Cabinet

Date of Meeting	Tuesday, 17th December 2019
Report Subject	The Council's Response to the Challenges of Climate Change
Cabinet Member	Collective Responsibility
Report Author	Chief Officer (Planning, Environment and Economy)
Type of Report	Strategic

EXECUTIVE SUMMARY

This report outlines (1) how the Council should respond to Climate Change as a responsible body and (2) the challenge of meeting Welsh Government's requirement that the public sector in Wales should be carbon neutral by 2030. It sets out work undertaken so far, actions that need to be taken in the future and how the strategy will be governed monitored and resourced.

RECOMMENDATIONS	
1	To support the establishment of a Response to Climate Change Strategy Board
2	To support the recruitment of a Programme Manager to coordinate the Council's response to Climate Change
3	To support the progress undertaken so far to reduce the Council's carbon footprint
4	To issue a public statement of commitment and intent on our position, activities to date and intended actions e.g. Carbon Reduction, Plastics reduction, Renewable energy, greening

REPORT DETAILS

1.00	EXPLAINING THE REPORT
1.01	The impact of human activity on global warming is accepted as significant and will require immediate action to mitigate the potential catastrophic global events including higher temperatures, severe weather events and rising sea levels. Flintshire will not be immune to the impact these global issues have on food supplies and economic stability, but will also feel the effects of global warming more locally and directly, with more regular flood events likely, higher summer temperatures leading to higher mortality rates for older people, and a different natural environment developing as existing flora and fauna decline and new, invasive species fill the ecological niches they leave. The question then arises about how the Council responds appropriately. One significant step that the Council can take is in relation to balancing its emissions of carbon (known as achieving carbon neutral state)
1.02	The Welsh Government is expecting the public sector to take an early leadership role in driving towards and delivering a low carbon future. Their document "Prosperity for All: A Low Carbon Wales" sets a clear aim of a carbon neutral public sector by 2030. Appendix 1. The scale of this challenge is significant and for the Council to achieve a net carbon zero position – where we have either completely eliminated our carbon emissions, or we have balanced emissions we make with measures to offset those emissions through renewable power generation or tree planting – will require a different approach to be taken to our existing. Public sector organisations across Wales are stepping up to this challenge through declaring climate emergencies, baselining their total carbon emissions and coordinating decarbonisation projects and work streams. The County Council have been promoting decarbonisation through activities such as installing energy efficiency measures, renewable energy technologies, promoting recycling and landfill avoidance, managing land for the benefit of biodiversity etc for a number of years. The extent of our activities are reflected in Appendix 2. Broadly, there are 12 areas which will help to shape the Council's response to Welsh Government's challenge are we are making progress in the bulk of these 1. Leadership The Council has a duty of leadership as a democratically elected local body representing the population of Flintshire. This leadership involves the example it sets, the actions it takes and what it says – all of which should benefit local citizens, communities, economies and the environment. A lack of leadership in terms of sustainability and activity to address climate change would fall short of public expectations. The aims that the Council is trying to achieve should be well thought out, consulted on, publicised and acted upon.

The Council has recognised the gravity of the climate change challenge in the revised Council Plan for 2019 onwards with a series of actions identified and being progressed (see below). The Council have ratified the Council Plan and recently received the mid-year progress update against those actions.

Given its breadth, magnitude and impacts, the climate change response falls across all portfolios and Cabinet Member functions. The issue of carbon reduction will be led by the Cabinet with a Climate Change Strategy Board being established with all-portfolio membership and political representation at Cabinet level.

2. Strategy

The Council needs a strategy to address the climate change challenge, to promote carbon emissions reduction and improve sustainability. Any strategy should show the way forward and how success will be realised over time. However, the strategy should not stand alone. It should link to other over-arching strategies within the local authority such as Council Plans, Local Development Plan and long term investment plans, as well as specific annual business plans and individual project plans. The strategy needs to be woven in to other strategies.

Whilst we have actions and projects within the Council Plan to address carbon reduction and improve sustainability, we do not have an up-to-date over-arching strategy, other than an ambition and requirement for us to meet WG's challenge for the public sector to be carbon neutral by 2030. We have an existing Carbon Reduction Strategy, which was originally produced in 2009, which sought to reduce our carbon output by 60% but this is based purely on energy usage. This strategy will be revised and broadened in its scope to establish a programme of projects to drive the Council's move to carbon neutrality by 2030.

3. Capacity

Significant change will not happen in any organisation without adequate capacity. That can take many forms – enough political will to perpetuate an approach; the human resource to spend time carrying out the necessary work; the skills and knowledge to imagine and manage projects; the financial resource to invest when necessary; the understanding to realise the benefits of long term commitment and planning.

Currently the climate change response is being led by the Chief Officer (Planning, Environment and Economy) with assistance from our Energy Conservation Engineer and her colleagues. Colleagues within Streetscene and Transportation are also leading a number of projects within the Green Theme of the Council Plan.

It is becoming clear that if we are to actively respond to the climate change challenge, the Authority needs to invest in staff capacity to develop our strategy and manage a programme of projects to lead us to carbon neutrality by 2030. A business case will be prepared for this specific staffing resource to lead the delivery of our Carbon Reduction Strategy.

4. Action Plan and Projects

Strategies and targets can only be achieved through projects and they require planning. Action plans need projects so drawing one up should help generate ideas

within our portfolios. Any action plan should be split into short (the first 100 days), medium and long term. Some projects may not be technically possible yet but may be achievable over a long timescale. A timescale for projects helps to clarify priorities and the resources to be allocated. Input to plans and the responsibility to carry them out needs to come from all in the organisation. Monitoring, reporting and reviewing them may be the job of an individual but objectives, such as climate emergency targets, will not be met without the support of all officers and councillors.

The action plan and additional projects will flow from the revised Carbon Reduction (Neutrality) Strategy. Some projects are already being progressed as outlined below, but short, medium and long term action plans will be produced.

5. Targets and data

Whilst an informed strategy and action plan are key to addressing the carbon neutrality challenge, finding the data to make them informed is much more difficult. Setting a target date for carbon neutrality and then producing up a plan to meet that date, is one approach. Another is to analyse the relevant data and establish when carbon neutrality can be achieved. Both methods have benefits. The points is that data is a vital ingredient when setting and monitoring targets.

We currently have a wealth of data available and this will inform the state of play analysis to be undertaken by the end of Q4 2019/20 which the Council Plan requires. Given the extent of the data which we collect, when produced, our revised Strategy and Action Plan will be well informed and deliverable.

6. Finance and risk

In times of austerity, it is even more important to justify how spending decisions are made. Many councils have declared climate emergencies and it seems natural that any emergency deserves money being spent on it. However, others would argue that local authorities have many emergencies so the skill is in the prioritisation. This will come down to how seriously a council considers its responsibilities in the realm of sustainability. The risk of allocating financial resources to one emergency or priority over another requires skill, time and a tried and trusted method.

The Green Council theme projects have been undertaken within the existing workloads of the portfolios. Where a Business Case for investment has been established, the Council has historically made the necessary capital investment e.g. solar farms, PV on schools. The Academi session which took place with senior managers on November 6th 2019 generated a series of potential projects which need to be reviewed for further appropriate investment.

7. Partnership and collaboration

A local authority's activities will make a contribution to their locality's carbon emissions, but it may only 2 or 3% of all the emissions within the area. Other businesses, employers, academic institutions, public services and citizens make up the rest and we should engage with them to make sure they understand, accept and work towards reducing their emissions. The local authority has a responsibility to support others to improve their actions but it cannot be held responsible for them. This split needs to be made clear.

We have begun initial discussions with Denbighshire and Wrexham Councils in relation to procurement, potential investment opportunities and the sharing of knowledge and skills. The Public Services Board is taking a regional approach to carbon reduction, led by Natural Resources and Flintshire is fully engaged with this work. We need to seek regional support amongst other public sector authorities for decarbonisation activities that are cross cutting and cross boundary or would benefit from economies of scale. We need to conclude which projects we can take forward with these partners and how we will resource them.

8. Suppliers and procurement

Those who supply local authorities have a duty to supply sustainably and local authorities have a duty to inform them about their sustainability requirements. There is a need to work closely together and to identify clearly what is and is not acceptable. A local authority cannot have a climate related target whilst ignoring the activities of its suppliers. The impact of our choice of supplier through the procurement can have a significant impact on a public body's carbon footprint (estimated in the region of 50%).

The Council has taken steps to revise our Procurement strategy in relation to improving the environmental, societal and ethical impacts.

9. Education and culture change

Everybody needs to be brought up to speed with the sustainability agenda and about how our actions as individuals and organisations impact on the natural environment and how it will impact on us. That means making a definite effort to put in place materials and resources that will educate us so that our citizens and workforce are informed enough to make the changes we need to, in order to change our behaviour.

Whilst we have begun work with staff at Academi level, the interaction with the workforce and the public has been limited to date. The new educational curriculum addresses sustainability and that will increase interest, expectation and desire to support carbon reduction initiatives. We will produce a Communications Plan for the Carbon Reduction project to make our citizens aware of the work undertaken so far and to seek their support for our future proposals.

10. Innovation

Some of the technologies associated with reducing carbon emissions, and with renewable energy generation and energy efficiency specifically, are developing at a rapid rate. This can mean that local authorities may wish to invest in technology that they have never used before, deliver services and collaborate in ways they haven't done before and work with suppliers in new ways. Without innovation we may not move forward so there is a responsibility on us all to accept our share of innovation and make sure we manage it successfully.

Historically, the Council has been innovative in terms of our investments: e.g. solar farms in Buckley, replacing street light bulbs with LEDs, placing solar PV on schools. The Council Plan has identified further innovative actions and the recent Academi session produced a significant number of other initiatives. These need further exploration and Business Cases produced for those which we want to progress.

11. Review and Inform

The dynamic nature of this agenda means that reviewing strategies and action plans is vital. New technologies and models are emerging continually and can make a significant contribution to meeting targets, so regularly revisiting our approach is good practice. Equally, keeping those within the Council, partners, suppliers and others informed of progress and opportunities is a role for the Council.

We will review the original Carbon Reduction Strategy and have a governance structure in place to monitor the success of the Carbon Reduction programme and individual projects.

12. Behaviour change

This is the most difficult aspect of the climate change agenda to achieve and will take the longest. Of course different people will have different views about what behaviour change means but it involves supporting people to change their eating habits, travelling habits, buying habits and some of their most fundamental routines. It will take generations and governmental intervention to fully see these types of changes. However, making smaller changes to the suppliers the Council uses, how staff, councillors and citizens are engaged in the sustainability agenda and simply ensuring this agenda remains at the forefront of people's minds, are changes which will impact on behaviour and can be made over shorter timescales.

The work that we have done so far

As a Council we have not stood still and have recognised and reacted to the challenge of climate within our Council Plan – Green Council theme and committed to the following actions for 2019/20:

4.1.1.1 (CP) Establishment of an officer group by quarter three to lead on the Council's commitment to be carbon neutral by 2030

4.1.1.2 (CP) Completion of a 'state of play analysis' of current Council activities on carbon reduction underpinned by the mapping of existing activity data

4.1.1.3 (CP) Completion of a greenhouse gas inventory covering scope 1, 2 and 3 emissions and greenhouse gas sequestration across the Council's land assets

4.1.1.4 (CP) An agreed plan to design and resource further energy efficiency and sustainable energy schemes such as the ground mounted solar PV schemes in Flint and Connah's Quay

4.1.1.5 (CP) Completing the renewable energy assessment though the Local Development Plan process in support of the future strategy

4.1.1.6 (CP) Agreement of a strategy for fleet conversion, away from diesel and petrol vehicles, for the medium and longer-term

4.1.1.7 (CP) Developing a local plan to meet the need access to E- charging points across the county network

4.1.1.9 (CP) Approval of the Council's Strategy to act as an enabler rather than a direct provider for electric charging infrastructure

4.1.1.10 (CP) Identification of commercially viable sites for the introduction of appropriate charging infrastructure

4.1.1.11 (CP) The adoption of a strategy to reduce the Council's reliance on single use plastics

Items on this Cabinet agenda show the progress against two of these actions in relation to the development of e-charging points across the County and the development of solar farms in Flint and Connah's Quay.

Decarbonisation

To meet the decarbonisation aim, the Council needs to determine its complete carbon footprint (action 4.1.1.2) to enable actions to be prioritised and ensure efficient and appropriate investment of time and resources.

The steps below detail proposed activities of how the Council can begin its journey to carbon neutrality. These are short term actions that could be completed in the next 1-2 years if resourced adequately.

Review the current state of play

This should focus on:

- The relevant National and Regional Policy which supports and advocates carbon reduction.
- The Council Plan and other policies/strategies (e.g. tree strategy) including a review of the current Carbon Reduction Strategy.
- The assessment of how carbon reduction/neutrality meets the needs of the Council in achieving its long term ambitions.
- Action that the Council is already taking.
- Assessment of what data is currently collated and gap analysis e.g. energy consumption, tonnes of recyclables collected etc.
- A review of best practice from other organisations such as NRW, other public sector organisations, universities, third sector such as the National Trust.
- An assessment of opportunities for collaboration and partnership working.
- A review of resource and capacity requirements and whether this is internal or external resource. For example NRW had a team of 3 officers who solely focused on the Carbon Positive project and were funded by Welsh Government.
- Partnership working with other public sector organisations/Welsh Government Energy Service may facilitate cost and resource savings. E.g. modelling carbon sequestration is likely to require external consultancy support however the modelling inputs/outputs will be fairly standard across other local authorities.

The findings of the state of play analysis will be reported to the Climate Change Strategy Board to inform the revised Carbon Reduction Strategy.

1.03	**Current Decarbonisation Activities**

The following activities relate to projects and programmes which are or could specifically reduce the Council's carbon footprint.

Energy Efficiency

Energy efficiency measures include the installation of new lighting, new boilers, fuel switching, insulation, heating controls, draught proofing etc. The Energy Unit and Property Maintenance have been installing energy efficiency technologies since 2008 and have a rolling programme of upgrades. These are funded through capital (those projects managed by Property Maintenance) or invest to save/income (those projects managed by the Energy Unit) budgets. Many of the low cost measures have been achieved so to continue to save energy, money and carbon higher cost measures will need to be installed such as switching oil and LPG heating systems to more carbon neutral fuels, whole building lighting upgrades to LED etc.

Energy efficiency is a core component of new buildings constructed by the Council in line with funding requirements and building regulations.

Renewable Energy

Building mounted renewable energy systems have been installed by the Energy Unit on non-domestic buildings since the beginning of the feed in tariff scheme in 2010. Technologies installed have primarily been solar PV, small wind turbines, solar thermal and biomass boilers.

Renewable energy systems are included in new buildings where funding/budget allows.

Biodiversity

Under the Tree and Urban Woodland Plan Flintshire County Council has committed to an increase in urban canopy cover from 14.5 to 18% by 2033. To achieve this, strategic tree planting will be planned, working with communities and delivered by the natural environment team, each winter planting season. We are also committed to trialing new methods of grassland management, reducing the management of selected areas of amenity grass, which can receive up to 13 cuts per year and managing more areas for wildflowers. This will support both de-carbonisation and the creation of resilient ecosystems. Flintshire County Council actively manage woodland estate in our ownership to ensure long term ecosystem resilience which supports carbon sequestration.

Waste and Recycling

There is significant ongoing promotion of recycling in line with Welsh Government targets. The Council only offers trade waste collections to its own buildings, and therefore has excellent data on tonnage collected and end destination. Very little of the Council's residual waste currently goes to landfill and it will now go to Parc Adfer Energy from Waste plant.

Transport

The Council only owns around 10% of its fleet vehicles. The remaining 90% are provided by Go Plant which the Council fuels and maintains and can install telematics. The majority of vehicles have recently been replaced to meet the Euro 6 requirement. The current contract with Go Plant ends in 2023 and there is limited scope to vary the current contract to include electric vehicles. The Council has limited control over what vehicles Go Plant supply. There may be an opportunity to update the new contract to include electric vehicles. Alternatively, the Council could buy these outright and claim the savings in running costs.

Broader decarbonisation activities

There are a number of activities at the wider regional and County level that are delivering carbon reduction. These include:

- Regional energy planning and the North Wales Growth Deal seeks to deliver investment in energy infrastructure linked to demand for electricity and heat. The Smart Access to Energy work stream of the Growth Deal also seeks to establish a regional energy supplier/energy developer.
- Promotion of active travel and development of active travel routes (dependent on funding).
- Large scale renewable energy developments on Council owned land.
- The sustained increase in recycling and reduction in waste to landfill, driven by Welsh Government targets.
- Council housing energy efficiency improvements and gas infill schemes as part of the delivery of Warm Homes/Nest and ECO funding.

2.00	RESOURCE IMPLICATIONS
2.01	Financial resource implications **Capital:** Business cases will be developed as appropriate to support investment in decarbonisation and / or carbon sequestration activities. **Revenue:** None immediately. The business cases referred to above will also identify revenue implications.
2.02	**Human Resources:** There is a recognition that project management support will be necessary to drive our move towards carbon neutrality.

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	The Academi session with senior County Council officers on 6th November identified carbon reduction work undertaken so far, potential future projects and partners who we need to work with to deliver those projects. We need to work with the wider County Councillor group to undertake a similar exercise and embed the move to carbon neutrality in their thinking and actions.

4.00	**RISK MANAGEMENT**	
4.01	There will be significant reputational risk if the County Council is not seen to take a leadership role in moving towards carbon neutrality. Financial risk will be assessed on a project by project basis.	
4.02	**Ways of Working (Sustainable Development) Principles Impact**	
	Long-term	Positive: Decarbonising the Council's activities and services will require long term planning and a long term vision to ensure systems and services are fit for purpose as the climate changes as well as reducing the impact of harmful climate change through mitigation. A number of decarbonisation activities such as planting trees and developing renewable energy will have long lasting impacts over 30-100 years. It also contributes to the climate change targets set by Welsh Government particularly Wales generating 70 per cent of its electricity consumption from renewable energy by 2030 and reducing carbon emissions by 95% by 2050.
	Prevention	Positive: Reducing the Council's carbon emissions and increasing the amount sequestered in its land assets is vital if harmful climate change and temperature rise is to be avoided. Carbon/greenhouse gas emissions caused by human activities are the main cause of climate change. Mitigating climate change will help to reduce impacts such as extreme weather leading to flooding/deaths from extreme heat, increased pests and diseases etc and will in turn possibly reduce the expected costs of adapting to a changing climate.
	Integration	Positive: Becoming net carbon zero integrates with the following priorities under the Council Plan; Green Council, Ambitious Council and Supportive Council. It integrates with the public service board objectives in the Environment priority of the Wellbeing Plan as well as the Smart Access to Energy project in the North Wales Growth Deal. It also integrates with the Environment (Wales) Act 2016 and the Act's wider goals and Welsh Government's decarbonisation of the public sector agenda.

Collaboration	Positive: Decarbonisation is a cross cutting agenda and will require internal cross departmental collaboration at all levels. Collaboration with the following groups is needed to ensure decarbonisation is integrated into everything that the Council and the wider region does and plans for: -Welsh Government -Other public sector organisations such as local authorities, NRW, health boards, universities. -Private sector -Regional groups such as the Economic Ambition Board -Local Town and County Councillors -the local communities
Involvement	Positive: If decarbonisation is to succeed and harmful climate change is to be avoided then everyone at a professional and personal level will need to be involved

Well-being Goals Impact

Prosperous Wales	Positive: Reducing the Council's carbon emissions should enable strategic investment in projects and ways of working that could deliver savings or generate new income streams, therefore supporting delivery of local services. It should also facilitate the development of the low carbon economy through infrastructure projects, sustained tree planting, land management etc which can support local businesses and communities.
Resilient Wales	Positive: Decarbonisation of the Council's activities and services will promote resilience through actions such as investment in renewable energy infrastructure which helps to reduce reliance on imports from across Europe and the World and the associated price fluctuations and increasing ecological resilience through enhancing biodiversity particularly on land with low ecological value. By planning for long term change and future trends the Council's services will also be resilient.

	Healthier Wales	Positive: Decarbonisation will require a shift to active travel, investment in green infrastructure and renewable energy developments which are likely to promote healthier lifestyles, improved wellbeing and reduced health impacts from poor air quality.	
	More equal Wales	Neutral; No impact identified	
	Cohesive Wales	Neutral; No impact identified	
	Vibrant Wales	Neutral; No impact identified	
	Globally responsible Wales	Positive: Reducing the Council's carbon emissions to net zero helps to mitigate climate change and therefore contributes to the achievement of Welsh Government, UK Government and international climate goals.	

4.03	There are not expected to be negative anti-poverty, equalities or environmental impacts of the scheme.
4.04	**The Council's Well-being Objectives** Decarbonisation of the Council's activities will support the Green Council objective with a key impact of reducing carbon emissions mitigating climate change, for example, through the development of alternative and renewable energy production, promoting active travel, shifting to electric fleet vehicles, engaging with the supply chain and promoting a low carbon economy through the goods and services purchased. It can also contribute towards the success of other Council Wellbeing objectives such as 'An Ambitious Council' and 'A Caring Council' through providing local job creation and apprenticeships and therefore potentially reducing poverty through maximising residents' income and employability.

5.00	APPENDICES
	1. Prosperity for all – a low carbon Wales https://gov.wales/prosperity-all-low-carbon-wales 2. Initiatives which the Council have undertaken or are planning to undertake to move to carbon neutrality

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	**Contact Officer: Andrew Farrow – Chief Officer (Planning, Environment and Economy)** **Telephone:** 01352 703201 **E-mail:** andrew.farrow@flintshire.gov.uk

7.00	**GLOSSARY OF TERMS**
	Carbon emissions: Used interchangeably with greenhouse gas emissions; meaning emissions of carbon dioxide, methane etc from human and natural activities and sources. **Carbon Sequestration**: the process involved in carbon capture and the long term storage of atmospheric carbon dioxide. **Decarbonisation**: Reducing and ultimately eliminating carbon dioxide and other greenhouse gas emissions. **Direct Emissions**: Greenhouse gas emissions that are from sources that are owned or controlled by an organization. E.g. emissions from burning gas in a boiler. **Emission Sinks**: A natural or manmade reservoir that stores greenhouse gas emissions over time. E.g. trees, peat bogs, soils, water. **EPC**: Energy Performance Certificate which provides details on the energy performance of a building based on its construction and installed equipment and provides information on how the performance can be improved. **Greenhouse gas emissions**: Carbon Dioxide, Methane, Water Vapour, Nitrous Oxide, Per/Chlorofluorocarbons (CFCs), Hydrofluorocarbons (HFCs), Sulphur Hexafluoride. **Indirect Emissions**: Greenhouse gas emissions that are a consequence of the activities of the organization but occur at sources owned or controlled by another organisations. E.g. electricity used in a building, the emissions occur at the power station which is owned by another company. **Net Carbon Zero**: Balancing carbon emissions with carbon removal or simply eliminating carbon emissions altogether. **Scope 1/2/3**: Classification of different greenhouse gas emissions as defined in the greenhouse gas protocol. Scope 1 refers to direct GHG emissions, scope 2; indirect emissions from electricity and scope 3; all other indirect emissions from an organisation's activities.