

NORTH WEST LEICESTERSHIRE DISTRICT COUNCIL

CORPORATE SCRUTINY COMMITTEE
 – WEDNESDAY, 9 JUNE 2021



Title of Report	ZERO CARBON ROADMAP UPDATE	
Presented by	Paul Sanders Head of Community Services	
Background Papers	Minutes of 31 March 2020 Cabinet meeting where Zero Carbon Roadmap & Action Plan was adopted Agenda for Leader of the Council Cabinet Member Meeting on Tuesday, 31st March 2020, 5.00 pm - North West Leicestershire District Council (nwleics.gov.uk)	Public Report: Yes
Financial Implications	A climate change reserve of £451,114 was allocated in the 2021/22 budget. This report proposes spending £140,000.	
	Signed off by the Section 151 Officer: Yes	
Legal Implications	Set out in section 8 of this report.	
	Signed off by the Monitoring Officer: Yes	
Staffing and Corporate Implications	None	
	Signed off by the Head of Paid Service: Yes	
Reason Agenda Item Submitted to Scrutiny Committee	To provide an update on the council's Zero Carbon Roadmap and Action Plan and an insight of future plans.	
Recommendations	<p>That Corporate Scrutiny Committee comments on:</p> <ol style="list-style-type: none"> 1. The progress that has been made with Year 1 of the Zero Carbon Roadmap 2. The actions and spend being proposed for year 2 of the Zero Carbon Roadmap plan, to feed into Cabinet's consideration at its meeting on 27 July 2021. 	

1. BACKGROUND

- 1.1. North West Leicestershire District Council (NWLDC) declared a climate emergency on 25 June 2019.
- 1.2. It subsequently commissioned specialist environmental consultants, Etude, in 2019 to help develop the council's response to the need to reduce the council's and district's carbon emissions. This focused on how to reduce emissions which are within the council's control.
- 1.3. Greenhouse gases emitted in North West Leicestershire are generally bulk products of the combustion of fossil fuels and they are produced on a massive scale. It is not practical to separate, remove or store these gases therefore the primary means to reduce them is to burn less fuel. Historically this has been achieved through making vehicles, buildings, and electricity generators more efficient. Efficiency alone cannot deliver carbon reductions. Zero emission technologies such as wind turbines, solar panels, heat pumps and electric vehicles can generate electricity, heat, and provide transportation without any need for fossil fuels. They offer a plausible route to achieve net zero emissions of greenhouse gases.
- 1.4. This activity led to the development of a Zero Carbon Roadmap and Action Plan which was adopted by the council on 31 March 2020. The Action Plan summarises recommended activity to achieve the ambition of a zero carbon council by 2030 and a zero carbon district by 2050.
- 1.5. The Zero Carbon Roadmap estimated, from a baseline of 2016, that the emissions from council owned assets of 18,000 tCO₂e represent just 1.5% of the total emissions of the North West Leicestershire district. This is dominated by the buildings owned and operated by the council, in particular housing. Whilst tackling the emissions from the council's own operations is an imperative, the scale of the emissions from the wider district highlights how important it is for the council to show leadership to influence wider district emissions.
- 1.6. The target for the council's operations to be zero carbon by 2030 and the district by 2050 is highly challenging and the council cannot achieve this alone. The council, in its civic leadership role, has a responsibility to lead in this area to help ensure that North West Leicestershire recognises and embraces the crucial activity required to meet the challenge.
- 1.7. A Climate Change Programme Manager was recruited and started in post on 1 September 2020 to lead the programme. A Zero Carbon Group was set up including officers from different functional teams and a full review of the Action Plan was undertaken to assess team ownership and involvement in the identified activities.
- 1.8. The Climate Change Programme Manager has engaged with colleagues at other districts and county through the Environment Group, and, together with the Head of Community Services, has built links with external bodies such as Midland Energy Hub, Energy Saving Trust and Leicester and Leicestershire Local Enterprise Partnerships as well as the East Midland Development Corporation through its emerging "Plan for Zero". This has helped identify collaboration and learning opportunities to drive our zero carbon agenda.

2. ZERO CARBON ROADMAP KEY THEMES

- 2.1. The Zero Carbon Roadmap is divided into several distinct activity groups.
 - Buildings and towns
 - Transport
 - Power
 - Waste
 - Forestry, land use and agriculture
 - Industry
 - Aviation and shipping
 - F-gases
 - Other
- 2.2. North West Leicestershire emissions are dominated by transport, buildings, and industrial installations.
- 2.3. Direct emissions from NWLDC are estimated at 1.5% of the total emissions from the district (council buildings, homes, vehicle fleet).
- 2.4. The council can directly influence a further 32% of emissions mainly through:
 - Planning for new buildings
 - Planning control for new industrial installations and site emissions
 - Electric vehicle infrastructure
 - Waste reduction and diversion from landfill
- 2.5. The initial focus is on the council's own activities and what direct action it can take. Other categories of activities identified are where the council can influence and where it can help to facilitate.

3. WIDER PERSPECTIVE ON CLIMATE CHANGE

- 3.1. The media coverage of climate change has changed significantly over the past year. Whilst environmental figureheads, such as David Attenborough and Greta Thunburg, and business leaders, such as Bill Gates, have raised the profile of the climate change emergency in the past, there is now more political recognition and commitment across the globe particularly with an increased interest in building back our society post Covid-19 in a more environmentally friendly manner.
- 3.2. The Prime Minister, Boris Johnson, released his [10 point plan](#) in November 2020, which is built around the UK's strengths and covers clean energy, transport, nature and innovative technologies.



- 3.3. The government is currently developing a number of key strategy documents including Heat & Buildings Strategy, Transport Decarbonisation Plan and National Infrastructure Strategy, alongside an Energy White Paper which will outline more detail on how it intends to achieve these ambitions.
- 3.4. The UK is hosting the UN Climate Change Conference [COP26](#) in November 2021 which will bring together world leaders to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change.
- 3.5. In the UK, ambitions and commitments are growing. The UK government has accepted the advice of its independent Climate Change Committee and in April 2021 announced new climate change commitments to set the UK on course to cut carbon emissions by 78% by 2035 (based on 1990 levels). To achieve this more electric cars, low-carbon heating, renewable electricity and potentially a reduction in meat/dairy and aviation, will all play a role.
- 3.6. These commitments, which are set to become law, bring forward the current target for reducing carbon emissions within 15 years. This would be a world-leading position and will undoubtedly lead to policy changes and the potential for future government funding support to North West Leicestershire.

4. COVID OBSERVATIONS

- 4.1. Since March 2020, due to the global pandemic, the council has been delivering its services predominantly remotely, supported by technology and flexible working arrangements.
- 4.2. With meetings, forums and webinars held on-line over the past 12 months, the global pandemic has challenged many organisations to re-think their operating models. A BBC survey in April 2021 of 50 of the UK biggest employers reported that almost all do not plan to bring staff back to the office full-time. Some 43 of the firms are looking to embrace a mix of home and office working, with staff encourage to work from home for two to three days a week, with a further four keeping hybrid working under review.
- 4.3. The council has been developing a Future Working Model which will continue to embrace flexible and agile working arrangements, and this will be adopted as the new, long term way of working with a clear focus on continuing to deliver the best

possible levels of customer service. It is not expected that individuals will return to be office based full-time and will be able to mix office work with home-working, dependent on their role and personal preference.

- 4.4. This creates the opportunity for the council to review its office accommodation and size requirements. Property Services is exploring office accommodation options as part of a wider portfolio review.
- 4.5. As well as the energy efficiency opportunities a smaller office space may present, it should also be noted that there will have been a reduction in personal commuting mileage, another positive impact on our zero carbon agenda.

5. YEAR ONE ACHIEVEMENTS

- 5.1. There has been a detailed review of our Zero Carbon Action Plan with twenty different teams at the council to drive both awareness of our action plan and to identify leadership, involvement, and collaboration opportunities. Activities have been incorporated into team service plans and are reflected in the Council Delivery Plan.
- 5.2. Power
 - 5.2.1. The council switched its electricity supply to a renewable source from October 2020. This is a four-year contract with Total Gas & Power via ESPO. With an annual usage estimated at 1.49 million kWhs, converting to renewable energy represents a full year of saving of **347 tCO₂e** (based on BEIS conversion rates for 2020-21 of 0.233). In addition, a full review of our electricity meters is well underway, building the foundation to review energy usage at location level in Year Two.
 - 5.2.2. Building on Etude's Zero Carbon Roadmap, a Renewable and Low Carbon Energy Study was completed by AECOM to provide further technical support to assess low and zero carbon energy opportunities across the district. This report has been completed and will form part of the technical evidence base to support the substantive review of the Local Plan.
- 5.3. Waste – Food Waste Trial
 - 5.3.1. The council's Recycle More Plan is an established programme and a key contributor to the council's zero carbon agenda. The roadmap aims to increase recycling rates by 1% per year to 50% by 2023. As part of this strategy, Waste Services has rolled out a food waste trial, supported by funding from the zero carbon reserve (£106,000).
 - 5.3.2. The trial was launched in November 2019 for 2000 households in part of Measham and the whole of Appleby Magna, Appleby Parva, Chilcote, Newton Burgoland, Snarestone & Sweptstone. Covid-19 impact led to its suspension in March 2020 in order to support domestic waste and recycling service.
 - 5.3.3. The trial resumed in November 2020 and has been extended to a further 2000 households in Coalville, Ravenstone and Whitwick. The scheme has been well received by residents.

- 5.3.4. Since the start of the trial in November 2019 to the end of March 2021, the service has collected a total 137.79 tonnes of food waste which represents a saving of **103.34 tCO₂e**.
- 5.3.5. In addition, a stackable container system has been trialled with 250 residents with the aim to make recycling easier, convenient, and safer.
- 5.3.6. In 2019/2020 (the latest official data), the total recycling rate increased by 1.3% to 46.3% and a total of 18,500 tonnes of waste was recycled or composted.
- 5.4. Transport - Electric Vehicle Charging
- 5.4.1. Electric vehicle (EV) charging points installations have been funded from the zero carbon reserve (£115,000). This investment demonstrates the council's commitment to take a leading role in encouraging our residents to embrace electric vehicles.
- 5.4.2. This year, the council has completed three EV charging point installations, each with four charging points, at Vicarage Street at Whitwick, Clapgun Street at Castle Donington and The Green at Thringstone. This is in addition to an earlier installation at North Street at Ashby de la Zouch.
- 5.4.3. The three installations were supported by a grant from the Office for Low Emission Vehicles (OLEV) of £45,000 and went live for residents to use from April 2020.
- 5.4.4. Feasibility studies are underway at two council car park locations in Coalville.
- 5.4.5. For the financial year 2019/20, the North Street EV chargers reported a saving of **2.960 tCO₂e** based on standard electricity. In the financial year 2020/21, the usage was lower due to Covid-19, however, from October 2020 the council's electricity supply was from a renewable source, so the total CO₂ saving will have been higher, equating to an estimated total of **1.918 tCO₂e**. This saving is included within the council's renewable electricity usage.
- 5.5. Transport – Fleet Management Strategy
- 5.5.1. Officers have commissioned a fleet management strategy part funded by the zero carbon reserve (57% contribution £12284, balance from HRA funding). Fleet replacement activity and additional investment has been paused pending the development and adoption of a clear fleet management strategy.
- 5.5.2. Loughborough based consultants, Cenex have been engaged to review the current fleet and operations and build a roadmap and action plan to transition the existing council fleet to a zero carbon/low carbon solution by 2030. Where a low carbon solution is not yet available, they will provide timescales for future expected technology opportunities and interim improvement opportunities.
- 5.5.3. This activity is well underway, and the resulting strategy will be shared with Corporate Scrutiny followed by Cabinet in September and will influence and shape our capital plan.

5.6. Transport – Cycling and Walking Strategy

- 5.6.1. Following the government's drive to get people cycling and walking more, the council's Health & Wellbeing team has commissioned a cycling and walking strategy for North West Leicestershire, working alongside Leicestershire County Council (LCC) who are developing a countywide Cycling and Walking Strategy.
- 5.6.2. The intention is to identify potential additional cycling and walking routes across the district to both encourage sustainable travel and increase connectivity within North West Leicestershire and into neighbouring authorities, and to identify the infrastructure required and the associated costs and implications of doing this.
- 5.6.3. The initial strategic overview, which dovetails into the LCC strategy, will be available in June 2021. This will lead to a second activity to create a detailed action plan that builds on the strategy by understanding the financial and operational implications of developing routes and maintaining them. This is due to be completed by December 2021.

5.7. Buildings and towns

- 5.7.1. The council's housing service, as part of their retrofit programme, has previously trialled a number of low emission solutions, including biomass boiler, air source heat pumps, solar thermal and solar PV installations. To date there have been 361 air source heat pumps installed in tenants' homes.
- 5.7.2. In January, the council's housing service was awarded funding from the government's Green Homes Grant (GHG) Phase 1B (£264,000) which will help fund efficiency improvements to c56 social housing properties alongside a council funded investment of £437,000. The grant funding was received in March and planning of this improvement scheme is well underway with delivery required by the end of September 2021.
- 5.7.3. The social housing new build design specification has improved from energy EPC rating B to A. Whilst this is an energy efficiency measure it will effectively translate to a carbon reduction.
- 5.7.4. The development of Newmarket has been designed and fitted with electric heating only and LED lighting. The Linden Way depot welfare facilities also have electric heating.

5.8. Other

- 5.8.1. A zero carbon update was presented at the Parish Council Liaison forum, including information about a community carbon calculator. The session was well-received.
- 5.8.2. Whilst the grant programme was paused from March 2020-October 2020 due to Covid-19, officers have provided two zero carbon grants to the value of £1000, with three more in progress. The scheme has been reviewed and the minimum grant reduced from £500 to £50 to encourage more applications.

5.9. Summary of Year One Saving

Category	Activity	tCO ₂ e *	Reference
Power	Electricity Supply	173.5	5.2.1 (from October)
Waste	Food waste trial	103.34	5.3.4
Transport	EV charging	1.918	5.4.5 – included in electricity
Buildings & Towns	HRA activity	N/A	5.7.1/5.7.2/5.7.3
Total		276.84	

* tCO₂e is a standard unit for measuring carbon footprint

6. YEAR TWO PLANS

6.1. Year Two will build on Year One foundations and introduce some new workstreams.

6.2. Waste

6.2.1. The food waste trial will continue across 4000 properties and the forecasted saving, based on the average participation rates of 35%, is **174.25 tCO₂e**. Officers have set a target to achieve a rate of 40% participation by the end of 2021/22 which would equate to a full year saving of **199.14 tCO₂e**.

6.2.2. As part of the Recycle More Plan, officers will continue the food waste trial to the end of 2021/22 and build the business case to expand this service across the whole district during 2022/23.

6.2.3. Based on the average participation rate of 35% in the trials to date and the quantity collected, across 48,000 residential properties, this would equate to a saving of **2090 tCO₂e**. If participation rates were to achieve 40% in the first year of a district wide service, this would equate to a saving of **2389 tCO₂e**.

6.2.4. A second container system will be trialled this year with 250 residents and will be compared with the first stackable wheeled container trial. The aim is to make recycling easier, convenient, and safer.

6.3. Transport

6.3.1. Officers will install electric vehicle charging points in a council car park in Coalville as well as two charging points at the depot to support vehicle trials. Note: emission savings will be included within the council's electricity usage.

6.3.2. Officers will investigate options for electric vehicle charging points at the council offices, dependent on Property Services portfolio review.

6.3.3. Electric vehicle charging points will be installed at Whitwick and Coalville Leisure Centre.

6.3.4. The travel expense policy will be reviewed in order to encourage staff to consider their carbon footprint.

- 6.3.5. The Fleet Management Strategy and action plan will be completed and reported to Scrutiny and then Cabinet in September 2021 outlining our roadmap and proposals for future fleet investment.
- 6.3.6. North West Leicestershire Cycling and Walking Strategy will be completed and plans and priorities for local infrastructure to drive connectivity improvements will be in place.
- 6.3.7. Vehicle emissions from licenced Hackney Carriage and Private Hire vehicles will be reduced by encouraging taxi operators to move to lower emission vehicles through lower licencing fees. The target in the Council Delivery Plan is to achieve 93% of vehicles with a Euro 5 engine of higher in 2021/22 and 100% by 2022/23.
- 6.4. Power
- 6.4.1. Car park lighting in the council's car parks will be converted to LED.
- 6.4.2. Solar panels will be installed on the roof of the sports hall at the new Whitwick and Coalville Leisure Centre
- 6.4.3. Electricity and gas usage will be reviewed and monitored across the council's estate.
- 6.4.4. Mine water heating opportunities will be investigated with a view to setting up a future pilot project. This technology could provide low carbon, low cost heat from water from dis-used mines underneath Coalville with the potential to feed the new Leisure Centre, Stephenson College and the council offices.
- 6.5. Power/Buildings and towns
- 6.5.1. The council's zero carbon ambition will be built into the substantive review of the Local Plan including:
- renewable energy, primarily wind and solar
 - energy efficiency standards for new homes
 - provision of electric vehicle charging points for residential and employment developments, where electricity supply permits
- 6.5.2. Officers will explore the setting up of a carbon offset fund.
- 6.6. Buildings and towns
- 6.6.1. Officers will manage the delivery of improvement works to c56 social housing properties, supported by the government's Green Homes Grant Phase 1B, by the end of September 2021.
- 6.6.2. Works is also being carried out to 76 E rated EPC properties where cavity wall insulations and top up loft installation will be fitted. Whilst this works initially started in 2020, the programme has been delayed by Covid-19. This activity will improve the energy efficiency of the properties and is funded through E-on with no cost to the council.
- 6.6.3. The council's housing service will be developing the HRA asset management strategy for approval within 2021/22 outlining plans for improving energy

efficiency and retrofitting the existing housing stock of 4100 tenants' homes. Zero carbon will be a key consideration and the strategy will include methodology to measure the CO₂ emissions benefit of improvements.

- 6.6.4. Within housing, there will be a focus on building technical skills and capacity to support the delivery of further efficiency improvement works key to our zero carbon agenda in order to complete works directly rather than via contractors (e.g., air source heat pumps, solar thermal, solar PV etc).
 - 6.6.5. A review of the councils' property portfolio will be carried out with associated retrofit plans that will help drive energy efficiency across the estate.
 - 6.6.6. Regeneration activity will consider zero carbon implications within all projects.
 - 6.6.7. Officers will explore sourcing information to provide the foundation for potential future activity with private residents of North West Leicestershire to improve their energy efficiency. Currently the council has limited insight on the district or framework to best target support and signpost opportunities, including grants.
- 6.7. Forestry, land use and agriculture
- 6.7.1. The Free Trees scheme will return in November 2021.
 - 6.7.2. Officers will work with County to explore tree planting opportunities and funding on council owned land.
- 6.8. Other
- 6.8.1. Officers will undertake foundation work to complete analysis of our indirect emissions ("Scope 3" or indirect emissions were not considered by the Etude report) in order to understand risks, identify and prioritise opportunities, shape the council's procurement policies and ultimately influence council spend, partners and suppliers.
 - 6.8.2. Officers will support Parish councils to understand their carbon footprint providing coaching sessions on a community carbon calculator.
- 6.9. Summary of Year Two

Category	Activity	tCO₂e *	Reference
Power	Electricity Supply	347.00	as per 20/21
Waste	Food waste trial	174.25-199.14	6.2
Waste	Recycling	-	methodology to be developed
Transport	EV charging	4.11	6.3.1 forecast included in electricity usage
Buildings & Towns	HRA activity	-	methodology to be developed
Buildings & Towns	Property Services	-	methodology to be developed
Total		521.25-546.14	

* tCO₂e is a standard unit for measuring carbon footprint

7. FINANCIAL REPORTING

7.1. Zero Carbon Reserve

7.1.1. Each activity will be supported by a detailed business case to assess the affordability and deliverability of a potential project on a case by case basis. In addition, grants and funding options will be explored.

7.1.2. The Zero Carbon Roadmap Financial Summary for Year One is as follows:

Funding - Revenue	£885,000
<u>Revenue Projects (c/c 0970)</u>	
Staffing (original funding for 3 Year post)	£187,830
Working Budget (3 year funding)	£30,000
Food Waste Trial (Measham & Coalville)	£106,000
Fleet Strategy Consultants (57% contribution)	£12,284
	£336,114
Funding - RCCO	£115,000
<u>Capital Projects</u>	
Electric Vehicle Charging Points	£160,000
External Grant for EVCP (OLEV)	-£45,000
	£115,000
Total Allocated	£451,114
Unallocated Balance	£548,886

7.1.3. The proposed spend from Zero Carbon Reserve in Year Two, from the unallocated balance is:

Unallocated Balance	£548,886
EV charging infrastructure/strategy *	£50,000
Minewater feasibility study	£50,000
District level resident/housing data	£10,000
Indirect emissions (Scope 3) evaluation	£15,000
LED lighting for car parks	£15,000
Total	£140,000
Unallocated Balance	£408,886

* estimated cost, dependent on feasibility study

7.2. Wider Council Zero Carbon Related Spend

7.2.1. Year One – 2020/21

Category	Activity	Spend	Grant	Comment
Power	Electricity Supply	£470		On-cost of renewable GF budget
Transport	Cycling & walking strategy	£4,884		
Buildings & Towns	HRA activity	N/A		No specific spend
Buildings & Towns	Properties Services	N/A		No specific spend
Buildings & Towns	Newmarket - LEDs	£15,000		Capital programme
Buildings & Towns	Newmarket – electric kitchen equipment (v gas)	£10,000		Capital programme
Buildings & Towns	Depot welfare – electric heating	£7,500		Capital programme
Total		£37,854		

7.2.2. Year Two – 2021/22

Category	Activity	Spend	Grant	Source
Power	Electricity Supply	£941	-	On-cost of renewable GF budget
Power	Car park lighting LED	£25,000		GF budget
Transport	Fleet strategy (HRA)	£9,267		(43% contribution)
Transport	Cycling & walking strategy	£11,366		
Transport	EV charging - depot	£3,312	£700	ZC Working budget
Transport	EV charging - leisure centre	£25,000		Capital programme
Buildings & Towns	HRA activity - GHG	£437,000	£264,000	HRA budget/ Grant
Buildings & Towns	Leisure centre - PVs	£200,000		Capital programme
Buildings & Towns	Property portfolio review	tbc		
Total		£711,886	£264,700	

8. LEGAL IMPLICATIONS

- 8.1. All decisions arising from the implementation of the action plan must comply with the council's established governance and decision making processes.
- 8.2. The legal implications of specific aspects of the plan will need to be assessed further in more detail on a case by case basis.

9. RISK IMPLICATIONS

- 9.1. Risk Management will be a central consideration of each action's business case. Affordability will be a central concern as will the availability of technology that can deliver the required low emission solution.
- 9.2. There are undoubtedly mixed perceptions of climate change across the various stakeholders and communities of the district that manifest into a spectrum of views that the council will need to navigate in the implementation of the action plan, the prioritisation of resources required as well as messages to communities.

10. ANNEXES

- 10.1. Annex A Year one achievements

Policies and other considerations, as appropriate	
Council Priorities:	"Developing a clean and green district"
Policy Considerations:	Zero Carbon Roadmap and Action Plan Local Plan
Safeguarding:	N/A
Equalities/Diversity:	An impact assessment will need to be carried out as part of each project's business case.
Customer Impact:	Communities, council tax and businesses in the district will be engaged on the roll out of the programme.
Economic and Social Impact:	This will be a key aspect of each business case to assess not only the financial impact of intervention but the wider benefits.
Environment and Climate Change:	The adoption of the Zero Carbon Roadmap and associated Action Plan sets out the council's future approach to addressing the climate emergency.
Consultation/Community Engagement:	Communities and businesses will be engaged on the roll out of the programme.
Risks:	Covered under Section 9 of this report.
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