

Working for a brighter futures together

Environment and Communities Committee		
Date of Meeting:	20 th January 2022	
Report Title:	Carbon Neutral Programme Update	
Report of:	Jayne Traverse, Executive Director of Place	
Report Reference No:	EC/23/21-22	
Ward(s) Affected:	All	

1. Executive Summary

1.1. In May 2019 Cheshire East Council committed to being a carbon neutral council by 2025 and to influence carbon reduction across the borough. In May 2020 we adopted our Carbon Action Plan which set out how we will achieve this.

1.2. Carbon Neutral Council by 2025

- **1.3.** Our action plan set a carbon reduction target of 46% and an insetting1 target of 60% by 2025 from 2019 baseline levels. To date the Council has achieved carbon reduction of 5% and delivered 28% of its insetting target. However, there are a series of projects in development that are forecasting total carbon reduction of 49% and total insetting of 60%.
- **1.4.** The Council is on track to deliver carbon neutrality by 2025, however, there remain decisions to be made with respect to locations of insetting projects, such as tree planting and a second solar farm, and the allocation of capital investment funding for the second solar farm and the charging infrastructure for the Council's electric vehicle fleet.

1.5. Wider Borough Progress

1.6. Cheshire East Council has pledged to influence the carbon footprint of the borough to be net-zero by 2045. We are delivering brough wide communication campaigns and have launched a toolkit for Town and Parish Councils to engage with their local communities. We use our influence through planning, procurement, and commissioning policies, and have set

¹ Offsetting Carbon that cannot be reduced by natural sequestration such as tree planting and renewable energy generation focused within the borough

one of the most ambitious carbon targets in local government for the Cheshire Pension fund. We are working in partnership with The Mersey Forrest, Cheshire Wildlife Trust, local business, and the voluntary sector to deliver borough wide reductions. We are also providing leadership on a regional basis through the Sustainable and Inclusive Growth Commission and are the lead authority for the housing sustainable warmth bid across the Local Enterprise Partnership (LEP).

2. Recommendations

- **2.1.** That the Committee:
- **2.1.1.** Note the progress made towards the Council's target to be carbon neutral for its own emissions by 2025 and wider influence measures to reduce carbon emissions across the borough.
- **2.1.2.** Agree to Cheshire East Council joining the UK100 network, setting a borough-wide target to be carbon neutral by 2045.
- **2.1.3.** Authorise the Head of Environmental Services to take all necessary actions to enter into a collaboration agreement between Cheshire East Council and Cheshire Wildlife Trust.
- **2.1.4.** Authorise the Head of Environmental Services to take all necessary actions to establish and procure an electric vehicle car club as a solution to reducing the carbon footprint of the Council's business travel and borough wide carbon emissions through public use of the car club.
- **2.1.5.** Recommend to the Economy and Growth Committee the adoption of the Manchester City Council Low Carbon Build Standard as a requirement for all construction projects undertaken by the Council.
- **2.1.6.** Agree that the £3.714 million Public Sector Decarbonisation Scheme Grant from the Department for Business, Energy and Industrial Strategy (BEIS) for further decarbonisation of Council buildings be accepted.
- **2.1.7.** Note the Council is planning to plant trees on suitable council owned agricultural land holdings as part of the Carbon Neutral Action Plan 2020-2025 commitment to develop natural climate solutions such as tree planting and peatland management on at least 100ha of Council owned land.

3. Reasons for Recommendations

- **3.1.** The above recommendations will continue to progress the Council's ambition to be carbon neutral for its own operations by 2025 and to influence carbon reduction across the wider borough.
- **3.2.** A Notice of Motion was proposed to Council on 20th October 2021 that Cheshire East Council makes the UK100 Carbon Pledge committing to be carbon neutral for its own operations (with a minimum of insetting) by 2030 and committing to reduce the borough wide emissions to net zero by 2045.

Council asked this committee to determine whether Cheshire East Council should join the UK100 Network. In making the pledge the Council would be required to report carbon emissions annually and to commit to the reduction of the use of offsets. The benefits of membership would be a network of like-minded corporations and a platform to amplify dialogue with national bodies.

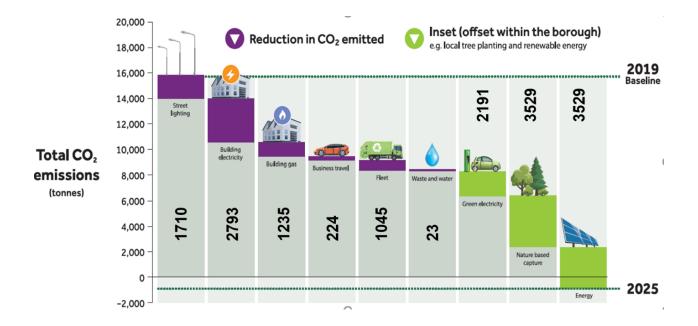
- **3.3.** A Collaboration Agreement between the Council and Cheshire Wildlife Trust will provide a mechanism to respond to opportunities for collaboration on nature based solutions to contribute to the insetting target of the Carbon Neutral Action Plan. Cheshire Wildlife Trust are specialists in the delivery of schemes to improve the natural environment and have the local knowledge, expertise, and capacity to deliver effective nature-based schemes. A committee decision is required due to the potential contract value. The Agreement will be in place until 31st December 2025 and shall be subject to a maximum value of £2.5m for its duration. Expenditure is covered by existing budgets and grant funding.
- **3.4.** The use of an electric vehicle car club as a replacement for leased pool cars has the potential to allow the council to reduce the carbon impact of the vehicles and reduce the cost of leasing and maintaining vehicles.
- **3.5.** Building standards like BREEAM are not always appropriate for the types of projects undertaken by the public sector. A review of appropriate equivalent standards has been undertaken with Manchester City Council's Low Carbon Build Standard being recommended as the most appropriate standard to adopt. The intention is to include this standard as is within the requirements for all construction projects, with a view to amending the document over time to be bespoke to the Council and to incorporate future improved targets and innovation. Where projects exceed £10m in value then consideration should be given to bolstering this standard with BREEAM certification.
- **3.6.** In November 2021 the Council has submitted a funding bid to the Department for Business, Energy and Industrial Strategy for the Public Sector Decarbonisation Scheme. Subsequently a grant of value £3.714m has been awarded to provide various low carbon solutions for the council estate. This scheme would see further 11 Air Source Heat Pumps being installed across our day centres and libraries alongside the upgrade of the building's insulation, some Building Controls upgrades and additionally a window replacement programme at a Corporate Office building. These measures are estimated to reduce the carbon emissions by 500 tonnes of CO2 per year.
- **3.7.** The Land Use Assessment report and its findings provide data on which to base decisions on land to be allocated for carbon insetting purposes. It will not be possible to achieve carbon neutrality by 2025 without the use of additional land, whether reallocated or purchased.

4. Other Options Considered

- **4.1.** There is an option to do nothing however this would severely curtail the Council's ability to meet its declared target of being carbon neutral for its own operations by 2025.
- **4.2.** The Council has the option to purchase registered carbon offsets. This is not recommended as the offsets would be outside of the borough and lose the co-benefits of borough wide carbon reduction.

5. Background

5.1. The carbon neutral action plan set carbon budgets against different areas of the Council's operations, illustrated below. These were intended to outline the scale of the reduction required against each area and would be reviewed annually and as and when new opportunities or technologies emerge. Where targets were not being met it is intended that other areas may be able to compensate through additional action.



5.2. UK100 Network

- **5.3.** The UK100 Network brings together a network of councils with a common pledge to tackling climate change. It is supported across the political spectrum with key partners including Community Energy England, UK Green Buildings Council and Department for Business, Energy & Industrial Strategy (BEIS).
- **5.4.** The UK100 Network initially invited local authorities to sign up to a pledge for 100% clean energy by 2050. 110 authorities signed up including Greater Manchester, Lancaster, Liverpool City Region and Shropshire from our region. They are now asking their existing members and local authorities who are not yet members to sign up to a new Net Zero Pledge setting targets for Carbon Net Zero for both the local authority and local authority area.

- **5.5.** The pledge is not legally binding but in becoming members we would pledge to be Carbon Neutral for our own emissions by 2030 and Borough wide by 2045. The pledge includes limiting our use of carbon offsets, and for any that we do use to be as local as possible. We would be asked to report our operational and borough wide scope 1 and 2 emissions on an annual basis.
- **5.6.** The stated benefits of membership are:
 - Facilitating dialogue with national politicians and senior officials across Whitehall, amplifying the voices of local leaders via collective advocacy to national government.
 - Enabling knowledge sharing between members including meetings, webinars, round tables, and workshops, and promoting best practice via social media (Twitter and LinkedIn) and newsletters.
 - Providing tailored insights, evidence and recommendations on the challenges and solutions to local Net Zero, inviting members to inform and participate in research.
 - Connecting with world-leading business and industry to help plan and implement the solutions needed to reduce emissions in your local area.
 - Demonstrating the collective ambition, commitment, and ability of democratically elected local leaders to deliver Net Zero.
 - Access to members-only programmes and services, including briefings on research and publications.
- **5.7.** Depending on the level of influence the Council would wish to take to achieve borough wide carbon neutrality by 2045, additional financial commitments and resources may be needed to achieve the pledge. Learning from how other authorities have approached this, the first step would be to commission a more detailed borough assessment and action plan, including consultation with key industry and business sectors, at an estimated cost of £40k. From a staffing perspective, again depending on the level of influence the Council wishes to take, an additional full-time officer would be recommended to work across the sectors and build a volunteer network. Any additional funding would need to be considered as a business case within future medium term financial strategy planning.

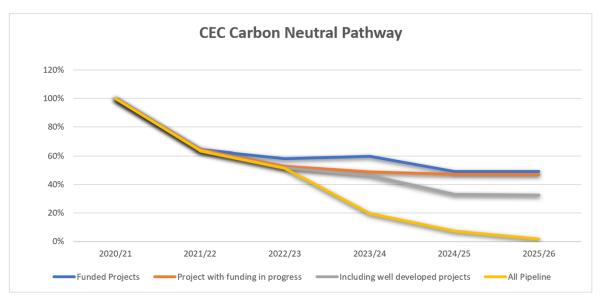
5.8. Carbon Neutral Progress Update

5.9. An assessment of progress against each area is summarised below. We have separated the forecasted impact of projects and polices which have been put in place and funded to date, and those projects which are at a high level of development and could be delivered by 2025, in some cases subject to funding through future business cases. There are also a number of projects which are at concept stage, and so there is a higher level of risk that these will not deliver the required carbon savings

	Tonnes of CO ₂	%
2019 Baseline CO ₂	15,447	100%

2025 Reduction Target	7,030	46%
Current carbon reduction Achieved	750	5%
Estimated Carbon reduction (funded	5,518	36%
measures)		
Estimated carbon reduction (including	5,629	39%
developed but currently unfunded		
projects)		
Estimated carbon reduction (including	7,506	49%
concepts)		
2025 Insetting Target	9,268	60%
Current Carbon Reduction Achieved	4,296*	28%*
Estimated Insetting (funded measures)	3,098	20%
Estimated Insetting (including developed	5,090	33%
but currently unfunded projects)		
Estimated Insetting (including concepts)	9,268	60%

* This figure includes the purchase of green electricity, the impact of which will reduce as the grid continues to decarbonise.



- **5.10.** There is sufficient scope of projects to give confidence that Cheshire East Council will achieve its ambition to be carbon neutral by 2025. However, the speed of project development will need to be maintained, access to investment and land will need to be prioritised, and key assumptions relating to changes to policies and service delivery will need to be delivered. Carbon reduction measures within Cheshire East Council buildings are heavily reliant on the provision of external grant funding.
- **5.11.** In the following sections we have taken the elements of the waterfall diagram shown above and broken them down to show where progress has been made and where there are gaps on which we need to focus.
- **5.12.** It should be noted the authority uses green electricity backed by the Renewable Energy Guarantees of Origin (REGO) scheme. In line with established good practice, however, it is still necessary to first look to reduce

electricity usage and to decarbonise though schemes such as solar before the remainder is then offset by the green electricity tariff.

5.13. Street Lighting

2019 Baseline (tCO2)	2556	100%
2025 Target (tCO2)	846	33%
Cumulative Change (tCO2)	-1710	-67%
Estimated reduction – funded projects (tCO2)	-1509	-59%
Estimated reduction – developed projects (tCO2)	-1509	-59%
To be developed (tCO2)	-201	-8%

- **5.14.** The programme to transition signs and road furniture has now entered delivery which is providing additional carbon savings to complement the previous rollout of LED lighting across the borough.
- **5.15.** Coupled with the reduction of the energy used for streetlighting the council has engaged a supplier to provide green electricity backed by the Renewable Energy Guarantees of Origin (REGO) scheme.
- **5.16.** In addition to this work street lighting will benefit from the national decarbonisation of the electricity network.

2019 Baseline (tCO2)	3911	100%
2025 Target (tCO2)	1118	29%
Cumulative Change (tCO2)	-2793	-71%
Estimated reduction – funded projects (tCO2)	-2427	-62%
Estimated reduction – developed projects (tCO2)	-2427	-62%
To be developed (tCO2)	-366	-9%

5.17. Building Electricity

- **5.18.** Cheshire East Council has been successful in securing funding from the Public Sector Decarbonisation Scheme of £4.5 million. This funding is being used to implement carbon reduction measures such as LED Retrofit; fossil fuel displacement via heat pumps; Solar PV schemes close to 1MW; and building fabric improvements across a range of council buildings.
- **5.19.** If the bid is successful, the round three funding will allow the council to fit further improve heating systems to low carbon heat pumps.
- **5.20.** Investing in carbon reduction measures delivers financial benefits as it mitigates the Council's exposure to unstable energy markets and lowers our costs, reinforcing the importance of not simply relying on the purchase of green electricity to reduce our carbon impact. It is noted that other aspects of reducing the council's carbon footprint will increase demand for electricity, particularly the electrification of fleet vehicles and electrical heat pumps.

5.21. Building Gas

2019 Baseline (tCO2)	4410	100%
2025 Target (tCO2)	3175	72%
Cumulative Change (tCO2)	-1235	-28%
Estimated reduction – funded projects (tCO2)	-1028	-23%
Estimated reduction – developed projects (tCO2)	-1028	-23%
To be developed (tCO2)	-207	-5%

- **5.22.** The decarbonisation of our gas usage is one of the most challenging and expensive areas of our carbon reduction and requires investment in building fabric improvements and grid upgrades to fully decarbonise the heating of our buildings.
- **5.23.** The Council has been successful in gaining Public Sector Decarbonisation Funding of £4.5m, as noted above, to reduce heat loss from buildings by improving insulation. This has also enabled the replacement of gas boilers with air source heat pumps in three Cheshire East buildings, the first time this has been done by the authority. We are also seeking to install a district heating network to heat Council buildings within Crewe town centre.
- **5.24.** To improve the energy efficiency of any future buildings the council is seeking the adoption of Manchester City Council's Low Carbon Build Standard (Appendix 1) for all construction projects valued at below £10m. Building standards like BREEAM are not always appropriate for the types of projects undertaken by the public sector. A review of equivalent standards has been undertaken with Manchester City Council's Low Carbon Build Standard being recommended as the most appropriate standard to adopt. The intention is to include this standard as is within the requirements for all construction projects, with a view to amending the document over time to be bespoke to the Council and to incorporate future improved targets and innovation. Where projects exceed £10m in value consideration will be given to bolstering this standard with BREEAM certification.

2019 Baseline (tCO2)	884	100%
2025 Target (tCO2)	660	75%
Cumulative Change (tCO2)	-224	-25%
Estimated reduction – funded projects (tCO2)	-151	-17%
Estimated reduction – developed projects (tCO2)	-422	-47%
To be developed (tCO2)	0	

5.25. Business Travel

- **5.26.** The Council's business travel has decreased substantially during the pandemic which provides a blueprint for how we can achieve our Business Travel carbon reduction target, however this will need to be sustained.
- **5.27.** The move to more flexible and agile working has enabled significant carbon reductions, demonstrating that investment in digital technology has a

significant carbon saving potential. Going forward, it is expected that our Agile Working Policy will continue to deliver savings, although potentially not at the level seen during the pandemic.

- **5.28.** Alongside this the Council has a range of policies in place to support sustainable travel by staff. A revised travel hierarchy is being developed to give clearer guidance to staff on how they can use these to reduce the carbon impact of travelling for work. Further investigations into business mileage solutions for individual teams are in progress including supporting public transport and active travel modes, and measures which may reduce vehicle use for commuting to facilitate sustainable business travel.
- **5.29.** In addition, there is a potential alternative delivery model for our pool cars to move to an electric car club model where vehicles could be used by both council staff and members of the public. These cars would be maintained by a procured contractor and charged on a time and distance basis to services. There could be financial savings by moving to this model alongside improving the carbon footprint of the fleet. Provision of a car club within the borough of Cheshire East will have the additional benefit of introducing the use of a car club to the residents of Cheshire East and allowing households to reduce the number of cars they need to own.

5.30. Fleet

2019 Baseline (tCO2)	3543	100%
2025 Target (tCO2)	2498	70%
Cumulative Change (tCO2)	-1045	-30%
Estimated reduction – funded projects (tCO2)	-397	-11%
Estimated reduction – developed projects (tCO2)	-1275	-36%
To be developed (tCO2)	0	

- **5.31.** The decarbonisation of the Council's operational fleet is another difficult area for our carbon reduction given that the solutions for larger vehicles, such as electrification and hydrogen, are still emerging.
- **5.32.** The focus at present is on continuing to improve our vehicle data, and on the electrification of owned and hired cars and small vans which make up the majority of our fleet. This is progressing with additional electric vehicles purchased by services, including three vehicles for Cheshire East Highways, a new Community Wardens electric vehicle, and the ANSA pool car.
- **5.33.** The transition to electric vehicles will require the development of an electric vehicle charging infrastructure around the borough to enable our feet vehicles to operate freely. There will be a need for the Council to invest in charging infrastructure for the use of council vehicles specifically and a separate provision of chargers for public use. This is currently in development in consultation with services, focussing on depots, main Council buildings, and strategic locations for worktime charging such as leisure centres. Given

that some of the chargers will need to be the 44KW rapid chargers, this will place an increased pressure on the local electricity grid requirements. This is being developed in collaboration with our Strategic Transport service who are developing a strategy for borough wide charging for electric vehicles to facilitate the move to ULEVs in the general population.

5.34. Another key area is the decarbonisation of our refuse collection vehicles (RCVs) which is likely to involve the adoption of hydrogen technologies, although we continue to keep a close eye on developments around electrification and sustainable fuels. The Vanguard project to move two RCVs to dual hydrogen and diesel, with the hydrogen being produced sustainably on site has now entered the operation stage with the electrolyser producing the hydrogen and both vehicles converted to use it. This is delivering carbon savings now and will allow the Council to move quickly as and when commercial hydrogen solutions emerge.

2019 Baseline (tCO2)	144	100%
2025 Target (tCO2)	121	84%
Cumulative Change (tCO2)	-23	-16%
Estimated reduction – funded projects (tCO2)	-6	-4%
Estimated reduction – developed projects (tCO2)	-12	-8%
To be developed (tCO2)	-11	-8%

5.35. Waste and Water

5.36. The implementation of estate wide water metering continues. Signage and communications aim to reduce waste by council employees and encourage recycling where appropriate.

5.37. Green Electricity

2025 Target (tCO2)	2191	100%
Estimated reduction – developed projects (tCO2)	Due to the purchase of green electricity this figure will equal the residual electricity use once all other measures are considered.	100%
To be developed (tCO2)		

- **5.38.** All council buildings are now being supplied with green electricity backed by the Renewable Energy Guarantees of Origin (REGO) scheme which offsets a significant proportion of the emissions meaning all assets at CEC under our financial control consume 100 % green electricity. This includes Leisure centres and Streetlighting. Since 2019, Schools under CEC energy framework benefit also from 100% green electricity.
- **5.39.** It is recognised that the purchase of green electricity, while important, should not negate the need to reduce consumption.

5.40. Nature Based Solutions

2025 Target (tCO2)	3529	100%
Estimated offset – funded projects (tCO2)	141	-4%
Estimated offset – developed projects (tCO2)	219	-6%
To be developed (tCO2)	3,310	-94%

- **5.41.** As part of the insetting element of the Carbon Action Plan, the Council has committed to develop nature based solutions such as tree planting and peatland management to sequester carbon on at least 100 ha of council owned land by 2025. Nature based sequestration is currently focusing on projects that include planting trees or hedgerows and restoring peat moss.
- **5.42.** The council has successfully restored 1 ha of peat moss at Pastures Wood Farm saving approximately 5 tonnes CO2e per annum.
- **5.43.** 21,000 trees have been planted to date and a pipeline of planting projects established for 2021 and beyond.
- **5.44.** Partnerships have been established with The Mersey Forest and Cheshire Wildlife Trust and proposals for joint planting schemes are being explored, with Cheshire East benefiting from community and volunteer input, work with schools and access to 'Trees for climate' funding.
- **5.45.** Land at Leighton Grange Farm is being made available for nature-based insetting surrounding the proposed solar array. This is currently in the design phase, but it is hoped that 7-9ha of planting may be established in 2022.
- **5.46.** The Council has undertaken a high-level land use assessment through consultants RSK Environment Ltd (Appendix 3). This has detailed some sites of interest for nature-based solutions by considering what biodiversity net-gain and carbon sequestration could be achieved in particular areas. The assessment has also indicated the co-benefits that can be achieved from the implementation of natural sequestration measures including public amenity, aesthetic, and flood mitigation among others. The assessment has recommended a number of sites that would provide net gains in biodiversity and carbon capture.

5.47. Energy Insetting

2025 Target (tCO2)	3529	100%
Estimated offset – funded projects	1,023	29%
(tCO2)		
Estimated offset – developed projects	2,510	71%
(tCO2)		
To be developed (tCO2)	1,019	29%

5.48. The project to install a 5MW solar farm at Leighton Grange is underway with detailed design completed and a planning application submitted.

- **5.49.** Heat networks continue to be a priority of the Council. Detailed design has been undertaken for a low-density network servicing the North Cheshire Garden Village. pre-construction is underway for the Crewe Town Centre Network and the heat network at Alderley Park is operational.
- **5.50.** The figures above include the provision of a low temperature heat network to service the North Cheshire Garden Village which is an unfunded project at this time and is therefore uncertain.
- **5.51.** In order to meet our energy insetting targets the Council will need to develop further projects. Within the Carbon Neutral Action Plan there is a recommendation for 20ha of solar which will require land to accomplish. The Land Use Assessment by RSK referred to above in para 5.14.6 has also considered the potential for re-allocating land for additional solar farms within the borough. Several sites have been identified with strong potential and will now proceed through feasibility to full business case.

5.52. Wider Borough Influence

- **5.53.** By agreeing the UK100 Pledge Cheshire East Council has committed to reducing the carbon footprint of the borough to net-zero by 2045, strengthening the commitment to the borough as a whole.
- **5.54.** Behaviour change is being encouraged through regular communication and engagement, highlighting the importance of reducing carbon emissions and suggesting ways that this can be achieved. Town and parish Councils are engaged through the Sustainability hub and Climate Emergency toolkit, designed to support Town and Parish Councils to consider their role in accelerating their own carbon neutral transition and establishing targets and delivering change within their communities. Schools are being encouraged to join the Let's Go Zero 2030 campaign uniting schools across the UK to work together to become carbon neutral by 2030.
- **5.55.** Cheshire East Council has supported a series of events within the local area including the Cheshire Net Zero Carbon Conference, the Zero Carbon Tour 2021 and the COP26 North West Events in Runcorn and Manchester.
- **5.56.** The Leader of Cheshire East Council is the Co-Chair of the Sustainable and Inclusive Growth Commission, working with the Local Enterprise Partnership to encourage local businesses and the agricultural sector to reduce carbon emissions.
- **5.57.** The Council continues to work with partners such as The Mersey Forest and Cheshire Wildlife Trust to identify areas where they are able to support the wider carbon reduction across the borough.
- **5.58.** Along with sub-regional partners, the Council has also contributed to the development of a Natural Capital Assessment and Investment Plan for Cheshire and Warrington. A baseline study of peatlands and mosses in the borough was commissioned that informed the development of funding bids by Moors for the Future and Cheshire Wildlife Trust under the Nature for

Climate Peatland Grant Scheme. The Council is also engaged with partners in developing a catchment-wide approach to the Bollin Valley with a range of partners (including a pilot Environmental Investment Readiness project) and is supporting the Local Nature Partnership.

- **5.59.** The Cheshire Pension Fund has targeted itself to deliver a carbon footprint of 50% below the general market, one of the most ambitious targets within the Local Government Pension Schemes.
- **5.60.** As a planning authority Cheshire East Council is working to bring forward planning policies to improve the carbon requirements of local development and encourage best practice.
- **5.61.** The Council's Housing service are administering the government's Green Homes Grant Scheme to enable homeowners to improve the energy efficiency or low carbon heating solutions within their dwellings.
- **5.62.** Cheshire East is also the lead authority for a sustainable warmth bid across the LEP area, if successful this will be in delivery from January 2022.
- **5.63.** The Cheshire East Crowd (crowdfunding initiative) has successfully launched with the first round of projects submitted by the public and receiving funding from local pledges.
- **5.64.** The Council is working in partnership with NHS with recommendations for future collaborative working between the public bodies acting as anchor organisations for sustainability within Cheshire East.

6. Consultation and Engagement

- **6.1.** There has been engagement with members through a Members Advisory Panel and officers through the Carbon Board.
- **6.2.** Consultation will proceed on each individual measure as part of the project development process.

7. Implications

7.1. Legal

7.1.1. This report does not cite any projects that at this juncture call for review by Legal. It is noted that the UK100 pledge is not legally binding. Whilst the Council works to evolve its approach to decarbonisation and develop projects which seek to deliver on the plans aims; Legal stands ready to consider implications arising from such projects and to advise accordingly.

7.2. Finance

7.2.1. The Council's Medium Term Financial Strategy (MTFS) for 2021-25 includes a revenue budget to support the delivery of the Carbon Neutral programme. The MTFS also includes several carbon neutral related capital schemes within the Addendum to the Capital Programme, including the Multi Site PV Scheme and Carbon Offset Investment.

- **7.2.2.** Further funding requests to support delivery of the programme will be presented for decision at full Council. These will include:
 - 7.2.2.1. Large Solar Farm Delivery of 50% of the carbon insetting required to become carbon neutral by 2025, through the creation a 20MWp Solar photovoltaic array. The cost of the scheme is estimated to be £14.2m, with the cost of capital recovered though future sale of the electricity generated.
 - 7.2.2.2. Council Fleet EV Charging Infrastructure Delivery of electric vehicle charging infrastructure for Council fleet. The cost is estimated to be £585k spread over 4 years 2022-2025. The cost of capital would be recovered through income raised for vehicle charging.
 - 7.2.2.3. There may also be a need to provide electric vehicle chargers at the Environmental Hub to enable the transition to ultra-low emission vehicles for the large Refuse Collection Vehicle fleet. The market for these technologies is still in development and includes electric, hydrogen and biofuels. This will require estimated capital investment of £400k from 2023/24.
 - 7.2.2.4. North Cheshire Garden Village Heat Network this will require a capital investment of £11.3m in 2024/25, although it is anticipated that at least 30% would be available from grant funding. It should be noted that this allocation would be to cover phase one. Phases two and three would follow in later years and would require further capital investment of approximately £10m. Connection charges would generate revenue of approximately £5m and there is the potential for further grant funding.
- **7.2.3.** There may be increased costs to building projects from the adoption of the Manchester City Council Low Carbon Build Standard. Projects may need to seek approval for additional funding once the adoption of the standard has been evaluated on a case by case basis.

7.3. Policy

7.3.1. The recommendations within this report are reflective of the priorities within the council's Corporate Plan 2021-25 and the vision for an open, fairer, greener Cheshire East. The plan includes the goal to be a carbon neutral council by 2025.

7.4. Equality

7.4.1. An equality impact assessment was undertaken for the Environment Strategy, of which the Carbon Neutral Action Plan forms a key element and concluded there are no adverse impacts on any of the protected characteristics. All residents are expected to benefit from taking action on climate change. Further assessment will be needed to assess individual measures proposed in the action plan on a case-by-case basis.

7.5. Human Resources

7.5.1. Policy changes may have HR implications and will be consulted on before they are implemented.

7.6. Risk Management

7.6.1. A programme risk register has been developed and is actively maintained. Individual projects also maintain their own risk register and individual risks are managed or mitigated.

7.7. Rural Communities

- **7.7.1.** Changes in land use to support the delivery of the carbon neutral goal may have an impact on rural communities. The land assessment has considered the competing priorities for different land parcels and given a rounded view.
- **7.7.2.** It is recognised that rural communities have different needs with regards to issues such as transport and may require particular solutions.

7.8. Children and Young People/Cared for Children

7.8.1. As part of the wider communications strategy plans are in place to engage with children and young people through various channels.

7.9. Public Health

7.9.1. It is expected that reductions in carbon emissions and associated pollutants will have a positive impact on public health.

7.10. Climate Change

7.10.1. The matters within this report are concerned with reducing the council's carbon footprint.

Access to Information	
Contact Officer:	Ralph Kemp, Head of Environmental Services
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Appendices:	Appendix 1 – Manchester Low Carbon Build Standard
	Appendix 2 – UK 100 Membership Pack
Part 2 Item	Appendix 3 – Land Use Assessment
Background Papers:	Cheshire East Carbon Neutral Action Plan