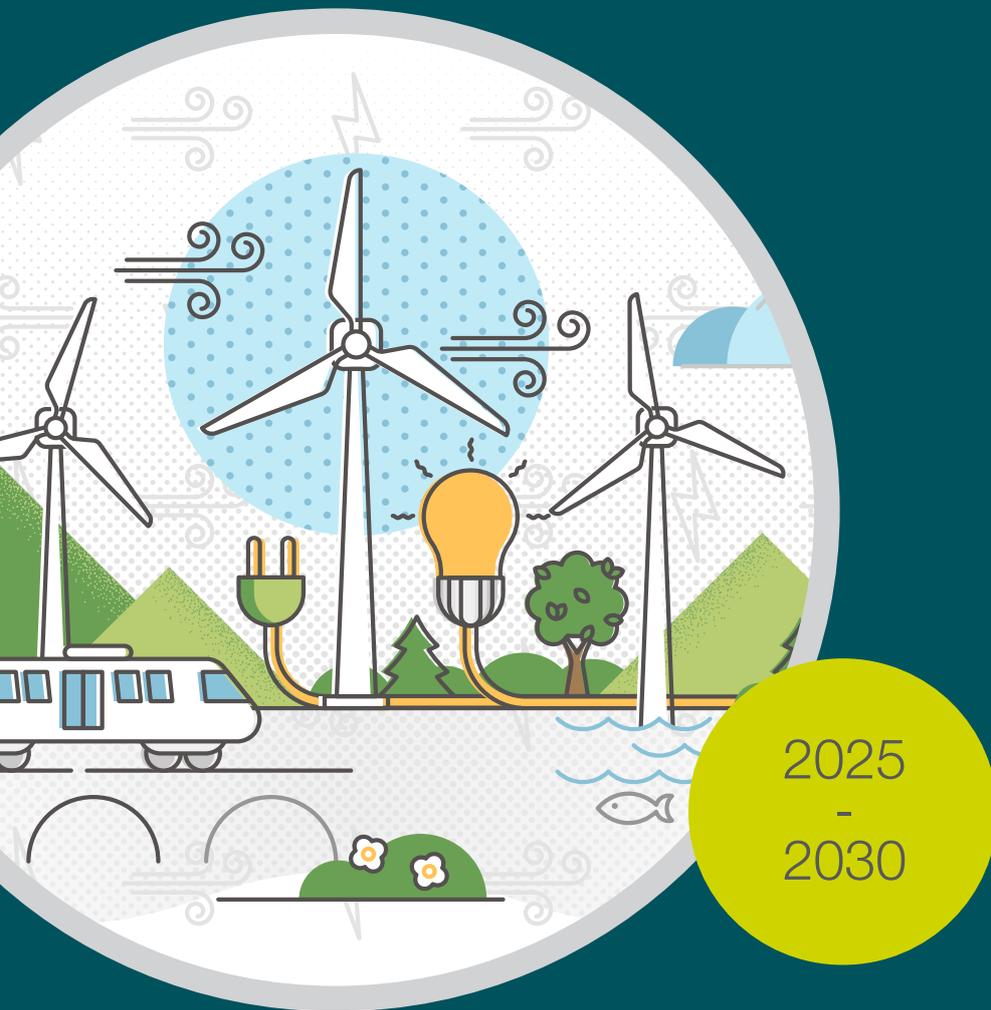


Climate Change Strategy



2025
-
2030

Mae'r ddogfen hon hefyd ar gael yn Gymraeg. Gweler y dudalen Gymraeg ar ein gwefan.
This document is also available in Welsh. See Welsh page on our website.



Dod o hyd i ni ar / Find us on

This document is an updated version of the original Climate Change Strategy 2022/23-2029/30.

Internal and external engagement took place during 2024 to gain feedback from stakeholders on the Council's progress with its climate ambitions, to ensure these factors were considered within the revised strategy.

The review has also given the opportunity to incorporate policy and guidance that has been published since the original strategy was adopted in February 2022. Other reviews have included a better understanding of carbon reduction trajectories and actions that can be achieved considering the financial unease within the sector currently. Work has been carried out to better understand the finances associated with climate action, and these have been incorporated into the revised action plan.

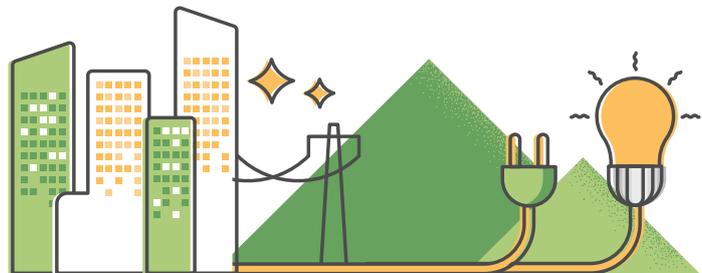
In July 2022, Audit Wales published the report 'Public Sector Readiness for Net Zero Carbon by 2030'¹. This report called for the sector to take action by: strengthening leadership and demonstrating collective responsibility, clarifying strategic direction, getting to grips with finances needed, knowing skills gaps and increasing capacity, and improving data quality and monitoring to support decision making. The revised strategy incorporates these calls for action.

In July 2022, Welsh Government published 'Decarbonising Social Care in Wales'². This report sets out a route map towards a net zero social care sector in Wales, and elements of this route map have been incorporated as part of the wider actions within the action plan.

Within this revised strategy there is an overview of climate risks and mitigating actions that can be taken by the Council. More work is needed to better understand the wider impacts, and this includes cross-sector working.

The strategy will again be reviewed in 2027/28 to carry out a similar exercise, ensuring that the Climate Change strategy remains a relevant and realistic reflection of the Council's commitment towards net zero carbon.

"Technology could help if they could make devices to get pollution out of the air and could come up with new ideas on climate change" Maddie, Argoed High



¹Audit Wales Public Sector Readiness for Net Zero Carbon by 2030 https://www.audit.wales/sites/default/files/publications/Public_Sector_Readiness_for_Net_Zero_Carbon_by_2030.pdf

²Welsh Government (2022), Decarbonising Social Care in Wales. <https://www.gov.wales/sites/default/files/publications/2022-07/decarbonising-social-care-in-wales.pdf>

Os hoffech gopi o'r ddogfen hon mewn fformat arall cysylltwch â / If you would like this document in another format contact:

Jeśli chciał(a)by Pan(i) otrzymać ten dokument w języku polskim, prosimy o kontakt poprzez:

Jeigu jūs pageidaujate šį dokumentą gauti lietuvių kalba, prašome kreiptis:

Dacă doriți acest document în limba română, vă rugăm să contactați:

Ha magyarul szeretné megkapni ezt a dokumentumot, kérjük, vegye fel a kapcsolatot:

您如果想得到這份文件的粵語版本請聯絡



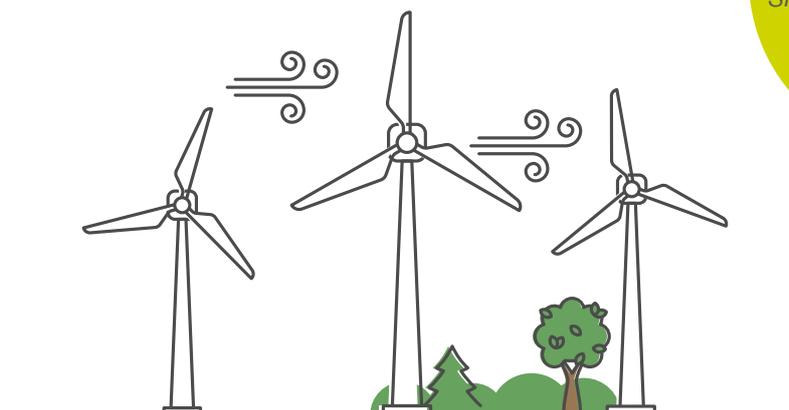
01352 703020



Gwasanaethaucwsmer@siryfflnt.gov.uk
customerservices@flintshire.gov.uk

Contents

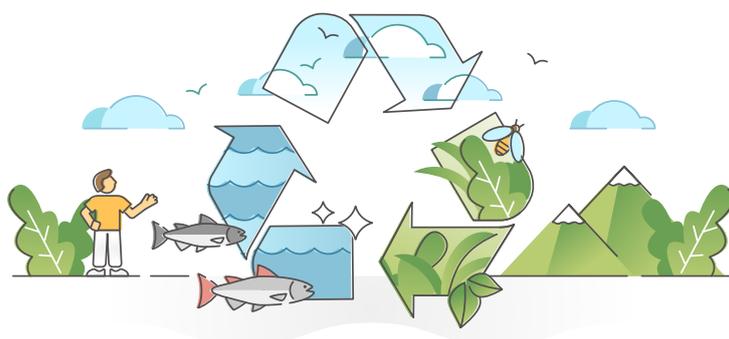
Table of Figures	4
Foreword	5
Why do we need a Climate Change strategy?	6
Other Council Strategies that link to Climate Change Ambitions	7
Flintshire County Council's Carbon Footprint	8
Baseline	9
Changes since the original Baseline calculation	11
Net Zero Pathway	12
Supply Chain Emissions	12
2030 Forecast v Net Zero Council 2030	13
Science-based Targets Initiative (SBTi)	14
What we have achieved so far	16
Strategy Themes	17
Buildings	18
Procurement	20
Land Use	21
Behaviour	22
Flintshire County's Carbon Footprint	23
How the Council can influence Flintshire County's emissions	24
Strategy Review Public Feedback	24
Buildings:	25
Mobility & Transport:	25
Land Use:	25
Behaviour:	25
Challenges & Opportunities	26
Climate Risk and Resilience	27
Impacts to Council assets and services	29
Impacts to the wider county and beyond	29
Financial Implications	30
Measuring & Monitoring Impact	31
Governance	32
Keeping others informed	33
Appendix 1 - Glossary	34
Appendix 2 - Action Plan to Net Zero Carbon	35



"Climate change is not a small issue and should not be treated as one" Lydia, Argoed High

Table of Figures

Figure 1: Council GHG emissions for baseline year 2018/19	9
Figure 2: Council emissions by source 2018/19 - 2023/24	10
Figure 3: Council emissions by source 2018/19 - 2023/24 excluding supply chain	11
Figure 4: 2030 Reduction Trajectory Comparisons for the Council	13
Figure 5: 2050 Reduction trajectories comparison: SBTi v Forecast (excluding supply chain emissions)	14
Figure 6: 2018-2030 Council Emissions following 2030 Forecast trajectory	15
Figure 7: Milestone carbon reduction targets for key themes based on 2030 Forecast trajectory	15
Figure 8: GHG emission sources/activities for Flintshire County Council grouped by carbon impact based on the source's percentage contribution to the Council's overall emissions and control and influence the Council has over the emission source.	15
Figure 9: The key themes of the climate change programme	17
Figure 10: The Council's control and influence in decarbonisation	22
Figure 11: Sectoral GHG emissions in Flintshire County 2005-2022. Department for Energy Security and Net Zero (DESNZ)	23
Figure 12: The view of the Committee on Climate Change on the role local authorities could play in achieving net zero carbon (Committee on Climate Change).	24
Figure 13: Well-being of Future Generations Act well-being goals for Wales. www.gov.wales/well-being-of-future-generations-wales	26
Figure 14: Climate Adaptation Strategy for Wales, page 13, Climate Adaptation Strategy for Wales 2024	28



Strategy Foreword

Welcome to this, the second climate change strategy the Council has prepared, and which builds upon the work we have undertaken over the last two years.

We recognise that the climate crisis is a hugely important issue facing not just our residents, but our communities, our environment and our wildlife.

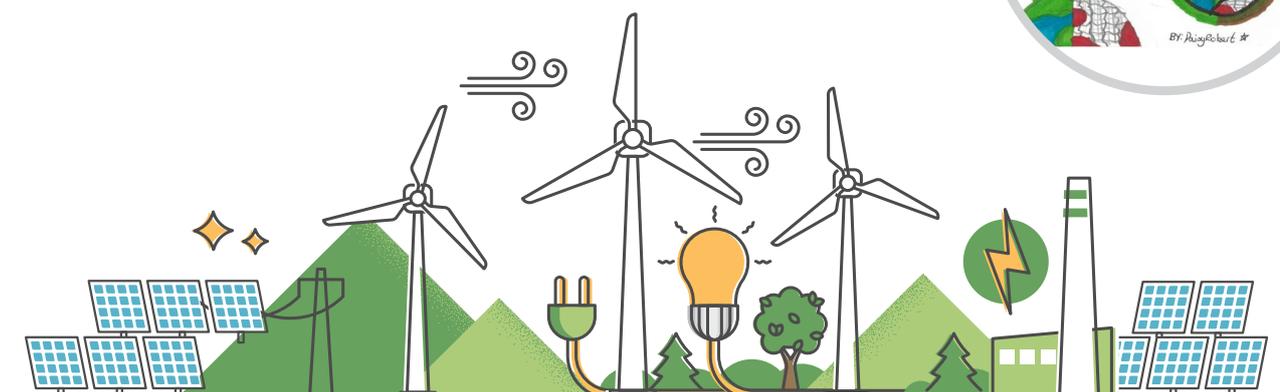
This strategy and action plan sets out our journey towards a net zero carbon Council by 2030; it's a live document that will evolve as our wider understanding of how we can combat the impacts of climate change evolve. By working through these goals, we will make a positive contribution to tackling climate change and support Welsh Government's aim to be a net zero carbon nation by 2050.

We can only achieve the aims of net zero carbon by engaging and working with our communities and businesses. Some of our communities' face challenges that we can help to ease by reducing fuel poverty, promoting green spaces for wellbeing, and developing green skills and job opportunities. Other issues are more complex and require us to work closely with government to influence thinking and direction on a national and international stage to ensure that we make tangible progress for our communities and future generations now.

Flintshire County Council has invested in energy reduction measures and renewable energy schemes for several years, and this strategy builds on and sets the scene for our future aspirations in tackling climate change to create a more resilient and net zero carbon Flintshire.



Neal Cockerton
Chief Executive
Flintshire County Council



Why do we need a Climate Change strategy?

Global heating is generating significant sea level rises and more frequent and heavy extreme weather effects. The actual impacts of the climate crisis can already be seen in terms of storms, flash flooding and drought, causing water damage, surface water drainage issues, and destruction of aged green spaces resulting in increased maintenance of roads, buildings, flood defences and loss of ancient woodland. This threatens human life, as well as access to adequate energy, water, food and housing as essential human requirements for effective health, wellbeing and future resilience. A more heated and unstable climate also affects the natural environment and is a risk to the health and diversity of wildlife and ecosystems.

There are a number of different Greenhouse Gasses (GHG) that affect global warming and in order to use a single number to 'group' these gases, they are converted into equivalent amounts of carbon dioxide – abbreviated as CO₂e. There is now unprecedented political recognition of the global Climate Emergency. The Intergovernmental Panel on Climate Change detailed the need to limit the increase in global temperature to an average of 1.5°C above pre-industrial levels in order to prevent a public health catastrophe³. This is currently predicted to occur between 2030 and 2052 if the current rate of change continues, with a 50% chance by mid-2030's.

The signing of the Paris Climate Change Agreement by 189 countries legally-bound their commitment to act to limit global temperature rise⁴. The Climate Change Act 2008 gives specific targets around carbon reduction for the UK. Climate Change (Wales) Regulations 2021 proposes further increases to Wales' climate targets in response to recommendations from Climate Change Committee (CCC) with interim targets and a final net zero nation by 2050⁵.

In 2019, the Welsh Government declared a Climate Emergency in Wales, accepting the recommendations from the UK Committee on Climate Change and further setting ambitious plans for the public sector to be Net Zero Carbon by 2030. 'Prosperity for All: A Low Carbon Wales'⁶ sets out Welsh Government's approach to cutting carbon emissions and 'Welsh Public Sector Net Zero Carbon Reporting Guide' details the principles and priorities for the reporting approach for the public sector.

The net zero ambition for the public sector will be on a 'Team Wales'⁷ basis meaning carbon positive organisations will balance with residual emissions of other Public Bodies, but this does not remove the Council's responsibility to plan for net zero. The Council recognises it has a contribution to make towards the 'Team Wales' target of a net zero public sector and this strategy sets out the next steps in carbon reduction.

As we are already experiencing the effects of climate change it is important that we look proactively to adapt to these impacts by adopting future thinking. This applies to the design and materials used in buildings, flood investigation and mitigation, renewable energy generation, access to green spaces and protection of the natural environment. This revised strategy provides an overview of climate risks and mitigating actions that can be taken by the Council, but further work is needed with external organisations to understand the wider impacts and responsibilities that are needed to facilitate a resilient future.

On 30 June 2021 the Welsh Parliament further declared a nature emergency following research showing how fragile many species and ecosystems are due to habitat loss, pollution, invasive non-native species and climate change. This called for statutory targets to be set to stop and reverse any decline in biodiversity.

The Council has been committed to reducing carbon emissions and managing and enhancing biodiversity for some time, however the importance of the link between climate change and nature recovery brings this work to the fore and therefore both areas must work together to reduce the impact we are having on our planet. This revised strategy sets out how the Council can aim for net zero carbon and contribute to the Welsh Public Sector's Net Zero Carbon by 2030 ambition.

³ Intergovernmental Panel on Climate Change (2020), Special Report – Global Warming of 1.5C. <https://www.ipcc.ch/sr15/>

⁴ United Nations (2015), The Paris Agreement. <https://www.un.org/en/climatechange/paris-agreement>

⁵ Welsh Government (2021), Climate Change Wales Regulations 2021. <https://gov.wales/climate-change-wales-regulations-2021-integrated-impact-assessment-html#section-62452>

⁶ Welsh Government (2019), Prosperity for All: A Low Carbon Wales. <https://gov.wales/low-carbon-delivery-plan>

⁷ Welsh Government (2020), Team Wales approach to tackle climate change. <https://gov.wales/team-wales-approach-tackle-climate-change>

⁸ Cynnal Cymru (2021), Wales declares nature emergency. <https://cynnalcymru.com/wales-declares-nature-emergency/>

Other Council Strategies that link to Climate Change Ambitions

In order to integrate positive decision making around carbon impacts across the Council, it is important that strategies and plans across the Council are reviewed to address carbon impacts. This is not an exhaustive list, but highlights the main corporate strategies and plans that need to align with climate ambitions.

- The Council aims to deliver a policy-led approach that incorporates the Well-being of Future Generations (Wales) Act 2015 and Environment (Wales) Act 2016.
- The Council's Corporate Plan outlines key priorities across its services.
- Renewable Energy 10 year Action Plan
- Air Quality Management Plan
- Biodiversity and Ecosystem Resilience Duty Delivery Plan (Sec 6 Environment (Wales) Act 2016)
- Urban Tree and Woodland Plan
- Local Development Plan
- Procurement Strategy
- Fleet Strategy
- Development Control and Planning Policy
- Integrated Transport Strategy
- North Wales Joint Local Transport Plan
- Waste Management Strategy
- Housing Decarbonisation Strategy
- Digital Strategy
- Clwydian Range and Dee Valley AONB Management Plan
- Active Travel Plan
- 21st Century Schools Investment Programme
- Flintshire Local Area Energy Plan (LAEP)

"At school we could combat climate change by recycling paper and plastic, reuse materials, use solar panels or wind energy." Emily, Ysgol Glan Aber



Flintshire County Council's Carbon Footprint

Flintshire County Council has, over a number of years, committed to the reduction of carbon emissions through proactive carbon reduction strategies. From 2009-2021, approximately 60% of the Council's carbon emissions from energy sources had been reduced through proactive programmes including conversion of street lighting to LED, utilising energy efficiency measures across its assets, and leading the way with renewable energy schemes such as solar and methane capture.

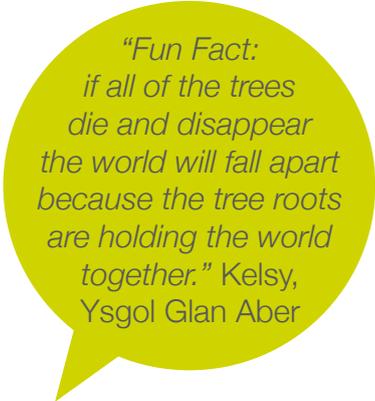
However, The Council's carbon footprint is much wider in scale than emissions produced through energy use, and therefore this strategy encompasses the Council's wider carbon emissions from its assets and services. The aim of the strategy is to decarbonise the Council's operations, support the wider county to decarbonise, and promote the protection and enhancement of the county's natural environment. There is an intrinsic link between the decline in nature and climate change and therefore it is important that the climate change strategy includes the protection of our ecology and biodiversity.

While the Council is committed to significantly reduce its carbon footprint, it recognises that however carbon efficient its assets and services become, there will still be a residual footprint of carbon that cannot be eliminated. Due to this, the carbon that cannot be removed must be compensated for through generation of renewable energy and carbon offsetting by, for example, tree planting. By generating renewable energy that is then utilised by the Council, we can reduce emissions associated with using energy from the grid.

The scale and scope of this strategy is informed by a number of key constraints including: wider financial constraints, economic recovery, changes in Government policy and planning policy, and funding availability e.g. Feed In Tariffs and Public Sector grants. The achievement of becoming a Net Zero Carbon Council by 2030 is incredibly ambitious, and unrealistic in terms of achievement without the supporting policy mechanisms, infrastructure and financial support from UK and Welsh Governments. More changes will emerge and it is vital for the Council to remain informed of emerging policy and financial change to support the wider climate change agenda. Despite the challenging financial climate, it is important that the Council remains focused on what it can achieve, and continues to challenge itself within its decision making so that longer term goals are possible.

This strategy sets out a route map for the next steps in carbon reduction. The strategy will be further reviewed in 2027/28 to review learnings, address successes and failures and adjust actions in line with emerging technologies and methodologies.

Achieving the aspirational targets set out in this strategy will require the Council to work in partnership with neighbouring Councils, Welsh government, other public sector organisations, Universities, local businesses and voluntary and community groups. The Council calls upon these stakeholders to collaborate with us to capitalise on opportunities and resources, in order to maximise our collective efforts to minimise greenhouse gas emissions from Flintshire. Only through working together can we achieve the required reduction in emissions needed to avert dangerous levels of climate change and achieve net zero carbon as a wider-nation by 2050.



*"Fun Fact:
if all of the trees
die and disappear
the world will fall apart
because the tree roots
are holding the world
together." Kelsy,
Ysgol Glan Aber*

Baseline

Everything we do has an effect on the environment we live in; from burning fossil fuels for heating to collecting kerbside waste and recycling. Flintshire County Council reports its carbon footprint to Welsh Government as tonnes of carbon dioxide equivalent (tCO₂e) within its organisational and operational boundaries. This strategy relates to the Council's internal operations which are:

- ✓ Buildings owned and operated by the Council including offices, depots, schools, community centres, care homes, public conveniences and street lighting. This includes heating, electricity and water use within these facilities.
- ✓ Fleet vehicles owned by the Council,
- ✓ Business travel for work,
- ✓ Employee commuting,
- ✓ Procurement of goods and services.

The scope excludes:

- ✗ Domestic properties,
- ✗ Buildings owned by us that are leased out and operated by third parties.

In order to establish where we are and where we need to be, we first need to look at our baseline figures. In 2018/19 we were able to capture the data set out below. Figure 1 below shows a breakdown of GHG emissions by emission source for 2018/19.

Flintshire County Council's greenhouse gas emissions (tCO₂e) for 2018/19

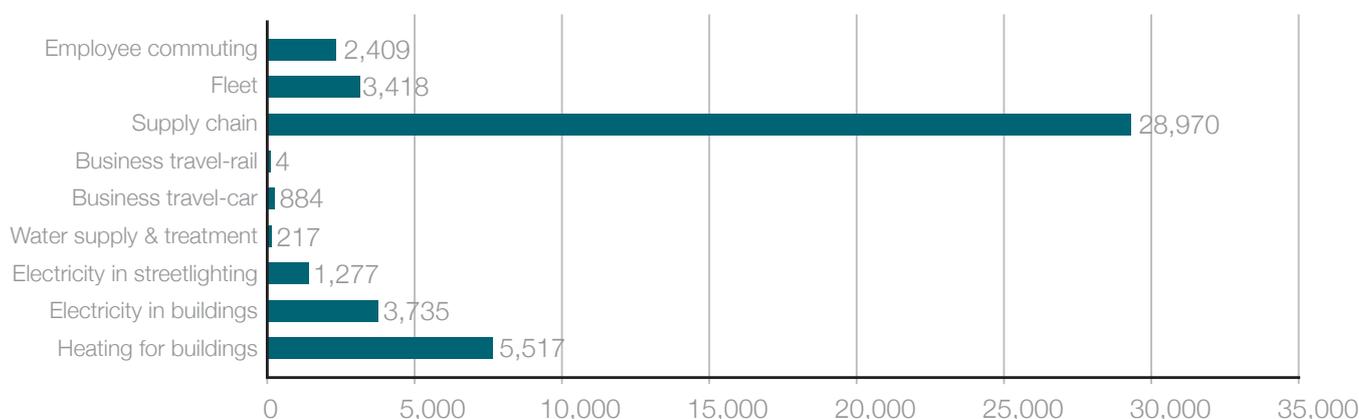


Figure 1: Council GHG emissions for baseline year 2018/19

As these figures suggest, the biggest contributors to the Council's carbon footprint in 2018/19 were:

- Supply chain; procurement of goods and services: 62%
- Heating for buildings: 12%
- Electricity in buildings: 8%
- Fleet: 7%
- Employee commuting: 5%

The Council produced 1,664 tonnes of waste in 2018-19 from its operations, however all waste collected by the Council, including operational waste, was either recycled or sent to energy from waste plants for incineration when it cannot be recycled. All green waste is composted. Therefore, the only carbon emissions related to waste are included in the 'Fleet' data through waste collection vehicles.

Baseline

Supply chain; procurement of goods and services equates to 62% of our baseline carbon emissions total. The Council understands that there are actions that can be taken to reduce these emissions through decision making processes and supplier engagement, however this figure will only see significant reductions if the appropriate investment, policy and infrastructure is provided and developed by the Government, as well as having an appropriate means to measure emissions accurately.

From this data we understand that our baseline carbon emissions for 2018/19 were 46,434 tCO₂e.

In 2018/19, the Council reported an estimated 1,500 tCO₂e absorbed from its land assets. However, this figure has been estimated based on two specific land types – grassland and woodland/forest – with a common value factor used to determine the absorption of carbon. No formal baseline figures have been calculated for our land assets to determine more accurate absorption figures, but processes have been developed to better monitor land use change across the council helping to direct efforts towards achieving the benefits relating to carbon sequestration and wider habitat richness.

The 2018/19 carbon absorption total can be removed from our emissions total as a ‘carbon offset’. Therefore, to meet our net zero carbon ambition, the total carbon emissions emitted by the Council, minus the total carbon absorbed from Council owned and operated land results in net emissions of, 44,934 tCO₂e.

To achieve the Public Sector Net Zero ambition by 2030, Public Sector carbon emissions need to be balanced by Public Sector carbon sequestration.

The Council now has carbon emission data for six financial years as shown in Figure 2 below. The total carbon emissions for 2019/20 saw a 1% reduction on the 2018/19 baseline, 2020/21 a 12% reduction, 2021/22 a 0.1% increase, 2022/23 a 30% reduction, and 2023/24 a 60% increase due to changes in Supply Chain methodology. This is further to the reductions already made within the former carbon reduction strategy 2009 – 2021.

Emissions by Source (tCO₂e)

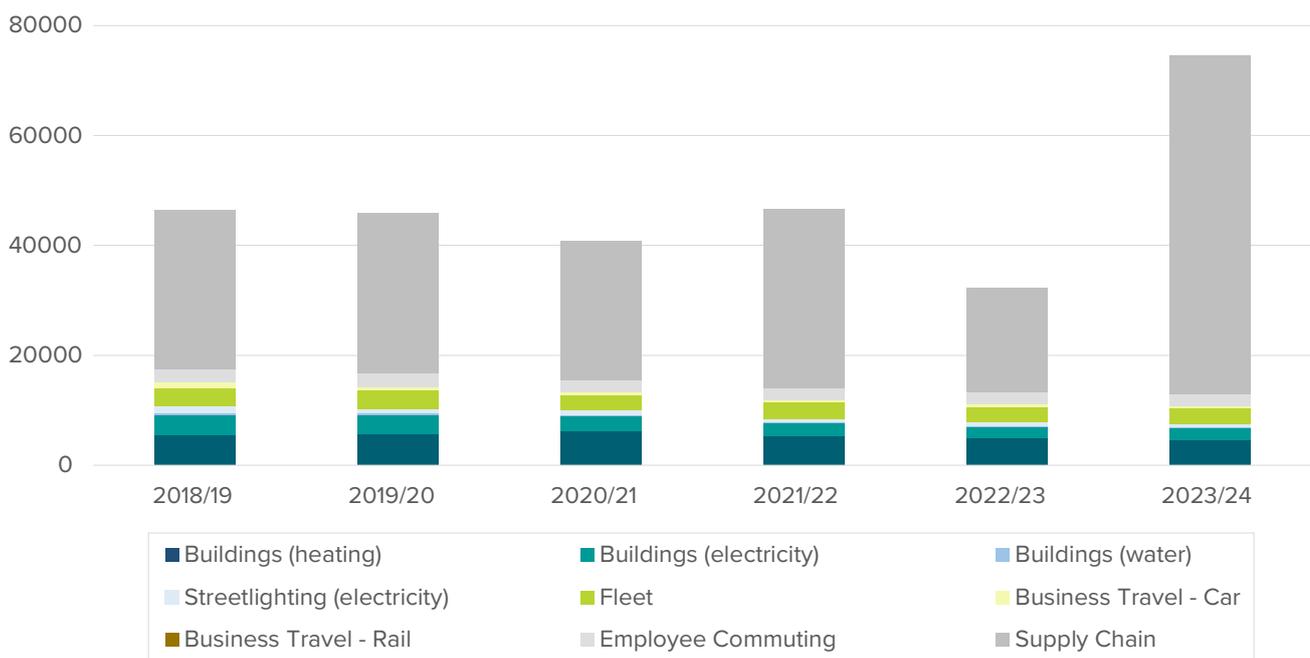


Figure 2: Council emissions by source 2018/19 - 2023/24

Baseline

In order to better reflect the emissions reductions year on year, Figure 3 demonstrates the emission sources with supply chain removed. Aside from minor fluctuations relating to external factors. It is expected that some sources will continue to see consistent reductions such as building heating and electricity, with others more sudden as large projects are completed.

Emissions by Source (tCO₂e)

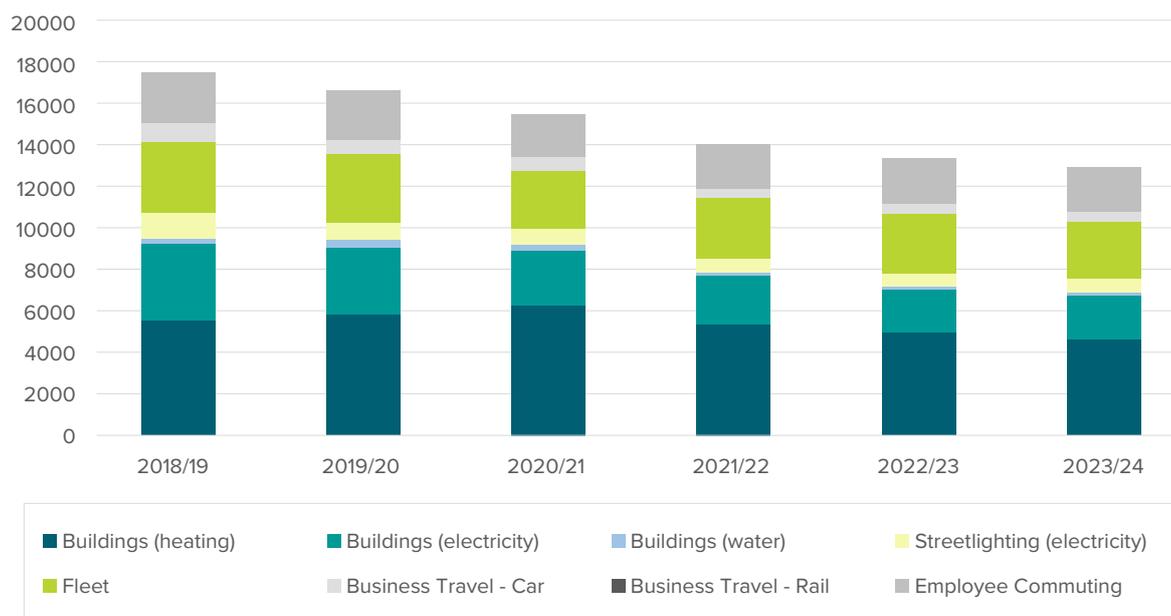


Figure 3: Council emissions by source 2018/19 - 2023/24 excluding supply chain

Business mileage emissions have shown some recovery since the Covid-19 pandemic, but it is Supply Chain emissions which have been challenging due to the basic spend-based calculation and methodology changes.

Changes since the original Baseline calculation

It is important to note that the scope within the original baseline did not include emissions from Flintshire Leisure and Libraries as these assets were leased out and operated by AURA. In 2024, the management of these assets changed and therefore emissions from some sources may be adversely affected. This may impact the emissions totals from 2024/25 onwards, and it may not be possible to reconfigure previous year's data to include these assets.

There have also been significant changes to the methodology used to calculate emissions from supply chain. The current methodology to determine emissions from supply chain/procurement is based on the value of goods and services. Welsh Government determines the most common spend categories, and allocates an Emission Factor to each category. From 2018 – 2023, the Emission Factors for supply chain were calculated by the Centre for Sustainable Accounting last updated in 2011 as per GHG Protocol. In 2023, Welsh Government updated the Emission Factors to better reflect a more modern economy. The Emission Factors were developed by University of Leeds and demonstrate an average 32% reduction across the spend categories. Footprint calculations since 2022/23 have used the updated Emission Factors. This means there is an inconsistency between the baseline data for Supply Chain, and the reported emissions post-2022/23.

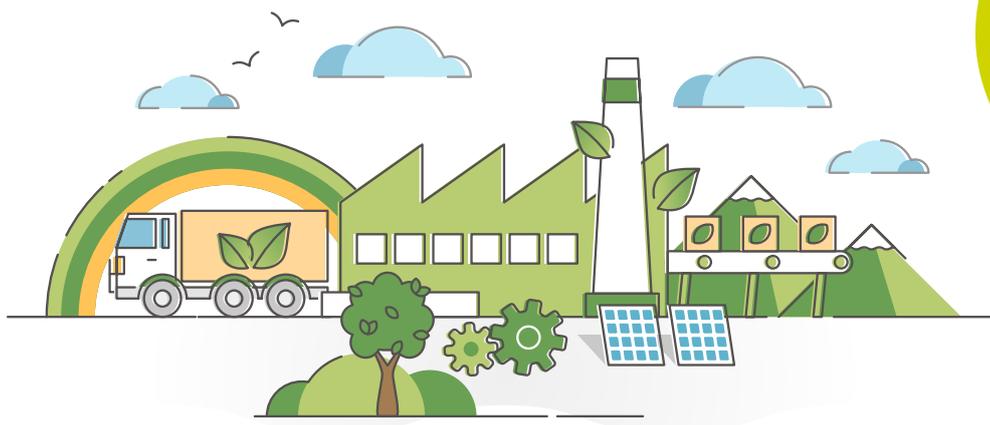
Net Zero Pathway

Supply Chain Emissions

In addition to the aforementioned inconsistency with supply chain Emission Factors, the current methodology to determine emissions from supply chain/procurement is based on the value of goods/ services. Due to this, for as long as we are spending money within specific 'higher carbon' areas, the assumption is that our emissions are relative to the value of those spends. This makes reductions of emissions from supply chain difficult to accurately quantify and difficult to manage. When viewing the 'total' carbon footprint, it can also make the excellent progress in reductions within other areas seem lost.

For these reasons we will continue to report Supply Chain emissions separately from the Council's carbon footprint, remove the quantifiable reduction targets, and instead, introduce new targets that have a greater material impact.

There are actions that we can take to improve emissions from supply chain – for example weighting tendering processes based on lower carbon emissions (local supply/low energy construction or delivery). However significant change can only come from this area with improved emissions methodologies that better represent real emissions, and better legislation/regulation/investment in local green skills.



"The little things we do today can make a difference tomorrow"

Luca, 8,
Ysgol Wepre

2030 Forecast v Net Zero Council 2030

Flintshire County Council's emissions pathway has been mapped between 2018 and 2030 using two trajectories. The pathways exclude emissions from Supply Chain, and Flintshire Libraries and Leisure which was acquired in 2024, helping to provide consistency when demonstrating what can be achieved against the 2018/19 baseline while accounting for emissions under the council's direct control and influence. These are demonstrated below:

- **Historical Reductions** shows the actual carbon emission data we have collected over the last 6 years.
- **2030 Forecast:** This trajectory takes into account carbon reduction opportunities identified up to 2030 within the programme's action plan (excluding supply chain), should there be the resources to do so.
- **Net Zero Council 2030:** This trajectory demonstrates the reductions required for the Council itself to become Net Zero Carbon by 2030, assuming remaining emissions of 2000 tCO₂e to be balanced by sequestration from its own land.

2030 Reduction Trajectory Comparison

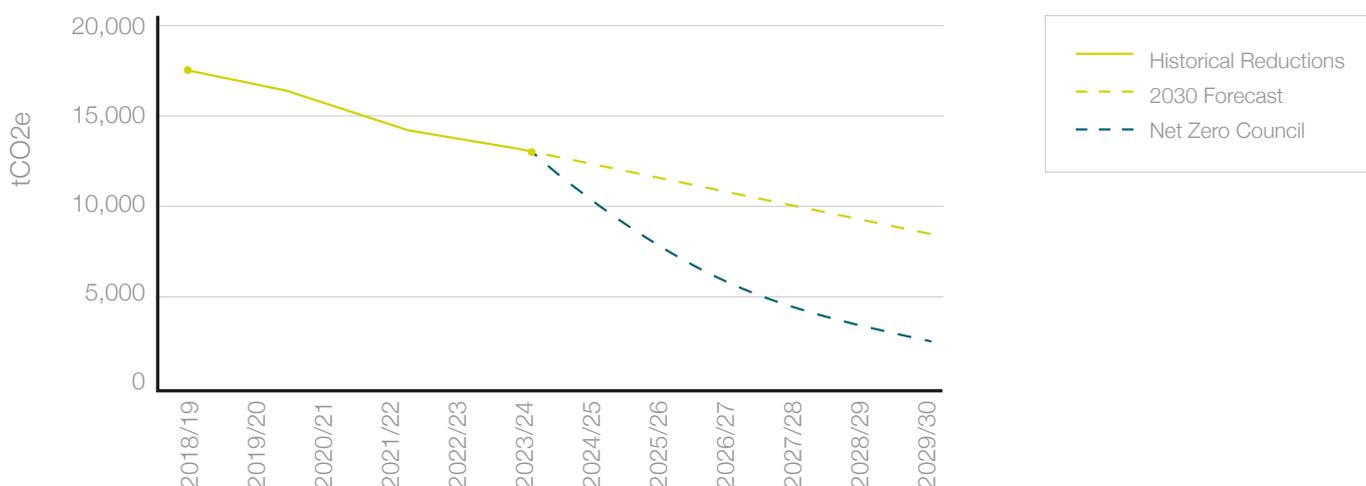


Figure 4: 2030 Reduction Trajectory Comparisons for the Council

Figure 4 demonstrates a disparity between the volume and pace of carbon reduction needed for the Council to become net zero carbon by 2030, compared to the reductions that have been calculated against the actions we have direct control over as a Council. The difference between the two trajectories can only be achieved via National policy and investment in infrastructure that supports the net zero carbon transition. For example, national grid decarbonisation, greater levels of investment in key areas such as a green supply chain, and faster movement towards sustainable passenger transport. Achievement of Net Zero Carbon Council by 2030 will require interventions beyond the control of the Council as described above, and achievement of the 2030 Forecast trajectory is also dependent on the necessary funding being available to support these projects. Where it is possible, estimated costings have been included within the action plan. Some of these costings are very high level and only give us an indication. Other actions are not possible to cost at this point until there is a better understanding of the solutions and technologies available.

The 2030 Forecast Trajectory estimates reductions from opportunities identified up to 2030 and shows a potential total reduction since 2018/19 of approximately 9300 tCO₂e. The objectives and actions described in the next section 'Strategy Themes' have potential to fulfil this reduction in emissions.

However, this still leaves remaining emissions at 8149 tCO₂e. These remaining emissions will mainly come from:

- Buildings that are not suitable for retrofit of energy efficiency measures or renewable energy and therefore retain a higher energy consumption, where the national energy system is not decarbonised.
- Fleet emissions from the use of alternative fuels or grid electricity for electric vehicles.
- Employee commuting and business travel where vehicles are either not ultra-low emissions (ULEV), are ULEV with reduced emissions, or where electric vehicle emissions come from the electricity grid which is not decarbonised.
- Supply chain; procurement of goods and services, which will be excluded from measurements until an appropriate methodology can be used.

Some of this gap can be filled by utilising carbon sequestration from council land, however current sequestration rates are insufficient to fill this gap, so investment in this area may be necessary.

Science-based Targets Initiative (SBTi)

SBTi defines and promotes best practice in emissions reductions and net-zero targets in line with climate science. Figure 5 investigates the council's carbon reduction pathway if it were to meet the Science-based Targets Initiative (SBTi) reduction targets, with trajectories set to a near-term year of 2030, and Net Zero year of 2050, aligning to the 1.5°C scenario.

The trajectory comparisons are demonstrated below:

- **Historical Reductions** shows the actual carbon emission data we have collected over the last 6 years.
- **SBTi Trajectory** demonstrates the council's carbon reduction pathway if it were to meet the Science-based Targets Initiative (SBTi) reduction targets, with trajectories set to a near-term year of 2030, and Net Zero year of 2050, aligning to the 1.5°C scenario.
- **2030 Forecast** – The estimation of reductions that can be made by fulfilling actions within the action plan (excluding supply chain) should there be the resources to do so.
- **Net Zero Council 2030** – The reductions required for the council itself to become Net Zero Carbon by 2030, assuming remaining emissions of 2000 tCO₂e to be balanced by sequestration from its own land.

The graph demonstrates that the 2030 forecast scenario aligns well with the science-backed SBTi Near Term targets. Achievement of this is subject to the necessary funding and resource being available.

2050 Reduction Trajectory Comparison: SBTi v Forecast (excluding Supply Chain emissions)

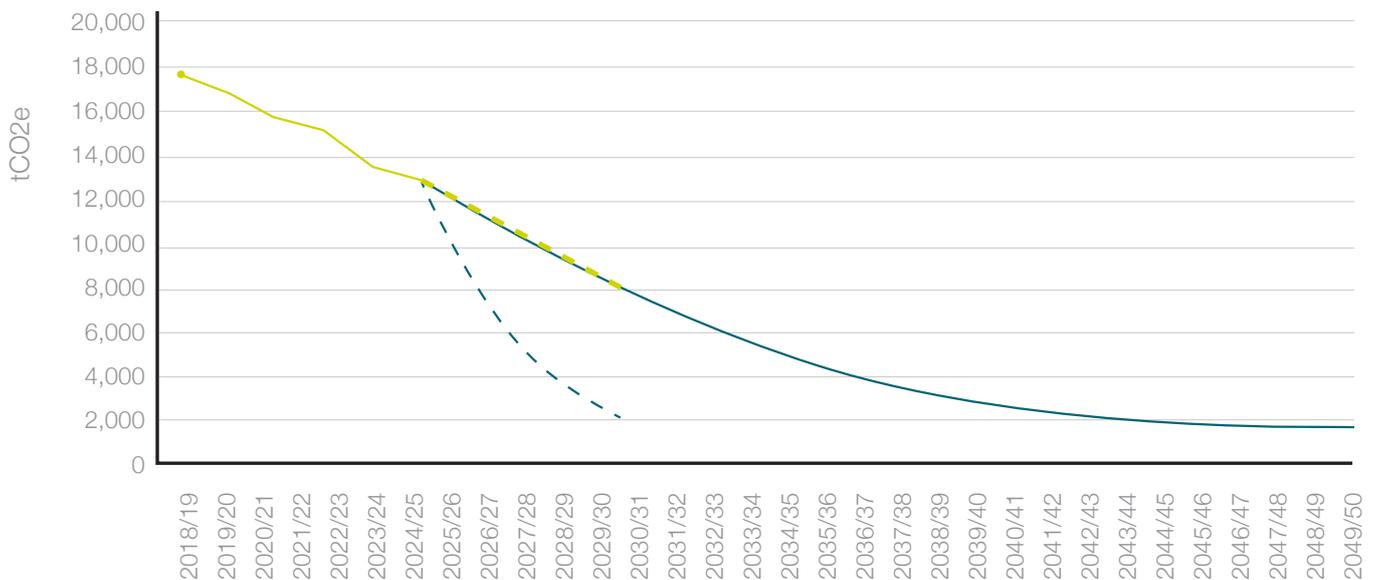


Figure 5: 2050 Reduction trajectories comparison: SBTi v Forecast (excluding supply chain emissions)



Based on reductions from 2018-24, and considering the impacts of actions detailed within this strategy that we can deliver in coming years, we estimate that carbon reduction in each of the themes will look as per Figure 6. This follows the 2030 Forecast trajectory and demonstrates the predicted balance of emissions remaining within each theme – excluding Procurement.

2018-2030 Council Emissions Following 2030 Forecast Trajectory

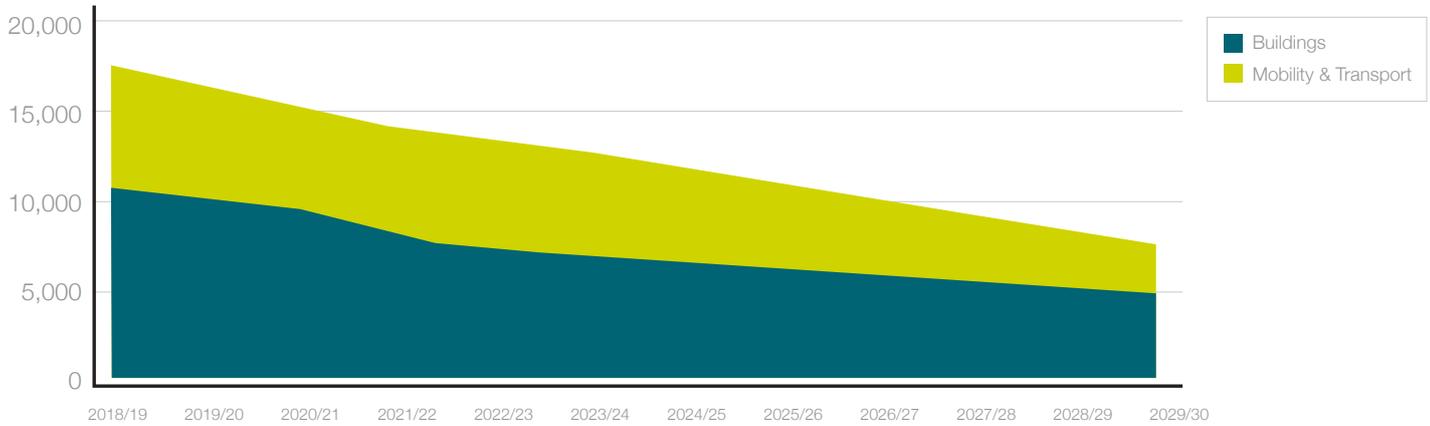


Figure 6: 2018-2030 Council Emissions following 2030 Forecast trajectory

Figure 7 below shows where we are now and the milestones we hope to reach between now and 2030.

Theme	2030 Forecast			
	Baseline tCO ₂ e	Reduction		
	2018/19	2023/24	2026/27	2029/30
Buildings	10,747	29.6%	45%	55%
Mobility & Transport	6,716	20.4%	35%	55%

Figure 7: Milestone carbon reduction targets for key themes based on 2030 Forecast trajectory

To achieve these milestones we will set interim targets in each theme which will allow us to identify success and areas that need additional attention.

It is suggested that the most appropriate method for prioritising the Council’s GHG emissions is to look at the size and contribution of the emission source and the influence and control the Council has over it. This is shown in the diagram below and the possible actions needed to reduce these emissions are detailed in the next sections.

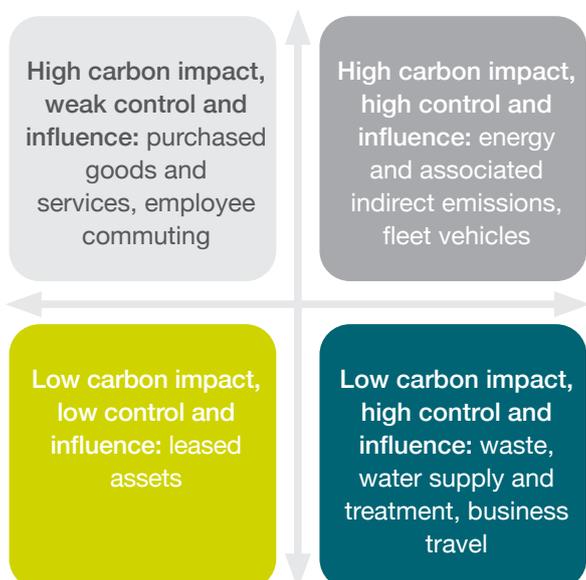


Figure 8: GHG emission sources/activities for Flintshire County Council grouped by carbon impact based on the source’s percentage contribution to the Council’s overall emissions and control and influence the Council has over the emission source.

What We Have Achieved So Far

- ✓ In 2009 the Council developed a carbon reduction strategy to reduce emissions from energy related carbon by 60% by 2021. Projects included: Installation of low carbon and renewable energy systems in over 50 of the Council's buildings including offices, schools and leisure centres. Technologies include solar PV, solar thermal, wind turbines, heat pumps, biomass boilers and combined heat and power. Investment in innovative technologies such as transpired solar collectors and battery storage. Delivery of an annual programme of energy efficiency measures, such as building fabric insulation, draught proofing, new boilers, new heating controls, lighting upgrades etc in the Council's non domestic buildings since 2008.
- ✓ Investment and delivery of energy efficiency improvements in Council housing through the Welsh Housing Quality Standard and Welsh Government/UK Government schemes such as NEST, Arbed, Warm Homes Fund and Eco4 (including improvements of private households).
- ✓ Rationalisation of Council estate moving employees to a modern, more energy efficient building in Ewloe.
- ✓ Building and renovating fit for future schools through the 21st Century Schools Programme, with new school buildings funded through this programme required to be Net Zero Carbon.
- ✓ Replacement of the Council's streetlighting with LED lamps which use significantly less electricity.
- ✓ The Council's fleet meets the Euro 6 standard and therefore has the lowest emissions possible for diesel vehicles.
- ✓ Introduced two electric recycling vehicles into the fleet.
- ✓ Delivery of safer routes in the community schemes around schools, encouraging children with their families to walk and cycle to school offering improved road safety, reduced air pollution and congestion whilst also improving peoples' physical and mental health.
- ✓ Developed and delivered active travel routes across the County.
- ✓ The Council has a strong methodology established through our own TOMs (Themes, Outcomes & Measures) framework which uses social, economic and environmental factors within procurement operations.
- ✓ Joint procurement service with Denbighshire County Council which allows collaboration to maximise cost and efficiency savings. Joint funded a Procurement Decarbonisation lead to develop a strategy to reduce emissions from supply chain.
- ✓ Reviewed the Council's Procurement Strategy with a key 'Carbon' theme setting out the Council's commitments to its suppliers.
- ✓ The construction of four solar farms, utilising former landfill sites, with a combined generation capacity of over 3.5MW.
- ✓ Development of a 15 year Urban Tree and Woodland Plan with the target of achieving 18% urban canopy cover by 2033.
- ✓ Publishing of our "Supporting nature in Flintshire" biodiversity duty plan and working to support biodiversity protection and improvement in Flintshire.
- ✓ Countryside Services manages over 40 sites of natural greenspace including Wepre Park and Greenfield Valley Heritage Park, 1,200 km public rights of way, 60 km of Welsh Coastal Path, events and education programmes, and brings in external grants of over £400k per year connecting people to nature.
- ✓ The Council has protected our 120 play areas and invested over £2m in partnership with town and community councils over the last 8 years as well as ensuring free open access to greenspace.
- ✓ Through collaboration with regional partners and Welsh Government, the Council has managed the construction of an energy from waste facility, Parc Adfer. This facility generates electricity for equivalent of 30,000 homes from waste that cannot be recycled. It also helps to prevent waste from going to landfill.
- ✓ Through the same partnership all of the Council's food waste is taken to an anaerobic digester where it is used to produce electricity (via biogas) and liquid fertilizer, preventing food waste from going to landfill.
- ✓ All green waste is developed into compost at the Greenfield Waste Transfer Station.
- ✓ Publishing the 'Climate Toolkit' for use by Schools and Town & Community Councils, with Castell Alun high school being the first to successfully incorporate the climate toolkit into the new National Curriculum.
- ✓ Development of a successful programme of training for both Council officers and Elected Members as decision makers on Council activity.
- ✓ Review of Council strategies and policies to ensure that carbon impacts are incorporated and engrained as part of the Council's blueprint.

These carbon actions have helped the Council decrease its carbon emissions across all key themes.

Strategy Themes

The five key themes of the strategy have remained the same, in line with Welsh Government's route map to net zero. These themes are: **Buildings, Mobility & Transport, Procurement, Land Use** and the underpinning theme of **Behaviour**.

The Council has identified a number of wide-ranging actions within each of these themes. Where a theme has a reduction target, this is based on the 2018/19 baselines utilising the 2030 Forecast projection.

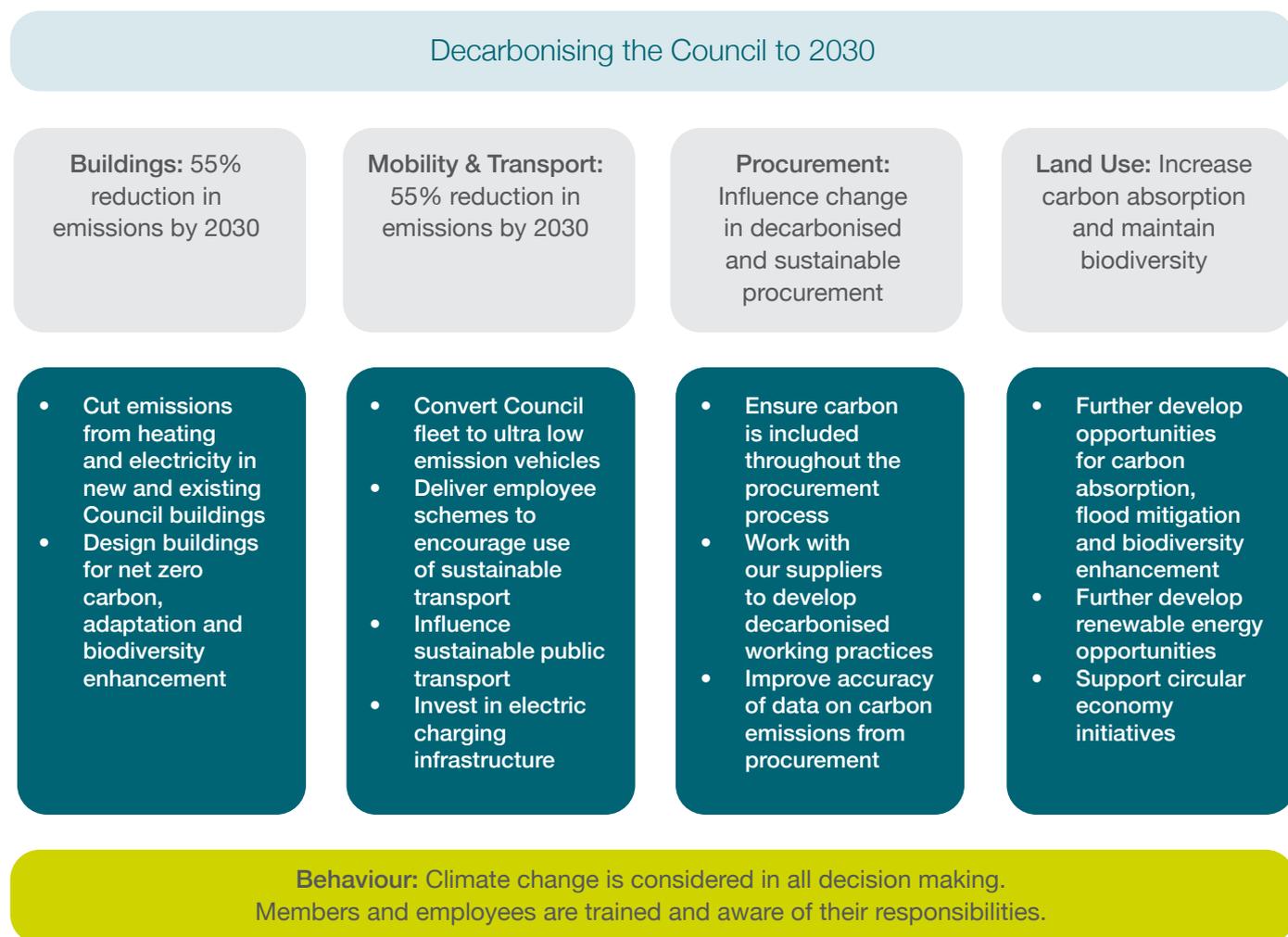


Figure 9: The key themes of the climate change programme

Given the scale, complexity and urgency of responding to climate change, it is proposed that the 'Action Plan' is seen as something that is iterative in nature. While setting out the medium to long term roadmap to net zero carbon, it is also likely that an annual update will be needed, to capture the rapid changes being delivered under the Action Plan, and to ensure it is reflective of the likely rapidly changing national and international context. To reflect the feedback from the public, for each of the actions within the action plan the co-benefits of that action have been identified. This helps to link climate action to the societal issues that the public feel is important to them.

Buildings

In 2018/19, Council owned buildings produced 10,747 tCO₂e. These emissions came from direct burning of fossil fuels for heat, electricity and water use in buildings and energy used to power street lights. Since 2009 a number of programmes have been completed to reduce these emissions from our offices, schools, leisure centres and care facilities.

In 2023/24, the emissions from Council owned buildings had reduced to 7,560 tCO₂e. However, to achieve net zero carbon we need to reduce the emissions even further while also considering the impacts of buildings on biodiversity. With Leisure & Library sites being brought back into Council control, from 2024/25 there will be a rise in emissions from Buildings, but for data consistency we will report on this separately.

To achieve our 55% emissions reduction in buildings by 2030 we will aim for 7% reduction each year to 2029/30.

We will:

- Further review the rationalisation of our building assets and leases.
- Improve the standard of energy efficiency in our existing buildings and engage with building users to encourage positive behaviour change.
- Design and refurbish buildings for Net Zero Carbon in Operation / low energy operation, biodiversity net benefit and adaptation to the impacts of climate change.
- Support schools to reduce operation's emissions.
- Ensure green infrastructure is considered throughout all existing Council assets and future schemes, e.g. allocation of green space, green roofs, habitat creation.
- Continue to carry out flood investigation and alleviation to identify proactive mitigation measures & prevent recurrent flooding and prioritise nature-based solutions to flooding remediation proposals
- Explore feasibility for rainwater harvesting within Council assets, particularly on high water usage sites.
- Petition the change needed to facilitate decarbonisation of buildings both within the Energy sector and Government.

Further measures of success and timescales can be found in [Appendix 2](#).

Constraints and Interdependencies

Within the Buildings theme there are constraints and interdependencies beyond the Council's control. These factors will affect the Council's ability to meet Net Zero Carbon by 2030.

- Decarbonisation of the National Grid
- Availability of funding, including Local Government settlement
- Availability of suppliers to design and deliver, and maintain schemes
- Lack of capacity within the National Grid to facilitate renewable energy schemes

Mobility & Transport

Reducing emissions from Council owned fleet, business travel and employee commuting. Emissions from mobility & transport remain a consistent source of carbon emissions with 14% of total emissions being reported in 2018/19. We know that technologies around electricity and hydrogen fuelled vehicles is improving and we need to ensure that we do not fall behind in this area.

To achieve our 55% emissions reduction by 2030 we aim to reduce our emissions by 8.5% each year up to 2029/30.

We will:

- Transition Council fleet vehicles to ultra-low emission vehicles (ULEV) – electric and alternative fuel.
- Review fleet strategy and journey management to support sustainable transport modes.
- Implement policies and initiatives that support the reduction of carbon emissions from business mileage and employee commuting such as: car share forum and salary sacrifice schemes.
- Petition the change needed to facilitate decarbonisation of transport both within the private sector and Government.

Further measures of success and timescales can be found in Appendix 2.

Constraints and Interdependencies

Within the Mobility & Transport theme there are constraints and interdependencies, some of which are beyond the Council's control. These factors will affect the Council's ability to meet Net Zero Carbon by 2030.

- Prioritisation of delivery of Council services
- Availability of suppliers to facilitate transition of fleet, and ongoing maintenance
- Future delivery model of fleet to facilitate decarbonisation
- Improved data on employee vehicles and mileage
- Ability to offer alternatives that are cost effective
- Lack of control over vehicles employees use to carry out Business operations
- Lack of EV charging infrastructure
- Lack of capacity within the National Grid to facilitate improved charging infrastructure
- Changes in employee work patterns that curtail car sharing
- Improvements to public transport network
- Availability of funding, including Local Government settlement

"Even though we have renewable energy sources most of the power stations in the UK use coal, oil and gas which result in global warming" Emily, 13, Argoed High



Procurement

Current estimates by Welsh Government show that 60 - 81% of Public Sector organisations' operating budgets are spent with Suppliers and Contractors. Flintshire County Council's own emissions from procurement represented 62% of total emissions in 2018/19. However, this has seen a 112% increase in 2023/24 against the 2018/19 baseline due to spend value methodology changes. Due to this, the Goods, Services and Works provided by our Suppliers and Contractors emits a significant percentage of the carbon we generate but are not yet reliably measured. For this reason we are no longer putting a reduction value against emissions from Procurement. Instead we are focussing on the material influence and change the Council can make within this theme.

We will:

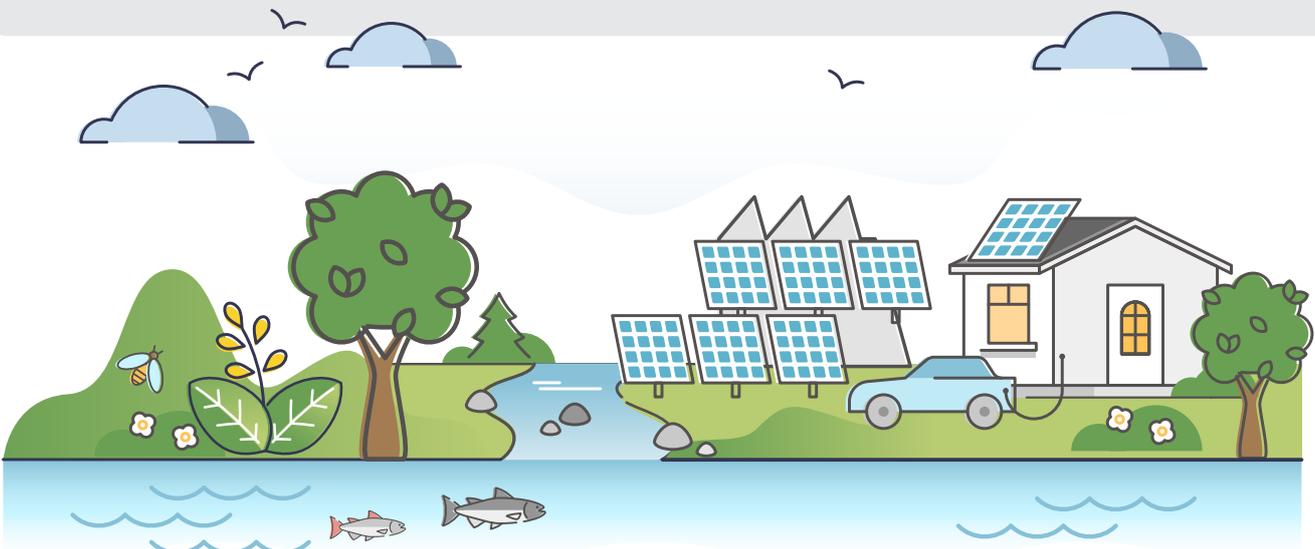
- Ensure carbon reduction is appropriately considered throughout Council procurement policy, strategy, business cases, commissioning templates, tender evaluations, etc.
- Increase the utilisation of the TOMs (Themes, Outcomes and Measures) framework in procurement across the Council's operations by working with employees who manage procurement activities.
- Work collaboratively with Denbighshire County Council to establish the recognised carbon reduction toolkit within the procurement process.
- Facilitate provision of training for commissioning officers and suppliers to grow knowledge and ownership of responsible procurement.
- Petition the change needed to facilitate decarbonisation of supply chain within investment in green skills.

Further measures of success and timescales can be found in [Appendix 2](#).

Constraints and Interdependencies

Within the Procurement theme there are constraints and interdependencies, some of which are beyond the Council's control. These factors will affect the Council's ability to meet Net Zero Carbon by 2030.

- Availability of supply chain to deliver with reduced carbon impacts
- Lack of mature supply chain in green skill areas
- Lack of knowledge and understanding of carbon impacts within supply chain
- Lack of national policy and framework to support decarbonisation within private sector
- Ability to not exclude SME or local suppliers



Land Use

We aim to increase carbon absorption and maintain biodiversity within our land assets.

The Council can utilise our land to support our carbon and biodiversity aims. We can do this through investment in renewable energy and planting schemes to support carbon absorption and improvement and maintenance of our biodiversity. The Council has worked on large scale projects to increase our renewable energy generation, however in order to reach our ambitious goals of decarbonisation more large-scale projects will need to be developed. It is unlikely that the Council will be able to reduce its annual GHG emissions to 1500 tCO₂e by 2030 (our current annual sequestration rate for our existing land assets). Where possible, the Council will explore opportunities for the sequestration rate to be increased.

We will:

- Investigate the potential of our land assets for new renewable energy installations and operating models and develop these schemes to increase the amount of energy generated from these sources
- Identify land for habitat restoration and tree planting schemes within land assets to mitigate climate change, adapt to impacts and enhance biodiversity.
- Audit the amount of herbicide and pesticide use on Council land assets
- Increase proportion of Council land managed for biodiversity to achieve 30 by 30 such as the introduction and management of wildflower and reduced mow areas.
- Support the increase of tree canopy cover across the county in line with the Urban Tree and Woodland Plan.
- Assess impacts of Ash Dieback and tree planting within Flintshire assets on canopy cover and net carbon sequestration
- Increase area with reduced mowing regimes to enhance biodiversity and increase carbon storage
- Strengthen the monitoring of sustainable drainage systems (SuDs) installation and quality in new developments.
- Explore best practice policies and encourage provision of space for food growing in new developments and vacant and under used sites

Further measures of success and timescales can be found in Appendix 2.

Constraints and Interdependencies

Within the Land Use theme there are constraints and interdependencies beyond the Council's control. These factors will affect the Council's ability to meet Net Zero Carbon by 2030.

- Availability of funding, including Local Government settlement
- Competing priorities for land
- Lack of capacity within the National Grid to facilitate renewable energy schemes
- Availability of land for purchase

"In Wales we have lots of nice scenery and parks, which are full of wildlife"
Ava, 9, Northop Hall CP



Behaviour

Climate change is a behavioural change programme. Behavioural change is a large part of climate action and the success of both the Council's and the wider nation's climate ambitions hangs on all of our actions. Communication and engagement is key for ensuring the ambitions set out in this strategy are embedded within the Council's culture and ethos.



Figure 10: The Council's control and influence in decarbonisation

We will:

- Ensure climate change and biodiversity is considered a priority in decision making across all Council services
- Ensure Councillors and employees complete carbon-related and biodiversity training. Inclusion of climate change within induction and appraisal processes.
- Facilitate transition towards a 'paperless Council' through, for example, digitisation of wage slips, report packs, contracts, applications, etc.
- Facilitate corporate volunteering for climate and biodiversity action

Further measures of success and timescales can be found in Appendix 2



Flintshire County's Carbon Footprint

Flintshire County has seen an overall reduction in GHG emissions between 2005 and 2022 as shown in Figure 11. The emissions during this time have reduced by 32.9% despite periods of increase specifically around 2006/07, 2011/12, 2017/18 and 2020/21.

The biggest overall reductions compared to 2005 data, have been seen in Waste with a 88% reduction, Public Sector with a 53% reduction, and Domestic Energy which saw a 48% reduction. Transport has seen a 17% reduction. The largest GHG emitter in 2022 is the Industrial and Commercial sector, with Transport and Domestic Energy second and third respectively. Flintshire has significant industrial areas in the county including Deeside Industrial Estate, and the heavily used A55 runs the length of the county. LULUCF stands for Land use, land use change and forestry, and is the difference between what is absorbed by the land and what is emitted.

Flintshire County Council was responsible for approximately 1.9% of the County's GHG emissions in 2022.

Flintshire County GHG Emissions by Sector

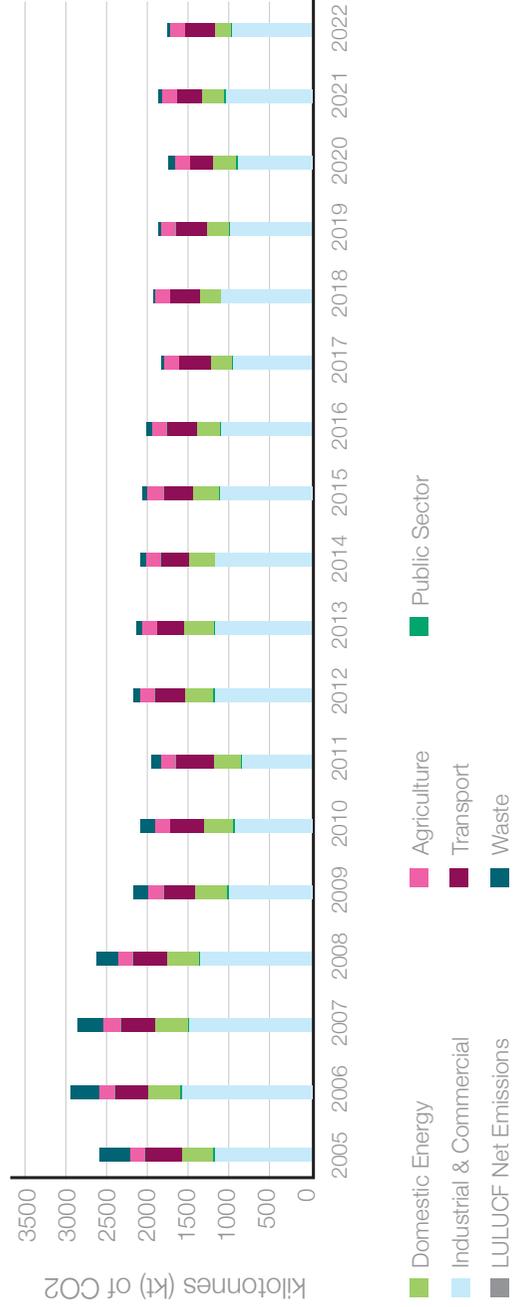
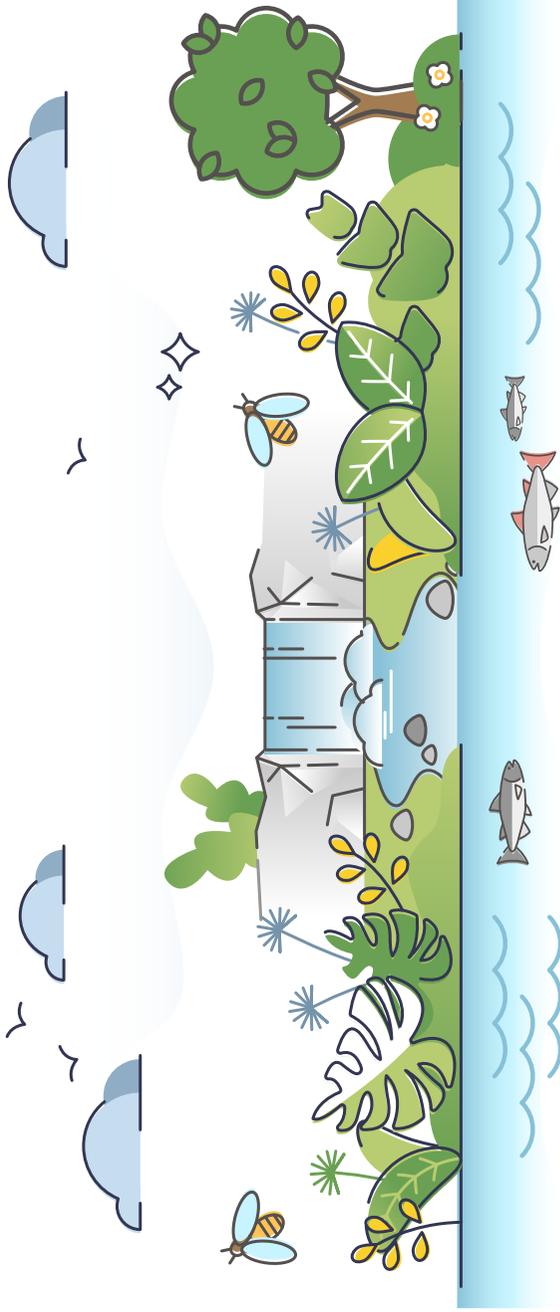


Figure 11: Sectoral GHG emissions in Flintshire County 2005-2022. Department for Energy Security and Net Zero (DESNZ)



How the Council can influence Flintshire County's emissions

Strategy Review Public Feedback

During Summer 2024, a number of engagement activities were carried out with the public, including public events and a public survey. The feedback from these activities was collated to inform the revised strategy, its aims and activities, and focusses within the wider county of Flintshire. During engagement, the public told us that they wanted to see more focus on how the Council can influence and empower climate action across the wider county of Flintshire. Key societal issues the public wanted improved through climate action were: public transport, air quality, cost of living and fuel poverty. There are a number of co-benefits that can be achieved by carrying out climate action, and these have been identified and linked within the action plan.

There are a number of actions that can be taken by the Council to reduce GHG emissions from the wider county, however it is important to identify action that is within the Council's direct control, and action that is outside of the Council's direct control. Through its leadership role, the Council can steer and influence as well as inspire individual and collective action and responsibility. Many actions such as rolling out electric vehicle charging infrastructure require a joined up, common approach which can only be brought about through joint working across boundaries.

However, collaboration and partnership working will be vital as many GHG emission sources lie outside of the Council's control and will therefore require cross sector input.

Local Authority influence and role in delivering Net Zero

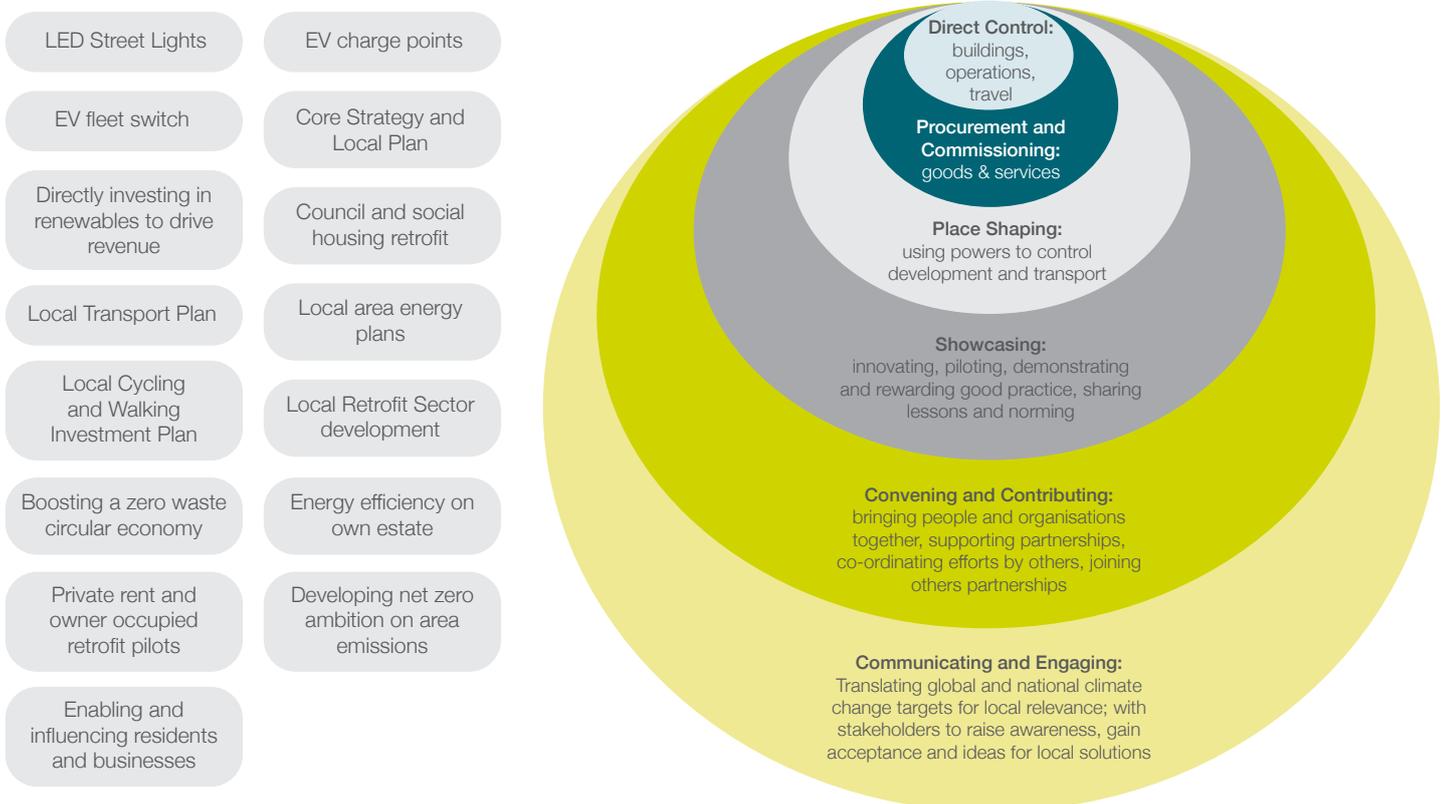


Figure 12: The view of the Committee on Climate Change on the role local authorities could play in achieving net zero carbon (Committee on Climate Change). [Local-Authorities-and-the-Sixth-Carbon-Budget.pdf](#)

These are the actions within the key themes that do not contribute to our direct carbon footprint but that we can deliver in order to engage, influence and empower others.

Buildings:

The public engagement told us that priority should be given to 'adapting buildings for the future' and 'renewable energy'. The Council will reduce energy consumption and emissions from homes and businesses in Flintshire by promoting energy efficiency measures, sustainable construction, renewable energy sources, and behaviour change.

- Decarbonising the local energy system by leading on our actions within the Flintshire Local Area Energy Plan (LAEP)
- Implementing a Housing Decarbonisation Strategy for the decarbonisation of Council homes in line with Welsh Government guidance to ensure optimised thermal efficiency, minimised cost of heating, and adapting for the future.
- Support Town & Community Councils to reduce operation's emissions and engage with our building users to encourage positive behaviour change
- Continue to deliver programmes with private households and local businesses to reduce fuel poverty and provide access to wider energy efficiency and renewable energy schemes.

Mobility & Transport:

The public engagement told us that they would like to see: Better transport infrastructure; Improve active travel infrastructure; Promote and encourage electric car use; Encourage and promote less car use.

The Council will reduce emissions from transport by promoting sustainable transport, reducing car travel and traffic congestion, and encouraging behaviour change.

- Promote use of public transport, active travel, and further develop the Council's walking and cycling network
- Promote multi-modal transport journeys and the development of strategic transport hubs. Improve access to storage, charging and hiring facilities.
- Consider opportunities with partners to enable greener fleet in the public transport sector (buses, rail, taxis) including Council contracted services such as school transport
- Ensure vehicle charging points are available at key areas across the county - rural and urban.

Land Use:

The public engagement told us that priority should be given to 'promoting sustainable farming' and 'renewable energy'. The Council will support other landowners and the community to utilise green spaces and maximise carbon absorption.

- Work with Tenant farmers to share best practice on sustainable farming and increasing carbon absorption
- Explore best practice policies and encourage provision of space for community food growing in new developments and vacant and under used sites
- Work with communities to increase biodiversity value and carbon storage
- Identify opportunities to acquire new Council land for the purpose of carbon sequestration and biodiversity enhancement

Behaviour:

The public engagement told us that they would like to see: Education in schools, the workplace, clubs, local groups; Training for residents; Promote the actions the Council are taking and need to take to reach NZC; Promote action residents can take; Communicate the strategy in clearer formats. The Council will support Council services, residents and businesses to adapt to the impacts of climate change.

- Support Clwyd Pension Scheme to reduce emissions by divesting pensions and other investment portfolios away from fossil fuels in support of green energy.
- Issue communications, events and activities for both internal and external stakeholders to raise awareness of climate change, promote council progress, and to encourage wider climate action.

Challenges & Opportunities

All sectors will need to work collectively to achieve climate change ambitions. This will require significant change in the way that we do things and the way we make decisions. It requires leadership at many levels and consultation both internally and with communities and businesses. General consumption of goods will need to be reduced, land managed to better absorb carbon, longer-term planning of building homes to be adaptable to the changing climate and designing roads and transport infrastructure that is resilient to weather changes. Difficult decisions will need to be made, that are not always popular, so that we can ensure a prosperous and sustainable society for the future.

There are multiple benefits to the Council's net zero carbon aims including health benefits due to cleaner air, warmer homes, increased walking and cycling and healthier diets. The local economy can grossly benefit from the investment in local energy and new green industries improving employment rates and social and financial deprivation. Ensuring a healthy net zero carbon future will contribute to all well-being goals under the Well-being of Future Generations (Wales) Act 2015⁹. It will also contribute towards the Council Wellbeing objectives 'An Ambitious Council' and 'A Caring Council'. Where possible the co-benefits of climate action have been illustrated within the revised Action Plan.

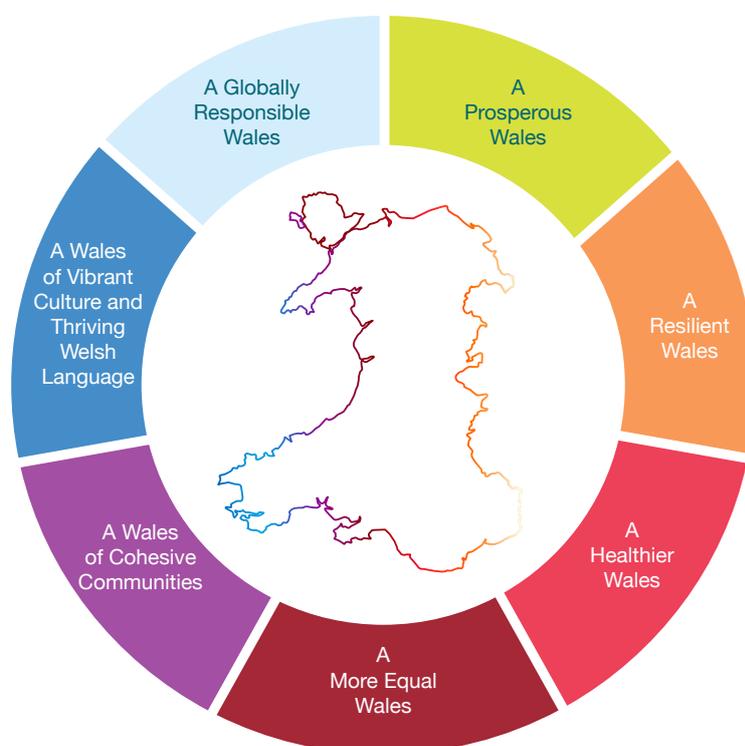


Figure 13: Well-being of Future Generations Act well-being goals for Wales. www.gov.wales/well-being-of-future-generations-wales

Flintshire County council will engage with the Government to call for increased commitment and resource to support the transition to net zero carbon. While there are actions that the Council can take to reduce its emissions; new legislation, regulation, policy and finance is required from the Government to reform to a net zero carbon society.

⁹Welsh Government (2015), Well Being of Future Generations (Wales) Act. (2015). <http://www.legislation.gov.uk/anaw/2015/2/contents/enacted>

Climate Risk & Resilience

A large focus of this strategy is on reducing the Council's impacts on the environment by reducing its carbon footprint. However, scientific evidence already tells us that the climate is changing (due to past emissions) and that while we can reduce future severity of change by decarbonising, we also need to prepare for a range of risks resulting from the already changed climate. This is known as climate adaptation/resilience.

UK Government's latest Independent Assessment of UK Climate Risk (CCRA3) was published in 2021¹⁰ and includes a Summary for Wales. It suggests that by mid-century (2040-2060) we can expect changes to our climate, seasonality and weather patterns such as: warmer and wetter winters, hotter and drier summers, high variability of extreme weather, increase of exposure to weather-related hazards, flooding and water scarcity, sea level rise, sea temperature rise and ocean acidification.

In response to CCRA3, the Welsh Government's 'Climate Adaptation Strategy for Wales' was released in October 2024¹¹. This strategy highlights the following risks identified within CCRA3 as most urgent areas for action:

- Risks to the viability and diversity of terrestrial and freshwater habitats and species from multiple hazards
- Risks to soil health from increased flooding and drought
- Risks to natural carbon stores and sequestration from multiple hazards, leading to increased emissions
- Risks to crops, livestock and commercial trees from multiple climate hazards
- Risks to supply of food, goods and vital services due to climate-related collapse of supply chains and distribution networks
- Risks to people and the economy from climate-related failure of the power system
- Risks to human health, well-being and productivity from increased exposure to heat in homes and other buildings
- Multiple risks to the UK from climate change impacts overseas

It sets out a strategic approach that considers the interrelated actions needed for addressing climate adaptation and resilience in Wales. Figure 14 below illustrates the different elements of the strategy, including the action plans and the cross-cutting issues Welsh Government are aiming to address.

"I hope the seas have stopped rising, the world has not flooded and sea creatures are ok. There is a lot of plastic in the ocean at the moment and I hope that has been cleaned up and more biodegradable plastic has been made. My school is pretty efficient – they are planting more trees and doing more work on computers so we use less paper" Riley, 8, Ysgol Wepre



¹⁰ The UK Government is required, under the 2008 Climate Change Act, to publish a Climate Change Risk Assessment (CCRA) every five years <https://www.theccc.org.uk/publication/independent-assessment-of-uk-climate-risk/>

¹¹ Climate Adaptation Strategy for Wales October 2024 <https://www.gov.wales/sites/default/files/publications/2024-10/climate-adaptation-strategy-for-wales-2024.pdf>

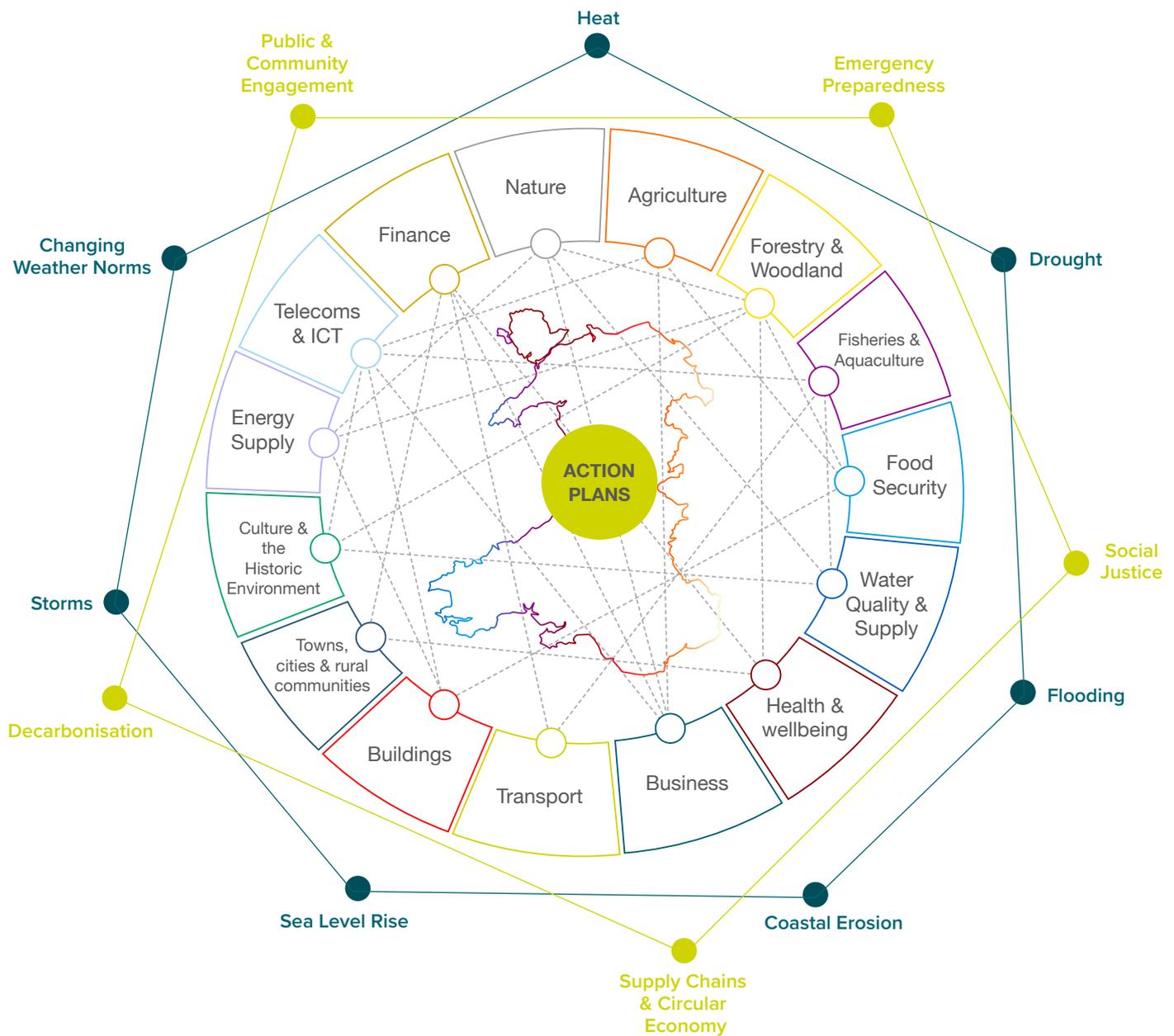


Figure 14: Climate Adaptation Strategy for Wales, page 13, Climate Adaptation Strategy for Wales 2024

The strategy further details key actions being taken by local government, and proposes four areas of focus to embed adaptation into all we do:

1. Partnership and Collaboration - Councils work closely with a range of partners and stakeholders to improve delivery of services and adapt to climate change, thus recognising the importance of cross-sector working and close collaboration to further increase resilience. Some positive work on adaptation is done through Public Services Boards where many of them are developing climate impact assessments or adaptation plans. There are also a range of opportunities to adapt and increase resilience on a regional scale via the work of Corporate Joint Committees on Regional Transport Plans and Strategic Development Plans.

2. Service Resilience - Councils also acknowledge that whilst adaptation may yield better results delivered collaboratively, they need to increase the resilience of their own services through better understanding of climate risks and changing the way they deliver services and manage assets and infrastructure. Developing approaches to organisational risk management, that incorporate climate impacts and regularly evaluate potential risks and vulnerabilities in local services and infrastructure, will be key components to increased service resilience.

3. Community resilience - Through the Well-Being of Future Generations Act, councils have a duty in ensuring community well-being. The decisions councils make, for example planning decisions, support to local businesses, or community education on climate risks and impacts, can have major implications on community sustainability and resilience. While we are seeing some of this work taking place around flood and coastal risks, this needs to be more widespread to include climate risks. Local communities themselves should also be involved in this work to enhance community acceptance of the need to adapt.

4. Leadership - Local leaders are instrumental in driving service change and seeking community buy-in. Leaders and Cabinet Members have been engaging in the WLGA's Climate Change Support Programme to share intelligence and learning on the best ways to incorporate climate change considerations into their decision making. The Adaptation Task and Finish Group will work closely with leaders and members in ensuring that adaptation is at the heart of decision making through a series of commitments.

Impacts to Council assets and services

To help us to plan and adapt to a changing climate, the Council needs to assess the risks to its assets and services and pull together a plan of mitigation action. By doing this, it provides reassurance that Council assets and services can continue to deliver and support the community through changing times.

A Climate Risk & Resilience strategy is currently being developed, however it will incorporate actions already identified within this strategy document, as well as exploring further aspects such as:

- Finalising the Council's Flood Risk Management Strategy, Strategic Flood Risk Assessment, Strategic Environmental Assessment, and Habitats Regulations Assessment.
- Reviewing Council land assets for feasibility of projects to support carbon absorption, biodiversity enhancement and natural flood mitigation.
- Review the strategy for Winter Maintenance and Severe Weather Deployment following potential for increased extreme weather events.
- Ensure capital works programmes incorporate measures that future-proof builds including use of natural ventilation, shading, and low-carbon energy sources.
- Continual development of the Active Travel Network and towards improvement of sustainable transport systems.
- Maintaining green spaces within both rural and urban environments – providing access to a natural environment for communities.
- Reviewing the provision of food growing sites across the county.
- Engaging communities and community groups to understand local risk and adaptation need across the county, and working with our communities to identify potential projects for climate risk resilience.
- Working alongside partner organisations to undertake a climate risk assessment for the county/region to better understand the risks and mitigating actions needed.

Impacts to the wider county and beyond

These risk impacts are largely within the control of the Council to mitigate, however a changing climate is much more far reaching than impacting the Council's assets and services. Due to this, a wider approach needs to be adopted to identify the full impacts of climate risks on the wider community – residents, businesses, third sector and the wider public sector. The topography and demographic across North Wales means that impacts to Flintshire county also have the potential to impact neighbouring counties.

The Flintshire & Wrexham Public Services Board has committed to support a regional approach to identifying climate risks that can impact our communities and develop a mitigation plan with all key stakeholders. This will ensure responsibilities for maintaining community resilience are shared across the sectors, and all parties have a common goal. The Council will engage in this process as a key stakeholder.

Financial Implications

Flintshire County Council has invested greatly in carbon reduction for over ten years and around £2.5 million has been invested in energy efficiency and renewable energy programmes through the interest free Salix invest-to-save programme. This investment, and the ongoing rationalisation of assets and agile working are producing financial and carbon savings in times of increasing energy prices.

Many Councils are under severe financial pressure with funding cuts over a sustained period reducing capacity for investment. However significant investment will be required if the Council is to achieve its goal of becoming net zero carbon by 2030. It is likely that resources will need to be diverted and increased to deliver on our ambition. The Council is experiencing the compound effects of years of austerity and budget challenges due to price increases, inflation, new legislation, and pressure on demand. The Council is also exposed as it is a low funded Council – the 6th largest by population but ranked 19 out of the 22 Welsh Councils for the amount of funding per capita it receives. Due to this, the Council must therefore find additional money through savings and efficiencies, charges for services, increases in Council Tax or by reducing or cutting services.

Despite this difficult situation we are faced with, the Council has a clear ambition to make its contribution towards tackling the climate emergency. This strategy has already explained that we don't have, at this moment in time, the total funds needed to fulfil all the projects in the plan. Some projects have already begun and therefore we already have the costs and funding details. Others can be partially developed whilst we seek additional funding, and others are dependent on continued grant funding.

There are also other projects that, for various reasons, we do not know what the full costs will be. We will need to undertake further work, or to co-operate with others, to calculate those costs.

Nevertheless, our current financial position does not stop us from starting or continuing to implement the projects outlined in this plan. Information about the estimated costs can be seen in the action plan.

Some investment will be required through both capital and revenue to deliver on this ambition, however it should be noted that it is not expected that finance will be provided by the Council alone. There is some scope to undertake external borrowing to fund projects but this has to be done in accordance of the requirements of the Prudential Code for Capital Finance in Local Authorities, which requires the Council to ensure that funding borrowing is affordable and does not place an unreasonable funding strain in future years. Projects that can generate revenue cost savings or allow the Council to avoid future costs could be funded from external borrowing. In order to implement capital projects on the scale required, funding from the UK and Welsh Governments will be required and it remains to be seen whether these will be 100% grants or will require an element of match funding from the Council. Whatever the level of funding will be, the Council will need to be ready with costed and viable projects to take advantage of opportunities that arise. It is likely that some or all of the funding will be on a competitive basis, with both Governments seeking to fund projects that give the maximum return towards achieving their climate change objectives. These funding streams will need to be fully maximised to ensure net zero carbon is achieved. Restructuring of internal funds/budgets and use of prudential borrowing will be required to fund other projects.

Several actions within this strategy, for example new builds to NZCio, already have committed funding either internally or from external sources such as Welsh Government. Energy related projects may be eligible for the Welsh Government Wales Funding Programme which offers low interest loans to the public sector for energy efficiency and renewable energy projects. It may be that some of the proposed projects can be tied in with existing work streams, however additional capacity is likely to be required.

Further development of the Programme's action plan will estimate the level of investment needed for the interventions described and businesses cases for individual investment projects will be developed to demonstrate the potential financial savings both short and long term.

Affordability is the greatest risk in the Council being able to achieve its net zero carbon goals and ambitions around climate risk resilience and area wide climate action. However, this Council remains committed to making our contribution to tackling climate change wherever and whenever we are able.

Measuring & Monitoring Impact

It will be crucial that the Council monitors and evaluates its progress to achieve the targets set out in this strategy. Reaching the overall aim of becoming a net zero council by 2030 will depend on effective and efficient data management, data monitoring and reporting (to demonstrate progress and identify areas for further development). Ensuring we have a robust and effective data management system in place. It will enable the Council to identify which emissions need to be prioritised and where resources need to be deployed to have the greatest impact.

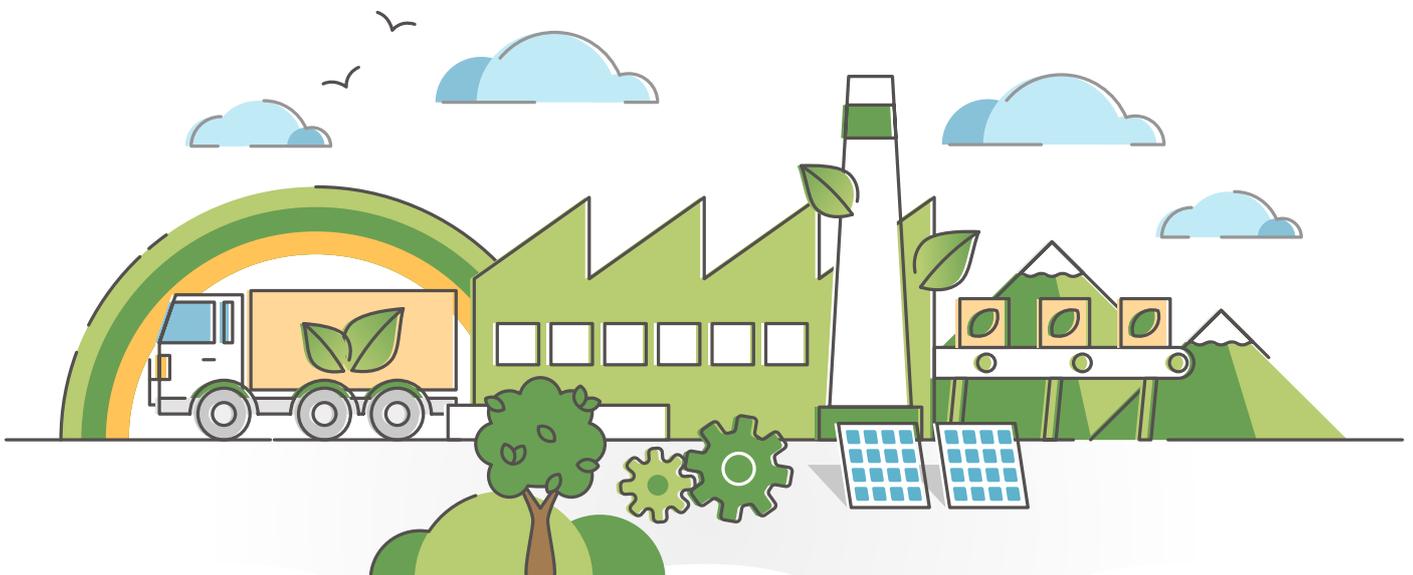
Therefore, the Council commits to:

- Measure and report carbon emissions from the Council's estate and activities each year to Welsh Government as part of its 'Welsh Public Sector Greenhouse Gas Reporting'.
- Publish performance and progress against targets annually.
- Continue to strengthen the accuracy of data collection through identification of gaps in process and emerging best practice.
- Continue to develop climate change actions and delivery plans through continued engagement internally and externally.
- Review the whole climate change strategy in 2027/28 to assess progress and areas for improvement and align targets within the key priority areas.

"I undoubtedly hope that by the time you are reading this, the state of the world has changed due to activists, protests and people's knowledge increasing about climate change. At this current period, our world is being destroyed, ruined and demolished each day and we need to take account for our actions"
Lydia, Argoed High

"Me and my family walk to school and back (as much as we can) to reduce polluting the atmosphere. We also turn lights off when we leave rooms (my sister doesn't). However, we sometimes leave the TV on for a bit when we are not watching it, even though we know we shouldn't. This is something we are working on."

Hannah, 9,
Ewloe Green CP



Governance

The climate change strategy will be delivered as a programme of activities that is coordinated and managed centrally but has the input and involvement of all Council service areas and external partners.

Political steer for this programme will come from the Cabinet Member for Economy, Environment & Climate, and the Chair of the Climate Change Committee.

Programme progress will be monitored by the Climate Change Committee which is made up of representatives from each political party. This Committee will be supported by Officer Groups for each theme with representation from each of the stakeholder portfolios. Progress reports will be received by the Environment & Economy overview & Scrutiny Committee to deliver further development of the plan. Scrutiny of the programme is also available from Internal Audit as appropriate.

Key performance measures will be included in the Council Plan performance report.



Keeping Others Informed

The Climate change programme's communication and engagement plan ensures there is a range of communication and engagement across a range of media platforms including attendance at public events, throughout the year.

Any consultation and surveys carried out with the public are linked within the Council's [consultation platform](#).

The Council has developed a suite of webpages to support climate action. The [Climate Change webpages](#) provide a breakdown of the Council's commitments within the key themes of the programme, and update on progress within these themes. There are also pages sharing ideas and information about how individuals in the community can reduce their carbon impacts.

The Climate Change team have developed a [Climate toolkit](#) for Schools and Community Town Councils to help them to understand their carbon impacts and develop a carbon reduction plan engaging pupils and the community in the process.

News items and articles on climate action are often shared through the Corporate facebook [facebook.com/FlintshireCC](https://www.facebook.com/FlintshireCC) and X [@FlintshireCC](https://twitter.com/FlintshireCC) .

You can always contact the team directly climatechange@flintshire.gov.uk

"I think the world will be flooded in 2071, half of the world's animals have probably died, hundreds of beaches closed because of the plastic overflowing them"
Kuba,
Ysgol Merlyn

"We can recycle paper so that trees don't have to be chopped down and recycle plastic so it doesn't have to be dumped in the clear sparkling ocean" Olivia,
Ysgol Merlyn



Appendix 1 Glossary

Biodiversity: The variety of plant and animal life that make up our natural world or a particular habitat.

Carbon Dioxide Equivalent (CO₂e): The equivalent amount of carbon dioxide that would produce the same amount of global warming over a 100 year timescale.

Carbon Store: The amount of carbon stored in the natural environment such as soil, woodland, peatland etc. These may also be described as carbon sinks.

Climate Change Adaptation: Actions to help organisations and communities to prepare for the impacts of climate change.

Climate Change Mitigation: Actions to help reduce greenhouse gas emissions and therefore help to prevent further climate change.

Council assets: Buildings and land owned by Flintshire County Council.

Decarbonisation: Reducing the carbon intensity and greenhouse gas emissions of an activity or service or wider organisation.

Direct Emissions: Emissions of greenhouse gases into the atmosphere from sources that are owned or controlled by an organization such as burning natural gas in boilers, burning petrol in owned company vehicles etc.

GHG Protocol: Greenhouse Gas Protocol provides internationally recognised standards, guidance, tools and methodologies to ensure consistency in Greenhouse Gas reporting.

Green Infrastructure: A catch-all term to describe the network of natural and semi-natural features within and between our villages, towns and cities. These features range in scale, from street trees, green roofs and private gardens through to parks, rivers and woodlands. At the larger scale, wetlands, forests and agricultural land are all captured by the term.

Indirect Emissions: Emissions of greenhouse gases that are a consequence of the activities of the organization but occur at sources owned/controlled by another organization.

Lifecycle assessment: This is a cradle-to-grave or cradle-to-cradle analysis technique to assess environmental impacts associated with all the stages of a product's life, which is from raw material extraction through materials processing, manufacture, distribution, use and disposal.

Net Zero Carbon: Emissions of greenhouse gases are balanced by the removal of greenhouse gases from the atmosphere such as by trees, peatland and carbon capture and storage technologies.

Net Zero Carbon in operation (NZCio): The operation of a building or business balances the amount of greenhouse gases it produces with the amount it removes. This can be achieved by reducing emissions and removing emissions.

Offsetting: A reduction in GHG emissions (e.g. wind turbines replacing coal) or an increase in carbon storage/GHG removal enhancement (tree planting, peatland restoration) outside of the GHG emissions boundary of an organisation that is used to compensate GHG emissions occurring within the organisation's boundary

Scope 1/2/3: Used to delineate direct and indirect emission sources to improve transparency and provide utility for organisations and climate policies. Scope 1 refers to direct greenhouse gas emissions from sources owned or controlled by the organization. Scope 2 refers to indirect greenhouse gas emissions produced from the electricity used by an organization. Scope 3 refers to all other indirect greenhouse gas emissions produced from the activities of an organization.

Sequestration: Removing carbon dioxide from the atmosphere and then storing it, usually through environmental processes such as photosynthesis, absorption by soil, oceans etc.

Welsh Public Sector Net Zero Carbon reporting guide: In response to Welsh Government's target of a net zero carbon public sector by 2030 a new Welsh GHG emissions reporting system has been developed whereby public sector organisations will report their GHG emissions annually to Welsh Government. Detailed guidance has been provided to support organisations in their calculations.

Appendix 2 Action Plan to Net Zero Carbon

Climate Change Strategy Action Plan 2025-30

Co-benefits of Climate Action Key

 Health	Addressing air quality, mental health, lifestyle diseases. Reducing pressure on National Health Services.	 Green space	Increased area or access to green space including tree planting and urban greening.
 Jobs & Economy	Creation of new green jobs, supporting the economy.	 Resilience	The ability to prepare, recover and adapt to climate impacts, eg extreme weather, access to resources, economic recovery.
 Equity & Community	Safe, prosperous communities for all, regardless of status, wealth, race, religion, etc. Accessibility and mobility for residents.	 Resource & Capacity	Climate actions that can release resource, increase capacity, or generate income, to fund other projects and services.

No.	Theme	Action	Monitoring Value	CO2 Saving (tCO ₂ e)	Cost (£)	Co-Benefits
CCBu1	Buildings	Annually appraise green energy tariff options for all Council operated buildings and schools	% electricity supply from green tariff	0	Varies Annually	
CCBu2		Review and rationalise building assets and leases	No. Rationalised assets with potential reduction in emissions from energy used in under-used assets	437.3	County Hall Closure Phase one £805,545	 
CCBu3		Improve the standard of energy efficiency within Council buildings through retrofit measures such as; insulation, glazing, installation of efficient / renewable heating systems, and reducing building electricity use. Communicate developments to building users upon completion.	% reduction in energy use in council buildings	2092.42	High level sum of several ongoing projects & feasibility studies £18,000,000	   
CCBu4		Implement water use efficiency measures across council assets	% reduction in water use in council buildings	Further research required	Further research required	 
CCBu5		Continue investment in renewable energy opportunities for Council buildings, council office car parks and depots	% electricity generated and supplied to FCC from its own renewable generation assets	3.27	High level sum of several ongoing projects & feasibility studies £70,000	  

No.	Theme	Action	Monitoring Value	CO2 Saving (tCO ₂ e)	Cost (£)	Co-Benefits
CCBu6	Buildings	Design and refurbish buildings (in scope) for Net Zero Carbon in Operation / low energy operation, biodiversity net benefit and adaptation to the impacts of climate change.	No. of projects meeting NZCiO / Low Carbon, and biodiversity measures	177.9	On average 20-30% increase in total cost of build to meet NZCiO standards.	
CCBu7		Ensure green infrastructure is considered throughout all existing Council buildings, assets and future schemes to increase resilience to climate change and support biodiversity	No. of green infrastructure schemes	Further research required to understand reduction	Further research required to understand costs and savings	
CCBu8		Continue to carry out flood investigation and alleviation to identify proactive mitigation measures & prevent recurrent flooding	No. of flooding incidents prevented No. of flood measures completed	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCBu9		Prioritise nature-based solutions to flooding remediation proposals using Land Strategy to identify opportunities on council and private land.	No. of flooding remediation proposals incorporating nature-based schemes	Further research required to understand carbon reduction / sequestration	Further research required to understand costs and savings	
CCBu10		Support Schools and Town & Community Councils to reduce their emissions and engage with other building users to encourage positive behaviour change.	% of Schools and Town & Community Councils engaging in climate action	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCBu11		Implement a Housing Decarbonisation Strategy for the decarbonisation of Council homes in line with Welsh Government guidance to ensure optimised thermal efficiency, minimised cost of heating, and adapting for the future.	Decarbonisation strategy and action plan completed and implemented. No. of houses improved.	Further research required to understand carbon reduction	On average approx. £13,500 per home for fabric first approach.	
CCBu12		Continue to deliver programmes with private households and local businesses to reduce fuel poverty and adapt for climate impacts. Provide access to wider energy efficiency and renewable energy schemes.	No. of household receiving energy efficiency support No. of businesses supported to reduce their carbon footprint. No. of businesses attending Deeside Decarbonisation Forum.	Further research required to understand carbon reduction	Further research required to understand costs and savings to private households and businesses	

No.	Theme	Action	Monitoring Value	CO2 Saving (tCO ₂ e)	Cost (£)	Co-Benefits
CCM1	Mobility & Transport	Review fleet strategy and journey management in supporting sustainable transport modes.	Reviewed Fleet Strategy and Journey Management	Further research required to understand carbon reduction	Further research required to understand costs and savings	 
CCM2		Ensure vehicle charging points are available at key areas across the county - rural and urban.	No. of EV charging points across county – corporate and public	Further research required to understand carbon reduction	Phase 2 off street charging approx. £250,000	  
CCM3		Transition of recycling, small and heavy fleet vehicles to electric and alternative fuels (hydrogen, etc.), building on learnings from the previous introduction of electric recycling vehicles.	% reduction of Fleet emissions	1912	LGV approx. £22,000 - 60,000 each HGV approx.. £140,000 - 200,000 each	 
CCM4		Introduce a car sharing platform for employees	No. of employees who car share % reduction in carbon emissions from business mileage % reduction in carbon emissions from employee commuting	Further research required to understand carbon reduction	Further research required to understand costs and savings	 
CCM5		Actively promote the existing employee cycle to work scheme to increase participation and review cycle storage facilities at principle work places (eg. Flint, Ty Dewi Sant and Alltami Depot)	No. employees using the scheme	Further research required to understand carbon reduction	Further research required to understand costs and savings	 
CCM6		Launch and promote a managed salary sacrifice scheme for low and ultra-low emission vehicles.	No. employees using the scheme	256	Further research required to understand costs and savings	  
CCM7		Promote use of public transport, active travel, and further develop the Council's walking and cycling network ensuring connectivity between schemes.	No. of active travel projects undertaken	33	Further research required to understand costs and savings	   
CCM8		Work with Public Transport partners to grow offerings of public transport, develop strategic transport hubs, and promote multi-modal journeys and cycle facilities, in line with Regional Transport Plan	No. of transport hubs No. of new Public Transport services implemented	Further research required to understand carbon reduction	Further research required to understand costs and savings	  
CCM9		Consider opportunities with partners to enable greener fleet in the public transport sector (buses, rail, taxis) including Council contracted services such as school transport.	No. of low emission vehicles in public transport	Further research required to understand carbon reduction	Further research required to understand costs and savings	

No.	Theme	Action	Monitoring Value	CO2 Saving (tCO ₂ e)	Cost (£)	Co-Benefits
CCP1	Procurement	Increase the utilisation of the TOMs (Themes, Outcomes and Measures) framework in procurement across the Council's operations by working with employees who manage procurement activities	% of commissioning employees receiving support	Further research required to understand carbon reduction	Further research required to understand costs and savings	  
CCP2		Establish the WLGA Carbon Reduction Toolkit ensuring it is fit for purpose and ensure ownership by procuring officers.	% of commissioning officers using the toolkit	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCP3		Ensure carbon reduction is appropriately considered throughout Council procurement policy, strategy, business cases, commissioning templates, tender evaluations, etc.	% of qualifying contracts submitting carbon reduction plans	Further research required to understand carbon reduction	Further research required to understand costs and savings	 
CCP4		Engage Council officers who procure on a regular basis to attend Supply Chain Sustainability training to grow knowledge and ownership of responsible procurement.	% of commissioning employees receiving sustainable procurement training	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCP5		Engagement with local council suppliers to increase understanding in respect of Decarbonisation and work with them to ensure decarbonisation outcomes are achieved	No. of suppliers engaged	Further research required to understand carbon reduction	Further research required to understand costs and savings	  
CCP6		Carbon Specific KPIs to be included in contracts of £6m incl. VAT and greater to monitor carbon reduction through the life of the contracts	% of contracts with Carbon Specific KPIs	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCP7		Create guidelines for Council procurement of food in offices, schools, etc, to be local and sustainable	Guidelines identified and implemented	Further research required to understand carbon reduction	Further research required to understand costs and savings	  

No.	Theme	Action	Monitoring Value	CO2 Saving (tCO ₂ e)	Cost (£)	Co-Benefits
CCL1	Land Use	Monitor carbon sequestration within Council assets through mapping habitat types, accounting for asset changes and developing methodologies.	Maintain carbon sequestration records Engage with partners to develop methodologies	Further research required to understand carbon reduction	Further research required to understand costs and savings	 
CCL2		Investigate the potential of our land assets for new renewable energy installations and operating models, and develop these schemes to increase the amount of energy generated from these sources	No. of new land-based renewable energy installations Increase of energy generation	Further research required to understand energy generation potential	Further research required to understand costs and savings	  
CCL3		Identify land for habitat restoration and tree planting schemes within council land assets to mitigate climate change, adapt to impacts, and enhance biodiversity.	No. of existing land assets improved for carbon sequestration, climate impacts and biodiversity	Further research required to understand carbon sequestration	Further research required to understand costs and savings	     
CCL4		Increase proportion of Council land managed for biodiversity to achieve 30 by 30 such as the introduction and management of wildflower and reduced mow areas.	% area increase in semi-natural habitat No. of nature recovery projects completed	Further research required to understand carbon sequestration	Further research required to understand costs and savings	     
CCL5		Support the increase of tree canopy cover across the county in line with the Urban Tree and Woodland Plan.	% canopy cover No. of trees planted No. new areas allocated for natural regeneration	Further research required to understand carbon sequestration	Further research required to understand costs and savings	     
CCL6		Assess and manage impacts of Ash Dieback and tree planting within Flintshire assets on canopy cover and net carbon sequestration	No. of trees removed and planted	Further research required to understand carbon sequestration	Further research required to understand costs and savings	     
CCL7		Strengthen the monitoring of sustainable drainage systems (SuDs) installation and quality in new developments.	% of appropriate new development with SuDs	Further research required to understand carbon emissions/sequestration	Further research required to understand costs and savings	 

No.	Theme	Action	Monitoring Value	CO2 Saving (tCO ₂ e)	Cost (£)	Co-Benefits
CCL8	Land Use	Explore best practice policies and encourage provision of space for food growing in new developments and vacant and under used sites	No. of sites developed	Further research required to understand carbon emissions/sequestration	Further research required to understand costs and savings	
CCL9		Undertake a land use strategy to ensure land is managed and protected for green infrastructure, council decarbonisation and biodiversity benefit, linking with private, third and public sector bodies to maximise impact.	Strategy developed and adopted LDP Monitoring	Further research required to understand carbon emissions	Further research required to understand costs and savings	
CCL10		Work with farmers to share best practice on existing and future sustainable farming methods, increasing carbon absorption and biodiversity value.	No. of Tenant and Private farmers engaged	Further research required to understand carbon emissions/sequestration	Further research required to understand costs and savings	
CCL11		Introduce new materials for collection at the kerbside with a focus on flexible plastics, small electricals, textiles.	No. new waste streams investigated	Further research required to understand carbon emissions	Further research required to understand costs and savings	
CCL12		Support circular economy initiatives diverting reusable items from disposal through recovery at Household Recycling Centres	No. of repair and reuse centres	Further research required to understand carbon emissions	Further research required to understand costs and savings	
CCL13		Work with communities to increase biodiversity value and carbon storage.	No. of schemes supported	Further research required to understand carbon sequestration	Further research required to understand costs and savings	
CCL14		Identify opportunities to retain and acquire new Council land for the purpose of carbon sequestration and biodiversity enhancement.	Area of land acquired for carbon sequestration and biodiversity enhancement	Further research required to understand carbon sequestration	Further research required to understand costs and savings	
CCL15		Engage with the Planning Department to develop planning strategy and decision-making to align with Carbon, Biodiversity and Climate Adaptation needs.	No. of developments / policies engaged with	Further research required to understand carbon emission/sequestration	Further research required to understand costs and savings	

No.	Theme	Action	Monitoring Value	CO2 Saving (tCO ₂ e)	Cost (£)	Co-Benefits
CCBe1	Behaviour	Ensure climate change mitigation, adaptation and biodiversity are considered a priority in decision making across all Council services.	No. of key policies and processes reviewed which consider carbon reduction	Further research required to understand carbon reduction/sequestration	Further research required to understand costs and savings	
CCBe2		Ensure Councillors and employees complete carbon and nature related training to drive understanding and action.	% of Councillors and employees received training	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCBe3		Review induction and appraisal processes to include carbon and nature principles and priorities, where appropriate	Reviewed processes	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCBe4		Facilitate transition towards a 'paperless Council' through, for example, digitisation of wage slips, report packs, contracts, applications.	No. of paper reduction initiatives completed	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCBe5		Facilitate corporate volunteering for climate and biodiversity action including a Climate Champion network to support services to embed climate action.	No. of corporate volunteer hours % of services supported by a Climate Champion	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCBe6		Support Clwyd Pension Scheme to reduce emissions by divesting pensions and other investment portfolios away from fossil fuels in support of green energy.	% reduction of pension fund carbon emissions	Further research required to understand carbon reduction	Further research required to understand costs and savings	
CCBe7		Issue communications, events and activities for both internal and external stakeholders to raise awareness of climate change, promote council progress, and to encourage wider climate action. Collaborate with existing local media and publications to widen communication to residents.	No. of internal and external events/activities No. of internal and external communications	Further research required to understand carbon reduction	Further research required to understand costs and savings	