plastics and cans. Explore the possibilities of collecting new materials including flexible plastics, textiles, small electricals such as kettles, toasters, hairdryers and household batteries.
- Improve recycling facilities in blocks of flats and shared accommodation the aim of collecting a wider range of material such as textiles and small electrical items. reducing contamination and improving the quality of materials collected.
- To do this we will identify flats that need improving through research and data gathering, and develop proactive engagement plans to tackle quality in flats in collaboration with landlords and managing agents.
- Whilst we provide a comprehensive weekly recycling service, 57% of recyclables including 27% food waste are still being placed into the non-recyclable bin which is collected every three weeks. With our objective in this strategy to collect new recyclable materials from households including flexible plastics, electrical items and household batteries we will therefore review and seek to reduce the residual waste capacity/frequency to encourage greater recycling across Gwynedd. We will support households that require additional capacity.
- Collaborate with partners within the higher education sector, to improve engagement and understanding for student populations by working with Bangor University to promote the importance of our service to students and seek to do more direct engagement and marketing with that demographic.

Recycling centres

We want to improve the customer experience of using our household waste recycling centres, increase the amount of material that we recycle whilst reducing the number of recyclable materials that are disposed of.

To support these aims we will:

- Reintroduce bag splitting at our recycling centres to segregate more recyclable materials, increase recycling rates and avoid items from being unnecessarily thrown away.
- Improve the layout and markings and signage of the sites to make them easier to navigate and recycle materials.
- Review our provision for reuse shops or drop off sheds at recycling centres and make it easier for residents to donate items to them.
- As a minimum ensure that all sites accept and have facilities to receive and store separately: glass, metals, paper, cardboard, wood, green waste, aggregate, soil, plastic packaging, hard plastic, textiles, mattresses, carpets, mineral oil, vegetable oil and items that can be reused. And ensure that there is a provision in at least one site to accept hazardous waste, e.g. electrical items, paints / solvents, bonded asbestos and other hazardous household waste.
- Acceptance of certain commercial recycling materials at some sites will be considered.

Maximising business recycling

We recognise how important our businesses and local services are to residents and want to support them in complying with the Workplace Recycling Regulations. There is an opportunity for our business community to enable Gwynedd's transition to a carbon Net Zero council and improve its overall recycling rate. More recyclable material from workplaces can increase council revenues, supporting service improvements for business and residents.

We want to provide support to workplaces across the county to recycle their waste and make the process of transitioning to a more sustainable, resource efficient model, as easy as possible.

To enable this, we will enhance and develop our commercial collections service aligned to the Workplace Recycling Regulations, making it as easy as possible for local businesses to recycle their waste whilst reducing the volumes of non-recyclable waste.

We will achieve this by providing:

- Prompt and efficient collections, with containers and service information that meets the needs of the business on how to recycle as much of their business waste as possible.
- Prepare businesses for the expansion of the workplace recycling regulations to collect a wider range of materials including small electricals and textiles.
- Explore the possibilities of expanding access for businesses to use our recycling centres.
- Help businesses to minimise their waste, repair and reuse more items.



Key objective 4 : Service delivery

Aligned to the delivery of all Strategic objective 5: Delivery a high-quality service. The way we deliver service for the communities we serve is of utmost importance. We want to deliver a high-quality value for money service to our residents and business customers and achieve high satisfaction rates.

We will preserve the core values of our service, but we will not be afraid to take opportunities to stimulate progress to ensure a better service. Our residents and customers will always be our focus.

We have set out below our priorities to deliver a high-quality service to our customers.

Kerbside collections

- Increase monitoring and feedback of collection crews with increased focus on quality to ensure collections crews pick up any materials dropped during collection and leave areas tidy.
- Only collect bins with closed lids and no side waste. This policy ensures that materials stay contained within the bins, preventing litter on the streets and encouraging residents to recycle as much as possible.
- Empower collection staff to identify households or business that may be struggling to manage their waste so that support can be proactive targeted.
- Use technology to improve the monitoring of our collections.

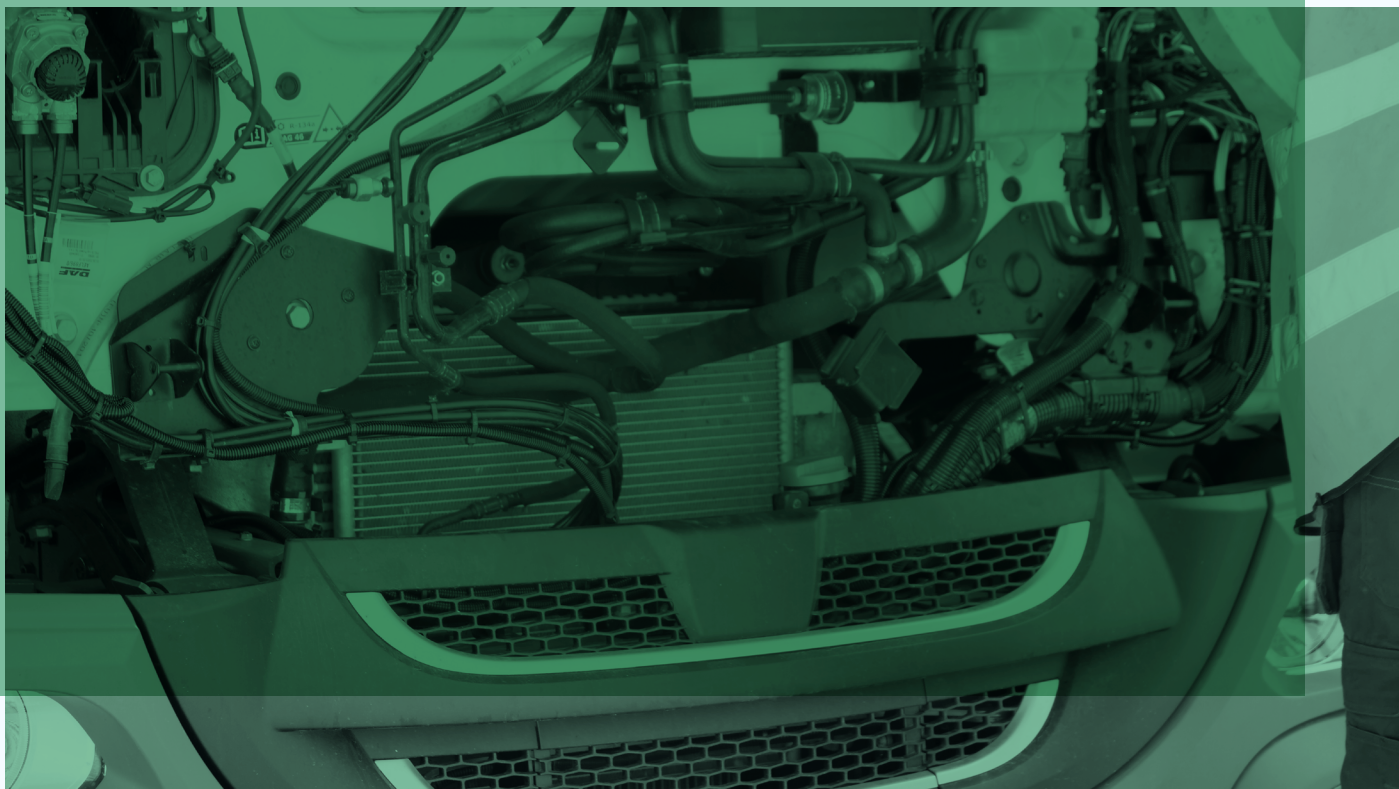
Recycling centres

To help the service at our recycling centres fulfil the previous objectives within this strategy, we need to ensure they are managed effectively and prevent non-Gwynedd residents using our recycling centres, unless there are prior arrangements with neighbouring authorities.

We will do this by:

- Improving the use of the booking system to ensure services are for Gwynedd residents only. This will also reduce waiting times and give staff more time to support residents using our sites.
- Review use and effectiveness of eight sites and opening times and consider introducing a mobile recycling centre, if the financial climate allows.





Key objective 5 : Achieving Net Zero

Aligned to the delivery of all Strategic Objective 6: Become a carbon Net Zero service by 2030. The strategy highlights how Gwynedd is committed to be Net Zero by 2030. Gwynedd Council committed to a Climate and Nature Emergency Plan in March 2022. The ambition of the plan is that the "council will be carbon Net Zero and ecologically positive by 2030".

We want our waste and recycling service to support that commitment through delivering changes that will lower our carbon emissions and make our service better for the communities we serve. Currently, direct waste services contribute almost 10% of the council carbon emissions (2019/20).

Transition to ULEV

We will focus on most carbon efficient way to collect and process our waste. Our current fleet consists of almost 100 diesel vehicles that support the delivery of our waste and recycling service in Gwynedd. We currently have two electric telehandlers in our fleet.

We need to transition our waste and recycling fleet to modern ultra-low emission vehicles (ULEVs) to support our aims of becoming carbon Net Zero by 2030.

We will undertake a trial of ultra-low emission collection vehicles in the north of the county to assess their capabilities within our rural county. We will assess the outcomes of this trial to determine opportunities for further rollout, and work with the Welsh Government on support for funding.

To support a ULEV fleet, we will require suitable charging stations to charge the vehicles at night which will be integrated into the review of our infrastructure.

The charging stations need to be strategically located to optimise the range of the vehicles and distances to collection and disposal points.

Improve efficiency of collection routes

We will use technology to monitor the efficiency of our service, including monitoring missed collections, ensuring our service minimises unnecessary or avoidable carbon emissions with our current diesel fleet. We will monitor our service changes and continue to seek continuous improvement the way we work.

We believe these changes will enhance our ability to deliver and communicate a consistent service for residents, making recycling, the reusing of resources and waste easier and more accessible for everyone.

Invest in renewable energy

To deliver a carbon neutral service, we recognise we must look at all opportunities to reduce carbon emissions.

Our buildings and land holdings offer the ability for us to enable a shift to carbon Net Zero through the utilisation of renewable energy to power our service infrastructure and potentially provide energy for the local grid. As part of our infrastructure review, we will undertake feasibility studies at existing and potential future sites, to explore the utilisation of renewable energy sources such as solar photovoltaic panels. We will work with the Welsh Government Energy Service to enable this ambition to become a reality where possible.

Ecology

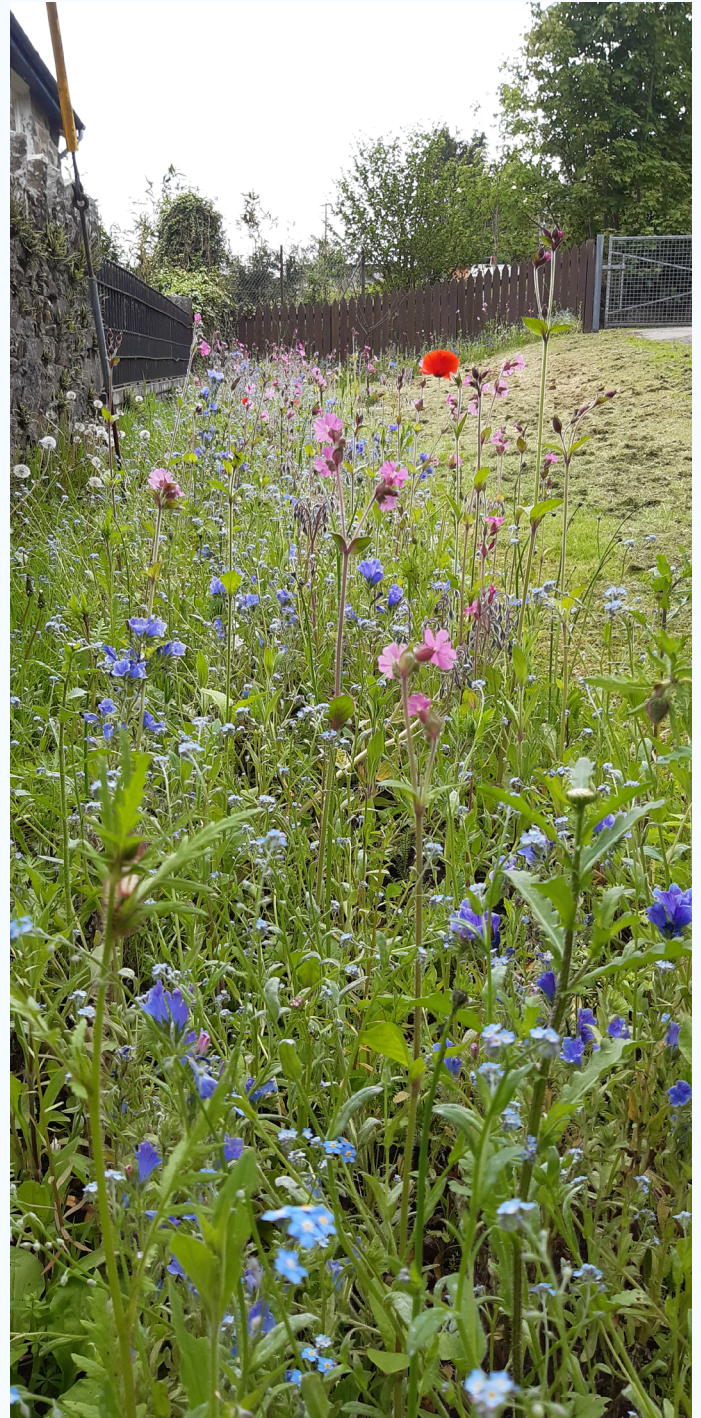
We will continue to support the work that has already been done to transform two former landfill sites in Gwynedd at Llwyn Isaf and Ffridd Rasus.

Llwyn Isaf consists of two areas which have been landfilled since the early 1980s, with a total household and commercial waste input of approximately 600,000 tonnes, plus an area of improved grassland making up a total of 32 acres.

The wet meadow on the landfill surface has been enhanced, improved, and enriched resulting in an explosion in wildlife abundance. 15,000 trees and shrubs have been planted in improved grassland and expanding hedgerows, which created connected mosaic habitat across the site. Four new ponds and wetlands have been added resulting in an abundance of aquatic species. The wildflower meadows are already a highly productive haven for pollinators and small mammals, and a significant number of bird and bat boxes have been placed in trees across the site.

Ffridd Rasus has two closed landfill sites which began to accept waste for deposit in 1981 and contain approximately 1.26m tonnes of household and commercial waste. The landfill sits parallel to an area of rare acid grassland making up the rest of the 79 acres of this diverse site.

Over 5000 trees have been planted at the site with multiple habitats created across the surface of the landfill with approximately 40 acres of wildflower meadow and mixed scrub habitat. A series of large, connected ponds have been created in the dry, slate chipping lined drainage lagoon. As the site had no previous standing water, this has resulted in an explosion of life around these features and increased biodiversity and abundance across the site. The site has multiple bird and bat boxes with an Osprey nesting pole on the western boundary of the site.



Key objective 6 :

Infrastructure for the future

Aligned to the delivery of all Strategic objective 6: Invest in our waste infrastructure to accommodate future service requirements. Our current infrastructure supports our operations to store and bulk household waste and recycling and consists of:

- Four vehicle depots where waste and recycling collection vehicle are stored overnight.
- Two waste transfer stations in Caernarfon and Harlech as well as using a private waste transfer site where waste and recycling, which is collected from households, workplaces and Recycling Centres are brought to be bulked before onward processing.

5,000 tonnes of materials every year – paper, plastics, cans, cardboard, but we feel that has now reached its end of life.

- Biogen's GwyrAD, an 11,500 tonne food waste anaerobic digestion plant at Llwyn Isaf. The facility was opened in 2013 and processes food waste from homes and commercial food producers to generate a valuable liquid fertiliser (digestate) and enough renewable electricity each year to power more than 700 homes.
- Eight Recycling Centres distributed across the county.
- We operate and maintain three closed landfill sites

at Cilgwyn, Ffridd Rasus and Llwyn Isaf. We have worked with Natural Resource Wales and the Welsh Government to create a new ecological habitat at two of these sites.

The ambitions of this strategy are to collect and recycle a wider range of materials and increased volumes. We must also meet our carbon Net Zero targets by 2030.

Our waste infrastructure is key to the successful delivery of our strategic objectives however our current infrastructure needs modernisation to meet future capacity and permitting requirements and allow us to transition to a carbon Net Zero service.

To support the strategic objectives of this strategy we will seek to invest in our infrastructure to make sure it can deliver an effective compliant service for future years that will meet the objectives set out in this strategy.

Key objective 6:

Infrastructure fit for the future

Waste Transfer Stations

- Invest in the redevelopment of Harlech and Caernarfon waste transfer sites to ensure they are suitable for the increase in material volumes and types in future years, meet modern site permitting requirements and maintain quality of materials to ensure we receive the best income prices.
- Redevelop our infrastructure to enable us to decarbonise our operations so that they can support ultra-low emission vehicles and where possible seek opportunities to use solar farms to directly power our operations.
- Ensure we incorporate energy savings measures into the redevelopment of our sites.
- We will adapt current and future sites so that they are resilient to the effects of future climate changes, adapting and derisking in preparation for excess heat or water events.
- We will explore innovation and use technology to make our processing sites as efficient and effective as possible.

Recycling centres

- Make it easier for residents to donate items for reuse at our recycling centres and expand our relationships with local partners to recover reusable items.
- Review our recycling centre provision with a view to providing an effective and efficient service to maximise recycling, ensuring recycling centres are accessible, efficient, and clearly marked to improve customer experience. This may include alternative models, such as mobile Recycling Centres.



Monitoring and evaluation

We want to ensure our strategy delivers for the people of Gwynedd and set a route map for a service of the future. We will commit to an annual monitoring and evaluation programme which will assess the delivery of the strategy against agreed metrics.

The overarching aim of this strategy is to clearly set out the principles and overarching ambitions that the Gwynedd waste and recycling team will deliver.

It is a blueprint that sets out how ambitious we will be in our quest for a service that meets the challenge of meeting a 70% recycling target and becoming a net zero service. Only by encouraging innovative and creative solutions to the challenges we face now can we achieve that ambition and make a strong contribution to tackling the nature and climate emergencies for future generations.

We acknowledge that there is a lot of work to be done if we are to be more effective in our approach. Our delivery plan will seek to build on our existing strengths but also address the areas we need to develop.

Through Department meetings, we will connect regularly with other linked work streams and feed these into the strategy and our Delivery Plan as required.

Strategic Objective	Measures and Outcomes
Meet Welsh Government targets for recycling, reuse and composting 70% of our waste by 2025	<ul style="list-style-type: none"> - % of municipal waste recycled, reused, or composted above 70% target
Achieve a level of at least 85% recycling and reuse at all HWRC	<ul style="list-style-type: none"> - % of municipal waste recycled, reused, or composted above 85% target
Waste minimisation	<ul style="list-style-type: none"> - Kg of residual waste per household below 2023/24 baseline. - Reduce the capacity of the green bin to 60 litres per week, in a typical house.
Provide support for our communities and residents to enable a transition to waste minimisation	<ul style="list-style-type: none"> - Kg of food waste recycled or composted from households above 2023/24 baseline. - Progress in the next composition analysis of Gwynedd residents' residual bin against the baseline.

Strategic objective	Measures and outcomes
Aim to become a Net Zero service by 2030	<ul style="list-style-type: none"> - Develop a sustainable plan to ensure Lhwyn Isaf and Ffridd Rasus continue to mature as a biodiversity site and calculate the potential carbon capture capability of the sites to offset against the waste service. - Reduction in the tonnage of waste sent to Parc Adfer Energy from Waste plant. - kWh generated from renewable sources derived from waste and recycling infrastructure above 2023/24 baseline (including number of ULEV as part of our fleet).
Support a green and sustainable local circular economy	<ul style="list-style-type: none"> - Additional businesses using the trade waste service above 2023/24 baseline. - No of items (weight-kg) reused from local authority reuse shops above 2023/24 baseline - Offer additional kerbside collection to residents and businesses (e.g. s/WEEE, textiles).
Ensure we have the right infrastructure to accommodate future service requirements	<ul style="list-style-type: none"> - Delivery of infrastructure review and ensure Gwynedd has two modern fit-for-purpose recycling processing plants – one in the south and one in the north of the county. - Rationalise and upscale our recycling centres.
Ensure a Value for Money customer focus service	<ul style="list-style-type: none"> - Gwynedd has one of the most affordable services in terms of costs in Wales against the 2022-23 baseline (dry recycling, food recycling, garden waste and residual collection). - Number of complaints about the service, including missed collections are below 2023/24 baseline.



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