

## CLIMATE CHANGE COMMITTEE

<b>Date of Meeting</b>	6 <sup>th</sup> September 2023
<b>Report Subject</b>	Carbon Offsetting – tree planting
<b>Cabinet Member</b>	Chief Officer – Planning, Environment & Economy
<b>Report Author</b>	Climate Change Programme Manager
<b>Type of Report</b>	Operational

### EXECUTIVE SUMMARY

In 2019 the Welsh Government called for the Public Sector to become net zero carbon by 2030. Following this declaration, Cabinet resolved in December 2019 to a Climate Change Strategy which would set key aims and actions for creating a net zero carbon Council by 2030. In February 2022, the Council adopted its Climate Change Strategy.

While the Council has committed to take measures to reduce the carbon emissions from its assets and services, there is an acceptance that even after all measures have been taken, there will still be residual emissions that cannot be removed.

There may be opportunities to offset these emissions however the council must ensure this is carried out open and transparently.

Carbon offsetting can be achieved through investment in renewable energy and increase of land types that aide carbon sequestration (eg. Wetland and trees). There is some potential that both of these activities could take place on existing Council owned land, however, there are conflicting priorities with land use in terms of agriculture, residential, commercial, conservation and recreation. Historically when land has become available it has been disposed of to generate income.

In order to meet our Environment Act (Wales ) Section 106 duty, Flintshire Forest ambition, increase in urban tree canopy cover, and net zero carbon by 2030 goals, we must consider the alternative options for land. As land assets are very complex, this requires developing a process to assess available land against these Council ambitions.

## RECOMMENDATIONS

1	The Committee supports the development of a land use analysis decision flow chart for the management of its land assets.
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## REPORT DETAILS

<b>1.00</b>	<b>EXPLAINING THE REPORT</b>
1.01	<p><b>Background</b></p> <p>In February 2022, the Council adopted its Climate Change Strategy where actions are arranged into five themes – Buildings, Mobility &amp; Transport, Procurement, Behaviour &amp; Land Use.</p> <p>While the Council has committed to take measures to reduce the carbon emissions from its assets and services, there is an acceptance that even after all measures have been taken, there will still be residual emissions that can not be removed.</p> <p>There are opportunities to offset these emissions however the council must ensure this is carried out open and transparently.</p> <p>The Council has carried out tree planting for a number of years to realise the multiple benefits that trees afford for people and wildlife both in rural and urban environments. The Council has also invested in large scale renewable energy and must now look to its existing land assets for potential for further developments.</p>
1.02	<p><b>Purpose</b></p> <p>The Council has committed to become a Net Zero Carbon Council by 2030. ‘Net zero carbon’ is achieved when the total carbon emissions, minus the emissions offset, equal zero. The key principle within this calculation is that the organisation does everything that is reasonably practicable to remove and reduce its carbon footprint, before considering the options to offset.</p> <p>Offsetting carbon can be achieved through absorption of carbon from the atmosphere by increasing land types that can do this – eg. Wetland and trees. Offsetting can also be achieved through generation of renewable energy, and utilisation of carbon capture technology.</p> <p>However, the Council must be very careful with how it chooses to offset carbon, so that it is not using carbon offsetting as a way to relinquish its duty to reduce its carbon footprint as much as possible.</p>
1.03	<p>Since the ‘Carbon reduction plan 2009 – 2021’, the Council has invested in renewable energy generation within its assets – both building mounted solar PV and wind turbines, and large scale solar farms. The latter of which the Council now has four in operation which are generating energy that is feeding into the national grid. This assists in decarbonising the national grid, and also generates income related to the kwh generated. There is potential for increasing the number of large scale solar farms on our land assets, as well as investment in other renewable energy schemes.</p>

1.04	Tree planting is an activity that the Council has carried out for a number of years due to the co-benefits associated with increased canopy cover including increased absorption of pollution; reducing surface water flooding; providing noise and visual barriers, providing shade and urban cooling and other associated benefits to health and wellbeing.
1.05	The Council has committed to increasing the county's tree canopy cover within the current 'Urban Tree & Woodland Plan 2018-2033'. This Plan seeks to increase urban canopy cover from 14.5% to 18% by 2033.
1.06	Within the Section 6 Environment Act Wales Biodiversity and Resilience of Ecosystems Duty, Objective 3 focusses on increasing the resilience of our natural environment by restoring degraded habitats and habitat creation. 'Supporting Nature in Flintshire' 2020-2023 sets out the Authorities commitment to maintain and enhance biodiversity under the Section 6 Duty.
1.07	Within the Council Plan 2023-28 the Council has committed to development of a 'Flintshire Forest' Plan by March 2024. This Plan will detail delivery, to include sites highlighted for inclusion, identified funding for planting and engagement plan. However, the plan is contingent on appropriate land coming forward which previously may not have been used for carbon offsetting, access or conservation.
1.08	<p>The Council adopts a 'right tree - right place' principle, as described within the Urban Tree and Woodland Plan, and has been working with Town &amp; Community Councils, communities and schools to identify and agree a number of urban sites for tree planting.</p> <p>Throughout the last tree planting season (December 2022 – March 2023), 154 standard trees and 7099 whips were planted across the county. This new planting both adds to the overall tree canopy cover across the county, as well as replacing trees that have been removed due to reasons such as Ash dieback or storm damage. However it is becoming increasingly difficult to find suitable spaces to plant trees and officers need to consider areas within Flintshire's broader landholdings.</p>
1.09	Within the 'Land Use' theme of the Climate Change programme, the Council has committed to increase carbon absorption and maintain biodiversity within our land assets. The 'Climate Change Strategy 2022-30' recognises that once all opportunities to reduce Greenhouse Gas Emissions (GHGs) have been completed/exhausted the council will need to increase the annual amount of carbon sequestered in its land assets.
1.10	The programme seeks to do this by investing in renewable energy and planting schemes to support carbon absorption and improvement and maintenance of our biodiversity. A piece of work identifying the current carbon storage capacity within Council land assets has been progressed with Welsh Local Government Association (WLGA) through their Transition & Recovery Support Programme (TaRSP). A mapping tool has been developed with Costain and Data Map Wales, and Flintshire have been piloting this tool before national roll out across Wales. The tool uses the most up-to-date Data Map Wales data of our land types, and allocates emission factors (EF) to these land types that consider both the positive and negative effects of the land (carbon emitters or carbon absorbers).

	<p>These emission factors are consistent with the Welsh Government reporting guidance.</p>
1.11	<p>The Climate Change team have been working closely with the Natural Environment team to identify potential areas of land for tree planting. A desktop exercise has assessed a portion of the Council's land estate and lease holdings against a matrix to identify land that may be suitable for tree planting, woodland creation, habitat connectivity, flood risk mitigation and erosion control, and proximity to urban areas and potential for community engagement. This exercise has been labour intensive and time consuming, and requires input from a network of internal officers simply to assess feasibility.</p>
1.12	<p>There is potential that both renewable energy generation and increasing positive carbon absorbing land could take place on existing Council owned land, however, there are conflicting priorities with land use in terms of agriculture, residential, commercial, conservation or recreational, and historically when land has become available it has been disposed of to generate income. The revised Asset Management Plan seeks to identify where available land may meet the other needs and commitments of the Council before disposal is considered.</p> <p>In order to meet our Section 106 duty, Flintshire Forest ambition, increase in urban tree canopy cover, and net zero carbon by 2030 goals, we must consider the alternative options for land whereby using land for trees/renewables/carbon purposes is given due consideration and prioritisation within the decision making process.</p> <p>As land assets are very complex, this requires developing a process to assess available land against these Council ambitions.</p>
1.13	<p>In order to effectively assess land holdings moving forwards, the Council needs to give due consideration to sustainable land use and carbon sequestration within its decision making process. This could be delivered through a decision flow chart that allows officers to review the potential options for a land holding when one becomes available.</p> <p>This tool should consider:</p> <ul style="list-style-type: none"> <li>- The current and future land ownership/lease arrangements.</li> <li>- The current land use, land value, and vegetation cover.</li> <li>- Any legal restrictions or regulations governing the land use.</li> <li>- The land suitability in terms of soil type, drainage, topography, and climate.</li> <li>- The need for an environmental assessment to identify potential impacts on nearby ecosystems, biodiversity, water resources, air quality and natural habitats</li> <li>- The availability and impact on the built environment, and infrastructure, eg, roads, utilities and public transport.</li> <li>- The communities and stakeholders affected by any land use change and what engagement has been or can be carried out to collate their opinions and needs.</li> <li>- Financial and resource considerations <ul style="list-style-type: none"> <li>- loss of income through lease closing,</li> <li>- costs with site preparation, materials and products, and ongoing maintenance,</li> <li>- Availability of grants, subsidies, or other funding sources.</li> </ul> </li> <li>- Alternative suitable land uses that consider all of the above factors.</li> </ul>

	This process will ensure that all Council ambitions and commitments are being considered when making decisions regarding available land.
1.14	Once all options regarding Council land assets has been expended, the Council must consider its options regarding the procurement of land for carbon sequestration. It should be noted that the Welsh Government's call for net zero carbon is to the public sector as a whole.
1.15	Most Councils in Wales have committed to Net Zero Carbon targets therefore many will also be considering their options regarding the use of land for carbon offsetting. The Programme Manager for Climate Change sits on the Climate Strategy Panel Task & Finish Group for Land Use and therefore engages with developments in this area. The Climate Change team will continue to keep abreast of existing tools being developed by other Local Authorities that may be suitable for the requirements of Flintshire County Council.

<b>2.00</b>	<b>RESOURCE IMPLICATIONS</b>
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2.01	Revenue and capital funding for projects will be assessed on a project by project basis, however the Council has a track record of securing both external grant funding and SALIX funding. There is also the potential for future renewable energy projects to generate income and provide energy for our building assets.
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<b>3.00</b>	<b>CONSULTATIONS REQUIRED / CARRIED OUT</b>
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3.01	Consultations may be needed on an as and when basis dependent on the land types identified and the potential impacts to stakeholders.
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<b>4.00</b>	<b>RISK MANAGEMENT</b>
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4.01	There will be significant reputational risk if the County Council is not seen to take a leadership role in moving towards net zero carbon. Financial risk will be assessed on a project-by-project basis but lack of availability of internal and external funding will reduce the action that can be taken.		
4.02	<p><b>Ways of Working (Sustainable Development) Principles Impact</b></p> <table border="1"> <tr> <td>Long-term</td> <td>Positive: Decarbonisation of 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</td> </tr> </table>	Long-term	Positive: Decarbonisation of 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
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		<p>mitigation. Decarbonisation activities such as planting trees and developing renewable energy will have long lasting impacts over tens to hundreds of years. These activities also contribute to the climate change targets set by Welsh Government particularly Wales generating 70% of its electricity demand from renewable energy by 2030 and becoming a net zero carbon nation by 2050.</p>
Prevention		<p>Positive: In order to avoid the harmful effects of climate change it is necessary for the Council to reduce its carbon emissions and increase the amount of carbon sequestered in its land assets. Carbon emissions caused by human activities are the main cause of climate change. Mitigating climate change will help to reduce impacts such as extreme weather causing flooding / extreme heat, loss of wildlife and habitats, increased pests and diseases, etc. Adapting to the impacts of climate change now will improve sustainability of our communities as the climate changes.</p>
Integration		<p>Positive: Becoming net zero carbon 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 Welsh Government's decarbonisation of the public sector agenda.</p>
Collaboration		<p>Positive: The climate change programme offers multiple opportunities to work collaboratively both internally and externally – and this collaboration will determine the success of the</p>

		<p>programme. 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:</p> <ul style="list-style-type: none"> <li>- Welsh Government</li> <li>- Other public sector organisations such as local authorities, NRW, health boards, universities.</li> <li>- Private sector</li> <li>- Regional groups such as the North Wales Economic Ambition Board</li> <li>- Local Town and County Councillors</li> <li>- the local communities</li> </ul>
	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.
4.03	<b>Well-being Goals Impact</b>	
	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 climate change adaptation the Council's services and its communities will also be resilient.
	Healthier Wales	Positive: Decarbonisation requires a shift to active travel, investment in green infrastructure, support for local and sustainable food sources, and development of renewable energy 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.
4.04	<p><b>The Council's Well-being Objectives</b></p> <p>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.</p> <p>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.</p>	

<b>5.00</b>	<b>APPENDICES</b>
5.01	None



<b>6.00</b>	<b>LIST OF ACCESSIBLE BACKGROUND DOCUMENTS</b>
6.01	<ol style="list-style-type: none"> <li>1. <a href="#">Climate Change strategy</a></li> <li>2. <a href="#">Urban Tree &amp; Woodland Plan</a></li> <li>3. <a href="#">Environment (Wales) Act Biodiversity Section 106 update report 2022</a></li> <li>4. <a href="#">Asset Management Plan</a></li> </ol>

<b>7.00</b>	<b>CONTACT OFFICER DETAILS</b>
6.01	<p><b>Contact Officer:</b> Alex Ellis – Programme Manager</p> <p><b>Telephone:</b> 01352 703110</p> <p><b>E-mail:</b> <a href="mailto:alex.ellis@flintshire.gov.uk">alex.ellis@flintshire.gov.uk</a></p>

<b>7.00</b>	<b>GLOSSARY OF TERMS</b>
7.01	<p><b>Capital Funding:</b> Capital funding is usually utilised to acquire or improve a long-term asset such as equipment or buildings.</p> <p><b>Carbon emissions:</b> Used interchangeably with greenhouse gas emissions; meaning emissions of carbon dioxide, methane etc from human and natural activities and sources. Wider greenhouse gas emissions are collectively calculated into a ‘carbon dioxide equivalent’ displayed as CO<sub>2</sub>e.</p> <p><b>Carbon sequestration:</b> the process involved in carbon capture and the long term storage of atmospheric carbon dioxide.</p> <p><b>Decarbonisation:</b> Reducing and ultimately eliminating carbon dioxide and other greenhouse gas emissions.</p> <p><b>Net Zero Carbon:</b> Balancing carbon emissions with carbon removal or simply eliminating carbon emissions altogether.</p> <p><b>Revenue Funding:</b> is utilised for items that will be used within a year. Examples include salaries, heating, lighting, services and small items of equipment. Routine repairs are revenue expenditures and can include significant repairs that do not extend the life of the asset or do not improve the asset.</p>