

<b>Title of Report</b>	<b>Adoption of Zero Carbon Roadmap and Action Plan</b>	
<b>Presented by</b>	<b>Cabinet Member for Community Services</b> <a href="mailto:Andrew.Woodman@nwleicestershire.gov.uk">Andrew.Woodman@nwleicestershire.gov.uk</a>  <b>Head of Community Services</b> <a href="mailto:Paul.Sanders@nwleicestershire.gov.uk">Paul.Sanders@nwleicestershire.gov.uk</a> 01530454832	
<b>Background Papers</b>	<b>Minutes of 25<sup>th</sup> June 2019 Cabinet regarding motion on climate emergency</b>	<b>Public Report: Yes</b>  <b>Key Decision: Yes</b>
<b>Financial Implications</b>	A climate change reserve of £885,000 has been allocated in the 2020/21 budget. This report proposes spending of £184,200 over the next three years for a Climate Officer and of £106,000 on expansion of the Food Waste Trial. In total, these allocate £290,200 leaving £594,800 in the reserve.  <b>Signed off by the Section 151 Officer: Yes</b>	
<b>Legal Implications</b>	Set out in paragraph 17.0 of this Report.  <b>Signed off by the Monitoring Officer: Yes</b>	
<b>Staffing and Corporate Implications</b>	Set out in paragraph 12.0 of this Report.  <b>Signed off by the Head of Paid Service: Yes</b>	
<b>Purpose of Report</b>	<b>To provide Cabinet with a detailed report and action plan on the nature and scope of the challenge of achieving carbon neutrality for both council operations by 2030 and the district as a whole by 2050.</b>	
<b>Reason for Decision</b>	<b>Adoption of Zero Carbon Roadmap and Action Plan</b>	
<b>Recommendations</b>	<b>That Cabinet approves:</b> <ol style="list-style-type: none"> <li><b>1. The Zero Carbon Roadmap and Action Plan (Annex A B and C).</b></li> <li><b>2. The allocation of a resource for a Climate Change Officer to lead on the Carbon Reduction Roadmap, develop relevant projects/funding bids and coordinate the work programme for both the council's operations and the district as a whole (para 12.1)</b></li> <li><b>3. The allocation of a resource to continue the food waste collection trial in Measham and a resource for a second pilot in Coalville (para 13.2)</b></li> </ol>	

## 1. BACKGROUND

- 1.1 As of November 2019 over 260 local authorities across the UK had declared a climate emergency and in June 2019 the UK Government committed to be carbon zero by 2050. North West Leicestershire District Council at its Full Council meeting in June 2019 declared a climate emergency as follows:

*"This council declare a climate emergency and will aim to achieve carbon neutrality from its own operations by 2030 and accordingly requests that officers develop an environmental strategy necessary to achieve this aspiration together with an assessment of the cost and technology implications of so doing to enable Cabinet and Council to take an informed decision whilst recognising that this will potentially require the allocation of resources from the council"*

- 1.2 The council has a track record in recognising the need to protect the environment and has for some years now had a *Green Footprints* programme of work including kerbside recycling sorting that is supported by the current Council Priority of *"Developing a clean and green district"*. Recent notable environmental initiatives have included the free tree scheme, the installation of air source heat pumps in council homes, car charging pilots, a weekly separate food waste collection trial for 2,000 households, 250 stackable recycling container trials and battery/mobile phone kerbside recycling collections.
- 1.3 Specialist environmental consultants Etude were commissioned by council officers in 2019 to help develop the council's response to the need to reduce the council's and the district's carbon emissions. The development of the suite of documents set out at **Annexe A and B** to this paper has been a robust learning process for council officers given that such specialist knowledge and expertise is not available in house. There is a council officer project team in place that has and will continue to guide the project once adopted.
- 1.4 Council officers have also ensured that there has been ongoing engagement with officer colleagues at Leicestershire County Council, the Leicester and Leicestershire Local Enterprise Partnership as well as other districts across the county who are also developing their approaches. As detailed business cases are developed for individual projects there are bound to be opportunities for synergy across the various public bodies including potential opportunities to share resources, time and personnel.

- 1.5 An all member briefing and workshop was held on 20 January 2020 at which the draft Zero Carbon Roadmap and Action Plan was shared. A list of comments are attached at **Annex D** that will help shape the action plan implementation. Community Scrutiny Committee will have a key role in helping to shape and guide the action plan delivery once adopted.

## **2.0 WARMING PROJECTIONS AND WHY WE MUST ACT**

- 2.1 The science is becoming ever clearer that our climate is changing.

The Intergovernmental Panel on Climate Change operational report on global warming (Oct 2018) describes the enormous harm that a 2% rise in global temperature is likely to cause compared to a 1.5% rise. The report goes on to say that limiting global warming to 1.5% may still be possible with ambitious actions from all levels of government, communities and the private sector

- 2.2 Society has become ever more active about climate change and there are many important stakeholders and agencies calling for action. The Committee on Climate Change, that advises the government, in its Net Zero Report of May 2019 stated that the “delivery of greenhouse gas reductions must progress with greater urgency”

## **3.0 GREENHOUSE GASES, AIR POLLUTION AND FUEL POVERTY**

- 3.1 Greenhouse gases emitted in NWL are generally bulk products of the combustion of fossil fuels. 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 zero carbon. Zero emission technologies such as wind turbines, solar panels, heat pumps and electric cars 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.
- 3.2 Air pollution is often also caused by the combustion of fossil fuels, however it is usually due to very small quantities of pollutants that are produced as by-products. These can often be filtered to some extent, such as through the use of catalytic converters in vehicles.
- 3.3 Fuel poverty is caused by the excessive need for energy and/or excessive cost of energy, relative to income. This is often due to people on lower incomes living in inefficient housing, driving inefficient vehicles and/or being charged higher rates for energy.
- 3.4 The Zero Carbon Roadmap and Action Plan at **Annex A, B and C** focuses solely on the measures required to achieve net zero greenhouse gas emissions in North West Leicestershire. It is important to understand that many, but not all, of these measures will also help to reduce air pollution and fuel poverty as well as improve the quality of air within the district.

## **4.0 CURRENT GREENHOUSE GASES FOR THE DISTRICT**

- 4.1 Etude have carried out a detailed assessment of both the emissions for the district as well the council's own operations and the calculations can be found from page 16 of **Annex A**.
- 4.2 For the district as a whole 1,281 kt CO<sub>2</sub>e are estimated to be produced per annum. Emissions are dominated by transport, buildings and industrial installations. The council's direct operations generate an estimated 18 kt CO<sub>2</sub>e from its buildings, council homes and fleet.
- 4.3 Although the council's share of the direct emissions only represents less than 1.7% of the whole district's emissions, the council has the potential to influence a further 32% of emissions through its planning powers as well as its statutory duty to collect domestic waste from every household.

## **5.0 ACTION PLANNING**

- 5.1 Meeting the target for the council's operations to be zero carbon by 2030 and the district by 2050 is a highly challenging issue and the council cannot achieve this alone. The council, in its civic leadership role, has a responsibility to lead in this area to ensure that North West Leicestershire plays a crucial role in meeting the challenge.
- 5.2 The production of this sustainability report is a significant milestone for the council and the associated action plan at **Annex B** sets out the recommended actions that are required for the initial years of 2020/21, 2021/22 and 2022/23 for both the councils operations and the district as a whole.
- 5.3 Each of the actions will require a detailed business case examining the feasibility, affordability, deliverability and the timing of the required action.

## **6.0 DIRECT COUNCIL OPERATIONS**

- 6.1 The council needs to lead by example and address the carbon emissions from its own direct operations as well as others that it commissions to provide services. Some of the key actions for the council to consider are: installation of PV's; ensuring the councils electricity supply is 100% renewable; wind turbines on council land; improving the energy efficiency of its main offices, council homes and wider assets including LED installation; ensuring that new housing that the council builds is Passivhaus standard or similar; mine water heating; fleet electrification(pool cars/waste and cleansing/housing/parks); greater recycling and less waste from council buildings and building projects; tree planting; dietary changes and staff green incentives/promotions.

## **7.0 THE COUNCIL AS AN ORGANISATION**

- 7.1 Appoint a dedicated sustainability officer to manage the programme of work, collect and report on CO<sub>2</sub> council emissions; ensure sustainability becomes and remains a headline priority and key decision making consideration for the council; strong leadership from the Corporate Management Team; embed, manage and monitor progress against all actions; employee engagement and training, all council polices to be aligned to the 2030/2050 objective; staff travel/lease arrangements review, waste champions for each council building; suppliers to be encouraged to reduce carbon footprint; environmental considerations embedded in all procurement considerations; relaunch of green footprints and grants scheme, partnerships with the National Forest, citizens assembly on climate change.

## **8.0 THE COUNCIL AS AN INFLUENCER: LOCAL PLAN AND POLICY**

- 8.1 Set targets for solar and wind capacity, passivhaus or equivalent for new homes and business premises, prevention of the installation of any new fossil fuel heating systems or gas powered VCHP systems; set up a carbon offset fund; electrical charging infrastructure; enhanced pedestrian and cycle routes; increased recycling and zero biodegradable waste to landfill; appropriate domestic and commercial waste storage and collection facilities as well as construction waste recycling; increases in woodland and open spaces and discouraging air conditioning systems.

## **9.0 PARTNERSHIP WORKING WITH PUBLIC AND PRIVATE SECTORS**

- 9.1 Help to encourage the creation of community energy companies, a community renewable energy investment fund; warehouses to install PV's (M & S; DHL; Segro; Castle Donnington, Coalville and Ashby Business Parks); on shore wind proposals; existing offices and businesses to develop net zero approaches, encourage engineers to retrain in heat pump technology; buses to convert to EV or hydrogen; electric highway/business/residential charging; bike hire schemes; rail infrastructure improvements; taxis to be electric; cars and HGV's to become electric and encourage businesses to recycle more and have zero food waste to landfill.

## 10.0 ENGAGEMENT WITH THE GENERAL PUBLIC

- 10.1 Engage with the public to embed an ownership of the actions individuals and communities can take to minimise their carbon footprint with technical advice to property owners, public awareness campaigns, private housing campaigns, promotion of transport of the future options, EV cars, recycling and food waste.

## 11.0 FINANCIAL IMPLICATIONS

- 11.1 As previously stated within this report, each action will require a detailed business case to assess the affordability and deliverability of a potential project. The council will need to consider the revenue and capital funding requirement of each action on a case by case basis. Clearly the scale of funding required for both the district and the council will be significant however with an adopted assessment, strategy and action plan in place this will help to provide the framework for any funding applications and bids to both regional and national agencies as well as central government as the arise in the immediate and long term future.

- 11.2 The Zero Carbon Roadmap Financial Summary is as follows:

Budget 20/21	£885,000
<u>Proposed Expenditure</u>	
Climate Officer 2020 - 2023	£184,200
Food Waste Trial	£106,000
Total Expenditure	£290,200
Balance remaining	£594,800

## 12.0 CLIMATE OFFICER

- 12.1 The council has as a part of its budget setting planning for 2020/21 set aside a general fund of £1m to address the cost implications of the zero carbon roadmap action plan and in order to provide both a specialist resource and capacity to manage this complex programme of work it is recommend that Cabinet approves the permanent funding for a Climate Officer as from April 2020 and a £10k annual working budget for project management/specialist commissions. Over the initial three year period this represents a drawdown on the £1m reserve of £184,200 as per the below table.

Climate Officer	Salary	Oncosts & Car Allow	Working Budget	Total
2020/21	£34,480	£14,480	£10,000	£58,960
2021/22	£36,190	£14,870	£10,000	£61,060
2022/23	£38,130	£16,050	£10,000	£64,180
	£108,800	£45,400	£30,000	£184,200

This role will be the programme manager for project and will develop, promote and deliver the strategy enabling the council to achieve the Carbon Zero Action Plan by developing sound business cases that deliver services in a sustainable way, enhancing our reputation as a forward thinking and responsible council. The role will specifically be responsible for the following:

- To present policies, reports and briefings at committee, government departments, public meetings and enquiries and to support the production of responses to enquiries from the general public and media.
- To coordinate and develop responses to relevant local, regional and national consultations, ensuring effective feedback to government.
- Develop awareness training to ensure environmental sustainability and climate change initiatives for council, businesses and the community are understood and delivered in partnership.
- Understand and take advantage grants opportunities for district and countywide projects

## 13.0 FOOD WASTE TRIAL CONTINUATION AND EXPANSION

### 13.1 Background

Recycle more...The Plan was adopted by Cabinet in April 2019 and one of the key actions is providing a proposed weekly separate food waste collection service for all households in the district. The food waste would be sent for reprocessing, a fundamental contribution towards the district's household recycling rate.

Furthermore, the collection and reprocessing of domestic food waste is supported by the Committee on Climate Change (CCC), which is an independent advisory body to the Government. As referenced in **Annex A**, it published "a roadmap to Zero Carbon 2050 for the UK" in May 2019. It advises zero organic waste to landfill by 2025. The Department for Environment, Food & Rural Affairs (Defra) also supports this as "Our Waste, Our Resources: a Strategy for England", published in December 2018 details legislation for mandatory separate food waste collections in 2023, subject to consultation.

According to The Waste and Resources Action Programme (WRAP) which works with governments, businesses and communities, as of 2017/18, 51% of local authorities in England already collect food waste, with 35% of them collecting it separately. It calculates for every 1 tonne of food waste collected separately which is sent for reprocessing, instead of landfill saves 0.75 tonnes of Co2. Therefore, North West Leicestershire District Council proposes to provide this service to residents, as it will contribute towards the proposed Zero Carbon Roadmap and Action Plan, as well as contributing to the district's household recycling rate.

### 13.2 Current and proposed weekly separate food waste collection service trials

As an action of Recycle more, a weekly separate food waste collection service trial commenced at the end of November 2019 for 2,000 households in part of Measham, and for the surrounding villages of Appleby Magna, Appleby Parva, Chilcote, Newton Burogland, Snarestone and Swebstone.

As of 18/3/20, **41.18** tonnes of food waste has been collected. It is sent for reprocessing at an anaerobic digestion facility operated by Biogen in Atherstone. This food waste is used to produce green electricity which is sold to the national grid, and the by-product is used as a bio-fertiliser on local farmland. To date, this has resulted in a saving of **30.89** tonnes of CO<sub>2</sub>, than if the food waste had been disposed of at landfill. See **Annex E** for further information.

The participation rate of those households which are using the service varies between **35.17% - 44.2%**. See **Annex E** for further information.

WRAP calculates levels of participation as:

- Poor participation = less than 35%,
- Average participation = 35% to 55%
- Good participation = 55% and above

Currently the participation of the trial can be classed as average. To date, no communication intervention with residents has taken place. However, now that the trial is established “no food waste” stickers will shortly be placed on residents’ domestic black bins. This will encourage those residents which aren’t engaging and participating with the service to do so, by using it instead of disposing of food waste in the domestic black bin.

Officers will also carry out a door knocking campaign amongst those households who are not participating in the service. This will assist in identifying what barriers are preventing them from doing so.

The provision of free compostable liners are available to residents on the trial as recommended by WRAP, as they identify that such provision helps to maintain engagement with the service amongst residents.

The average amount of food waste collected per household per week is between **2.97 kg – 3.34kg** defined as “yield” by Wrap. Wrap calculates the average yield per household receiving a separate weekly food waste collection service is 1.5 kg - to date the average yield for the trial is twice this figure. See **Annex E** for further information.

This demonstrates those households using the service are engaging with it very well, which is further supported by compliments received from residents recorded by the Customer Services team. A number of those compliments are provided below, further compliments are detailed in **Annex E**.

“I’m so pleased to be able to recycle more - the kids are enthusiastic about it too. I do hope the scheme gets taken further”.

“We think the food waste recycling is absolutely fantastic, we have used it so much. The collection drivers are also so courteous and efficient. Really hoping the trial becomes a permanent arrangement”.

“My family are very happy with recycling our food waste and it is having a real impact reducing the amount of waste in our black bin on a weekly basis”.

It is proposed that the scheme in Measham is continued and funded to 31<sup>st</sup> March 2021 at a cost of £48,000. This will enable the collation of further data which will be used to support the proposal for rolling out a separate weekly food waste collection service throughout the district. Also from the yield data and compliments received, those residents who are using the service are finding it invaluable, hoping it becomes a permanent arrangement and it is having a real impact of reducing the amount of waste in the black bin. It is anticipated that the UK Government will look to fund collection authorities for full food waste collection roll-out.

There is operational capacity to be run an additional trial for a further 2,000 households. The same food waste collection vehicle and operatives could be utilised to operate the proposed trial between Tuesday – Friday, alongside the current trial in Measham and the some of the surrounding villages.

If approved this would assist the collation of further data as the service would run at an enhanced and fuller capacity. This data gathering would be invaluable if the proposal for rolling out a weekly food waste collection service throughout the district was approved at a later date. It is proposed that a report proposing rolling out a weekly food waste collection service throughout the district is submitted for November’s Cabinet meeting. At this current time the indicative revenue and capital costs to provide such as service for the whole of North West Leicestershire would be in the region of £1.2m, however full costs will be provided in the cabinet report for members to consider.

To run a proposed additional trial in Coalville it would cost £58,000. This would be a total drawdown on the reserve of £106,000.

Furthermore, as a result of the current trial in Measham and the surrounding villages there’s an opportunity to provide food waste recycling at the Council Offices in staff kitchens. This will be at no further cost as the existing food waste collection vehicle and operatives will be utilised. The food waste will be processed at the same anaerobic digestion facility and will ensure as a local authority we’re leading by example and following best practice, another key action of the proposed roadmap to zero carbon as well as Recycle more. Officers within the Waste Services team are proposing to launch the collection from the Council Offices in March through liaison with other district council officers.

If successful, the same initiative could be provided at other council owned sites such as the recycling depot on Linden Way in Coalville and the Open Space and Parks depot based at Coalville Park.

In addition, if a separate weekly food waste collection service is provided throughout the district, there’s potential capacity to collect food waste from local businesses and schools on a Monday. This would further enhance the offering provided by our existing commercial waste service, as well as actively influencing third parties within the district on their journey towards zero carbon.

## **14.0 ELECTRICAL VEHICLE CHARGING POINT INSTALLATIONS**

- 14.1 A capital budget of £115,000 has been included in 2020/21 for the installation of electric vehicle charging points and is a further draw down on the reserve. Feasibility surveys will be undertaken to determine costs and locations prior to any installations taking place.

In April 2019 the council installed 4 x 7kw (medium speed) electric vehicle charging points within North Street car park as a pilot scheme, the decision for fast speed charging will be dependent on the infrastructure outcomes of feasibility studies in the preferred locations.

Carbon (Co<sub>2</sub>) saved up to and including 29 February 2020 is in excess of 2500 kilograms and with the number of vehicles having used the charging points exceeding 1000.

Annex F of this report illustrates the identified locations where feasibility surveys are to be completed.

## 15.0 OTHER CARBON NEUTRAL EXPENDITURE FUNDED BY UNSUPPORTED BORROWING

15.1 As part of the future fleet capital programme it is proposed to purchase various electric vehicles. A summary of these and the additional cost of buying electric vehicles compared to diesel is shown below.

19/20	1 x Medium Van for Street Cleansing £18.5k (delivery now expected 20/21)	£18,435
20/21	1 x Pool Car £15k, 4 x Medium Vans for Housing Hybrid £? (£48k for EV, Hybrid costs unknown)	£15,000 + Hybrid
21/22	3 x Cars for Enforcement £45k, 1 x Light Van for Parks £15k, 1 x Sweeper £50k	£110,000
22/23	1 x light Van for parks £15k, 1 x Medium Van for housing maybe Hybrid £?, 1 x Light Tipper for Street Cleansing £15k	£30,000 + Hybrid
23/24	1 x Pool Car £15k, 1 x Small Van for Enforcement £15k, 1 x Medium Van for Enforcement £13k	£43,000

The above vehicles and budgets are indicative as changes in technology and costs over the coming years could lead to further changes in the councils fleet vehicle programme.

## 16.0 HOUSING REVENUE ACCOUNT

- 16.1 The Housing Revenue Account will be developing its funding solutions in line with the actions set out within the plan. This will include the development of relevant business cases that build on the good practice trials already carried out in this service area
- 16.2 A program of development is currently being progressed with Everwarm to install Air Source Heat Pumps in council properties that currently use solid fuel or storage heating. This work has been rolled out on a geographical basis commencing in Albert Village and Worthington. To date 300 installations have been completed, 263 of these have removed the need to burn solid fuel.
- 16.3 The programme included the installation of loft and cavity wall insulation where possible; the full programme has resulted in warmer and more efficient homes that have been well received by tenants.
- 16.4 This programme is improving the Standard Assessment Procedure (SAP Ratings) for our housing stock; it has therefore been decided to continue this programme in an effort to further reduce the number of homes using solid fuel or storage heating whilst at the same time reducing the amount of CO2 produced.

## 17.0 LEGAL IMPLICATIONS

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

## 18.0 RISK IMPLICATIONS

- 18.1 Risk management will be a central consideration of each action's business case. Affordability will be a central concern as will the availability of the technology that can deliver the required low emission solution.
- 18.2 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

## 19.0 ANNEXES

- 19.1 Annex A Zero Carbon Roadmap Main Document
- 19.2 Annex B Zero Carbon Roadmap Action Plan
- 19.3 Annex C Zero Carbon Roadmap Summary Document
- 19.4 Annex D Comments from All Member Briefing and Workshop held on 20.01.20
- 19.5 Annex E Food Collection Waste Trial Date
- 19.6 Annex F District Map showing existing and proposed locations for Electric vehicle charging points.

Policies and other considerations, as appropriate	
Council Priorities:	"Developing a clean and green district".
Policy Considerations:	The adoption of the Zero Carbon Roadmap and Action Plan sets out a key policy for the council
Safeguarding:	Not applicable
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 within 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 an intervention but the wider benefits
Environment and Climate Change:	The adoption of this new policy and associated action plan sets out the council's future approach to addressing the climate emergency

Consultation/Community Engagement:	Engaging the community and businesses is detailed within section 8 of this report
Risks:	Covered under section 18 of this report
Officer Contact	Paul Sanders