

Draft City of Lincoln Council Decarbonisation Strategy and Action Plan

Responding to the Climate Emergency

2021-2030



Lincoln COUNCIL Together, let's deliver Lincoln's ambitious future

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Introduction

What does carbon neutrality mean?

Carbon neutrality means reducing net emissions by at least 95% of 2008 levels, there may be a residual 5% of emissions that is not technically feasible to eliminate by 2030. The UK Government ambition is for carbon neutrality across the entire UK public sector, i.e. some public sector organisations may be able to achieve negative emissions, to balance out unavoidable emissions in other organisations. Our contribution to this ambition will reflect future UK Government guidance.

What is a Decarbonisation Plan?

The purpose of a Decarbonisation Plan is to describe how the City of Lincoln Council intends to replace fossil fuel reliant systems with low carbon alternatives (e.g. Electric Vehicles, renewable energy). To meet the challenge of net zero, the Council will need to decarbonise its buildings and transport over the next 10 years.

The Plan describes the current state of the Council's energy use and its plans for reducing and/or decarbonising its energy use. The plan outlines what the Council has already done, what it is currently doing, what it plans to do in the future. The plan explains what actions are going to be taken, over what timescales, and the intended outcomes.

Scope of the Decarbonisation Plan

The Plan looks at emissions that are in our direct control, i.e. the Council's transport fleet or how we heat our buildings, as well as the services that the Council provides such as managing parks and open spaces or waste collection.

We recognise that some elements of our emissions are not solely in our direct control and/or will require additional support to achieve, e.g. the availability of low carbon technology and decarbonisation of the power grid. We will seek to collaborate with partners and advocate for actions in these areas. The Council are working closely with the Lincoln Climate Commission to develop a citywide Climate Strategy ad Action Plan which will focus on how we are collectively going to achieve a net zero Carbon target for Lincoln by 2030.





Climate change and the need for decarbonisation



Source: NASA Climate Change

In 2015 the UK government joined an overwhelming majority of countries from around the world by signing the Paris Agreement. This consensus acknowledged the scientific advice and evidence of thousands of the world's best climate scientists and the need to ensure the average temperature of the earth's surface warms by no more than 1.5oC from the earth's temperature in approximately 1850-1900 (pre-industrial levels). The earth's average temperature is currently approximately 15oC. This shows why the constant human activity which causes additional increases to the global average temperature (in addition to any irregular but essential natural events that have a warming effect e.g. volcanic eruptions) must be addressed by mankind's next evolution to a new low carbon age.

Reducing emissions to safe levels can be done with existing technologies and knowledge. Governments know the cost and risk of inaction far outweighs the cost of action. After advice from the Committee on Climate Change, the UK government amended the Climate Change Act and made reaching a target of 'net zero' emissions by 2050 a binding target.





City of Lincoln Council's Climate and Environmental Emergency Declaration

On the 23rd of July 2019 CoLC's Full Council unanimously resolved that. This Council:

- Acknowledge the reality of the climate and environmental crises and commits to urgent emergency action.
- Join with Parliament and other Councils in declaring a Climate and Environment Emergency, and commit to the vision of a carbon • neutral LINCOLN by 2030 at the latest.
- Sign up to a science based carbon reduction target that is consistent with achieving the Paris Agreement of no more than 1.5oC global • temperature increase.
- Call on central government to provide the funding and powers to make this possible, and ask local MPs to lobby government to achieve • this.
- Call on Lincolnshire County Council to cooperate with the City and District Councils to enable the City & District Councils to deliver on the carbon neutral vision by 2030, especially in such critical areas as highways & transport, energy, waste, food and health & wellbeing.
- Work with partners in the area to deliver carbon reductions and support environmentally sustainable industry, business & • employment.
- Ask the Lincoln Climate Commission to consider ways of involving all interested people to have a voice through a citizens assembly or • something that serves this purpose.
- Facilitate the work of a Lincoln Climate Commission to drawn upon expertise in the community (industry, commerce, education, health • etc.) and general public, to devise a carbon reduction road map with staged targets and policies consistent with carbon neutrality by 2030, and bring a report to the Council's Executive as soon as practicable.





Vision 2025 Strategic Plan

Let's Address the Challenge of Climate Change

Vision 2025 is a five-year plan, based on many conversations we have had with members of the public and our partners. The plan sets out in some detail what we think needs to be done to deal with the most pressing issues we face in Lincoln. Our plans aspire to achieve a dynamic, resilient, inclusive and carbon neutral city, but importantly as well, to have Lincoln as a place of advanced social progress, with a high degree of social cohesion, a city of cultural, generational and ethnic diversity. Having declared a climate emergency in 2019, Vision 2025 places a new focus on this priority as a key element of the council's strategic plan.

A Climate Challenge taskforce has been set up to deliver the following climate aspirations:-

- Let's ensure our development approach reduces our carbon footprint
- Let's set the Lincoln standard for sustainable zero carbon development
- > Let's make walking, cycling and the use of public transport the best and favourite way to move around Lincoln
- Let's ensure the city's infrastructure is fully adaptable and resilient to the challenges of climate change
- Let's make our existing housing and business premises energy efficient

The taskforce is made up of officers representing all Directorates and service areas within the council with responsibility for environmental management, business support, property management, air quality, planning policy, communications, procurement and climate change.

This Decarbonisation Plan sets out how the Council intends to achieve some of its climate aspirations.

vision-2025-strategic-plan (lincoln.gov.uk)





Building on success

What we have already achieved

We have a strong track record of delivering emission reductions and financial savings. There have been significant reductions in emissions over time against both the target and business as usual (BAU) scenarios. Since 2008/9 the Council's Green House Gas emissions have reduced by 36% and the current reduction trend sets a solid foundation upon which to aim for carbon neutrality.



Green house gas emissions are measured as **Carbon Dioxide equivalent (CO2e)** have reduced in all council buildings since 2008, public buildings have been slowest to reduce due to a significant increase in gas consumption at the Council's Crematorium between 2018/19 and 2019/20.

The Council's 50 year old Crematorium will undergo a refurbishment in 2022 and will include a range of energy efficiency measures to significantly reduce CO₂e emissions.





Some examples of successes we have had in reducing our carbon footprint to date include:

• An Environmental Management System to record monitor and identify opportunities to reduce the council's emissions produced directly or indirectly from gas, electricity, waste, waste and vehicle fuel.

- Replacing some of our IT servers with virtual servers significantly reducing electricity consumption.
- LED lighting and sensor controls in our MSCPs and offices.
- Electric fleet vans and recharge points in six council managed car parks
- Solar thermal and PV projects on seven housing sites and four Council buildings.
- Rainwater harvesting, solar thermal hot water and ground source heat pumps at Yarborough sports pavilion.
- New Transport Hub completed in 2018, designed to absorb thermal heat and natural ventilation and shading to prevent overheating with on site Solar PVs



 Parking Services Electric Van
 Photovoltaic Panels on the roof of City Hall

 In 2020 the Council undertook an independent audit of its Environmental Management System. An environmental management system (EMS) is



"a system and database which integrates procedures and processes for training of personnel, monitoring, summarizing, and reporting of specialized environmental performance information to internal and external stakeholders of a firm".¹

Having a recognised EMS accreditation demonstrates a continued environmental commitment to residents, contractors, suppliers, the wider business community and voluntary & community groups. In September 2020 Investors in the Environment announced that the City of Lincoln Council has achieved the Silver level accreditation with a score of 74%.



'The Investors in the Environment (iiE) accreditation consists of organisations working toward high-level criteria and targets, followed by an official auditing process. The objective is to identify how City of Lincoln Council is performing against agreed targets and environmental performance. By qualifying for the accreditation, City of Lincoln Council (CoLC) are demonstrating their organisation's commitment to minimising its environmental impact and helping to set the standard for the environment.' (City of Lincoln Council iiE Audit. Sept 2020)



Overall Outstanding Achiever 2021

Carbon Reduction Pathways – What are we doing now?

¹ Sroufe, Robert. "Effects of Environmental Management Systems on Environmental Management Practices and Operations." Production and Operations Management. 12-3 (2003): 416–431.



Lincoln's ambitious future

The Council has set an ambitious target to be net zero carbon in all its buildings operations and services by 2030. In order to achieve this ambition it is necessary to break decarbonisation down into six manageable pathways to identify the key actions required.

| Decarbonisation | What does this cover? | % of total |
|-------------------|---|------------|
| Pathway | | CO2e |
| Electricity | This transition is now well underway, with the grid becoming increasingly green as a variety of forms of renewable | 11% |
| | power are installed (solar, wind, hydro). Energy efficiency is also improving, with the council making substantial | |
| | investments in energy efficiency throughout its buildings. Low carbon electricity will also play a key area in | |
| | decarbonising other areas such as heating and transport, placing pressure on supply. | |
| Heat | Decarbonising space and water heating (and cooling) in CoLC's buildings will be part of a wider transition away from a | 66% |
| | national heating system based on a standardised gas grid. It is very early in this transition but it seems clear that the | |
| | switch will not be to a single technology, but involve a range of alternatives such as district heating networks, heat | |
| | pumps, hydrogen and solar thermal to fit local circumstances. | |
| Transport | Direct transport includes all work related travel by ColC employees, whether in their own, or in CoLC fleet, vehicles or | 12% |
| | by public transport. This also overs indirect transport such as the refuse feet vehicles owned and operated by a | |
| | contractor to deliver a council service. | |
| Waste | This pathway focuses on waste from council offices and depots as well as waste generated by the public at council | 11% |
| | owned and managed sites such as Hartsholme County Park. Public behaviour has a large impact on the volume and | |
| | type of waste entering our waste system. Not just at the point of waste disposal, but in consumer choices made prior | |
| | to this. Waste that is not recycled is converted to energy, at the Energy form Waste facility at North Hykeham. | |
| Built Environment | The Council has some influence on Lincoln's built environment, through the building, renovation, repair and | NA |
| | remodelling of over 7000 council homes. The Council is also the Planning Authority for Lincoln and has a joint Central | |
| | Lincolnshire Local Plan with an ability to influence carbon neutral planning policy. | |
| Natural | There are 47 Local Wildlife Sites, making up 740 hectares and account for 21% of the land in the City of Lincoln | -2% |
| Environment | administrative boundary. The natural environment plays an important role in decarbonisation, removing emissions | |
| | from the atmosphere, these negative emissions are crucial to achieving carbon neutrality. In addition, as land owner | |
| | the council is responsible for substantial carbon stocks already captured, grasslands, wetlands, trees and soil are the | |
| | main natural carbon stores in the city. | |





Decarbonisation Action Plan 2021-2026

Electricity – Council Buildings

In 2021/21, the Council consumed 1,513,778 kWh of electricity in its operated buildings. These emissions calculated for electricity generation are associated with the generation, and transmission and distribution of electricity.

First and foremost, this should be reduced through energy efficiency measures. However the emission factor for purchased electricity is reducing as conventional power generation from coal and gas is replaced by low-carbon generation (e.g. from renewables and nuclear). This will result in reduced emissions, even during a business as usual approach.

As the carbon intensity of electricity reduces it will become more beneficial in terms of emissions to use electricity as a fuel in the place of gas, diesel etc. This electrification of heating and transport sectors will likely cause this electricity consumption to increase by 2030.

| Council Building | S | | | | | | | |
|-------------------------------|-------|----------|--------|-----|----------------------|--------------------------|--|--|
| Year | | Kg CO2 e | | | Total Percentage +/- | Total Percentage +/- | | |
| 18/19 Baseline | | 213720 | | | | | | |
| 19/20 | | 192480 | | | - 10% | | | |
| 20/21 | 20/21 | | | | - 37% | | | |
| | | | | | | | | |
| Priority Actions Objective | | Measure | Target | RAG | Outcome | Responsible service area | | |

Overall target to reduce CO2 emissions from electricity by 2% year on year.





Lincoln's ambitious future

| 1.1 | Transition to | Reduce the number of IT | Carbon | 10% reduction | Amber | Reduce electricity | IT/Agile Working Group |
|-----|--------------------|---------------------------|------------|---------------|-------|--------------------------------------|------------------------|
| | new | Servers | Dioxide | on baseline. | | demand from IT servers | |
| | workstyles and | | equivalent | | | and air conditioning. | |
| | , agile working | Reduce the Air | (CO2e) | | | Ū | |
| | practices | Conditioning in the | emissions | | | Reduce office space and | |
| | | server room. | | | | improving energy | |
| | | | | | | efficiency. | |
| | | Roll out new ICT devises | | | | | |
| | | to teams for remote | | | | Reduce the Council's | |
| | | working. | | | | overall CO ₂ e emissions. | |
| | | | | | | | |
| | | Transforming the way | | | | | |
| | | we work through the | | | | | |
| | | new workstyles – making | | | | | |
| | | more efficient use of our | | | | | |
| | | assets. | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Progress Update (Sept 2021 Status)

The transition to agile working is progressing and the following outcomes have been achieved:-

- The number of physical servers has reduced from 100 to 25
- Power Hosting kit installed which runs a further 257 virtual servers.
- Only one air con unit is now required, (second unit turned off and only used if required as a backup)
- All remote workers have and are using ICT devices.
- Office plans are being prepared for a trial in the Housing Tenancy Service area at City Hall.
- A longer term implementation of full work styles transformation is on hold due to budget restrictions.



Full programme details available at <u>Work Styles - Home (sharepoint.com)</u>

| | Priority | Actions | Measure | Target | RAG | | Responsible service area |
|-----|---|----------------|--------------------------------|------------------------------------|-------|---|--|
| | Objective | | Wiedsure | Turget | | Outcome | |
| 1.2 | Switch to Automated Meter Readings | Upgrade meters | Number of sites with AMR | 100% completion by June 2022 | Green | AMRs help with more accurate recording and monitoring of energy consumption and CO2 emissions. This helps identify any variation on energy consumption and enable planned energy efficiency measures. Improve electricity consumption recording and monitoring | Responsible Officers/property Services |

- 85% of CoLC sites have been installed with an AMR, all large sites now have AMRs and remaining small or remote sites planned to be upgraded by June 2022.
- Liaison underway with electricity supplier to plan installations.
- Electricity data from sites with AMRs are recorded and monitored monthly.



- Preparation of a new energy dashboard for all Council sites underway to assist responsible officers to monitor electricity consumption more accurately and identify and investigate unexplained peaks in demand.
- There is currently no internal or external costs associated with this project.

| | Priority | Actions | Measure | Target | RAG | Outcome | Responsible service area |
|-----|----------------|--------------------------|-------------|--------------|-------|--------------------------|--------------------------|
| | Objective | | | | | | |
| 1.3 | LED lighting | Replace T5 lighting with | Electricity | 4% CO2e | Green | Replace all internal and | Property Services |
| | and motion | LED and fit motion | consumptio | reduction on | | external lighting with | |
| | sensors in all | sensors in communal | n and CO2 | baseline | | LED | |
| | council | areas | emissions | | | | |
| | buildings. | | | | | | |

- All corridors and refurbished offices in City Hall installed with LED lighting.
- LED Lighting and sensors installed at all Multi Storey Car Parks
- Plan to include LED lighting upgrade as part of future building refurbishment. Lighting recently upgraded at the Crematorium, planned for Beaumont Manor and Lincoln Central Market in 2022.
- Decarbonisation Plans to be prepared for community centres will include LED lighting upgrades as part of funding application.

| | Priority | Actions | Measure | Target | RAG | Outcome | Responsible service area |
|-----|--|--|------------------|-------------|-------|--|------------------------------|
| | Objective | | | | | | |
| 1.4 | Procure 100% clean energy by 2030 at the very latest. | Review cost of green electricity supply when contract is due for renewal in 2023. Due to the additional internal cost associated with this project approval would have to | CO2 emissions | 100% switch | Amber | Currently 42% of electricity from the National Grid is produced from renewable sources. Target 2030 to 100% renewable electricity through energy contracts. | Finance/property services |





be secured before proceeding. Progress Update (Sept 2021 Status)

- 43% of the Council's current electricity supply is from a renewable source.
- Review of additional cost of switching to renewals from our current supplier based on 2021/22 prices was £3000 pa. Electricity saving opportunities to be reviewed to identify savings first before switching to renewables.
- Energy supplier due to release renewable energy tariffs in May 2022. Additional price to be reviewed and considered in line with electricity savings achieved.

| | Priority | Actions | Measure | Target | RAG | Outcome | Responsible service area |
|-----|--|---|---------------------------------------|--|-------|---|--|
| | Objective | | | | | | |
| 1.5 | Consider opportunities for renewable energy generation | Review opportunities for onsite renewable energy generation. External Funding would need to be secured form the Public sector decarbonisation Fund or a Local Climate Bond for this project to proceed. | Electricity generation and CO2e | 5% of electricity generated on site | Green | Current onsite renewable energy reduces the council's CO2 by 9 tonnes a year | Property Services/Climate Change Manager |

- Solar Photovoltaics installed on 7 sites generating 593 MWh.
- Solar PVs to be considered as part of more detailed site decarbonisation plans and grant opportunities to be explored through the public sector decarbonisation fund.
- The Council have engaged with Local Partnerships Re:Fit programme to review sites and prepare more detailed site based decarbonisation plans and investigate further opportunities for renewables at Council Sites.





| • | Local Climate Bond scheme being investigated to raise funds for green projects in Lincoln. | | | | | | | | | | |
|------|--|--|--|---|--------------------|--|---|--|--|--|--|
| | Priority Objective | Actions | Measure | Target | RAG | Outcome | Responsible service area | | | | |
| 1.6 | Deliver a staff awareness programme on saving energy. | Intranet messages. Laminated or framed notices in shared areas/offices. A1 Poster in stairways Publish a net zero carbon sharepoint site | Electricity generation and CO ₂ e | 1% reduction of CO2e | | Engage staff in net zero programme Reduce electricity consumption. Achieve behavioural change. | Communications/HR/Pro perty Services | | | | |
| Prog | Marketing and Net zero Linco | t 2021 Status) Communications Plan curre In sharepoint site underway | ently being pre to include onli | pared for 2022 on ne training progra | wards ain amme. | ned at CoLC staff and the wi | der community. | | | | |

Electricity - Public Buildings

In 2021/21, the Council consumed 1,513,778 kWh of electricity in council owned public buildings. These emissions calculated for electricity generation are associated with the generation, and transmission and distribution of electricity.





First and foremost, this should be reduced through energy efficiency measures. However the emission factor for purchased electricity is reducing as conventional power generation from coal and gas is replaced by low-carbon generation (e.g. from renewables and nuclear). This will result in reduced emissions, even during a business as usual approach.

As the carbon intensity of electricity reduces it will become more beneficial in terms of emissions to use electricity as a fuel in the place of gas, diesel etc. This electrification of heating and transport sectors will likely cause this electricity consumption to increase by 2030.

| Year | Year | | | O2 e | | | Total Percentage +/- | | |
|-------|------------------------------|---|-----------|--|---|-------|---|-----------------------|--|
| 18/1 | 9 Baseline | | 364,810 | | | | | | |
| 19/20 | | | 305,757 | | | | - 16% | | |
| 20/21 | | | 201,120 | | | | - 34% | | |
| | | | | | | | | | |
| 2.1 | Priority | Actions | | Measure | Target | RAG | Outcome | Responsible | |
| | Objective | | | | | | | service area | |
| | Crematorium Refurbishment | Install internal and external LED lighting an PIR sensors as part of t building and car park refurbishment. | nd :he | Electricity consumption and CO2 emissions | 10% reduction on site baseline | Green | Improve quality of the lighting and reduce electricity demand | Major Developments | |
| | Progress Update | e (Sept 2021 Status) | | | | | | | |

Overall target to reduce CO2 emissions from electricity by 2% year on year.



- A budget has been approved for all refurbishment works at the Crematorium, including low carbon measures.
- Refurbishment works commenced in April 2021 and second chapel complete in June 2021.
- Refurbishment of main facilities commenced in due to complete in December 2021.

| 2.2 | Priority | Actions | Measure | Target | RAG | Outcome | Responsible | | | |
|-----|--|-------------------------------|---------------------|----------------|------------|------------------------------|--------------|--|--|--|
| | Objective | | | | | | service area | | | |
| | Central Market | Install new lighting and air | Electricity | Remain | Green | Due to the replacement of | Major | | | |
| | refurbishment | source heat pumps, | consumption | the same | | gas heating with Air | Developments | | | |
| | | double glazed windows | and CO2 | but | | Source Heat Pumps | | | | |
| | | and improve fabric | emissions | achieve | | (ASHPs). There is likely to | | | | |
| | | efficiency. | | carbon | | be an increase in | | | | |
| | | | | savings for | | electricity but overall a | | | | |
| | | | | gas | | decrease in CO2e | | | | |
| | Progress Update (Sept 2021 Status) | | | | | | | | | |
| | | | | | | | | | | |
| | Towns Fund secured in March2021 for capital works and feasibility works have been completed. | | | | | | | | | |
| | Planning permission approved in June 2021 | | | | | | | | | |
| | Business | es Case to be submitted to BE | IS October 2021 | and final appr | oval. | | | | | |
| | Public Se | ctor Decarbonisation Funding | g id submitted in (| October 2021 | to fund LE | D lighting, insulation, ASHP | | | | |
| | Start on | Site planned for early 2022 | | • | 1 | | | | | |
| 2.3 | Priority | Actions | Measure | Target | RAG | Outcome | Responsible | | | |
| | Objective | | | | | | service area | | | |
| | Hartsholme | Prepare a feasibility Study | Electricity | TBC on | | Improve the thermal | Community | | | |
| | Country Park | to identify energy | consumption | completio | | comfort and efficiency of | services | | | |
| | Restoration | efficiency measures for | and CO2 | n of | | existing office space and | | | | |
| | | existing office and visitor | emissions | feasibility | | visitors centre. Improve | | | | |
| | | centre and opportunities | | Study | | the visitor experience to | | | | |
| | | for renewable energy. | | | | the park. | | | | |



Progress Update (Sept 2021 Status)

This project has not yet commenced and is subject to internal/external funding

Heat (Gas)

Gas is required for space and water heating in buildings. The Council consumed 3,300,071 kWh of gas in 2020/21, 53% of which was in Council office buildings. As the national grid decarbonises, it is recommended that heat sources are electrified where possible (e.g. through the installation of heat pumps). The Council should consider electric heating for all new-builds with high energy performance. For existing buildings, where possible a fabric first approach should be taken and retrofit actions should be performed to reduce heat loss and drafts before electrification.

| | Year 18/19 Baseline 19/20 | | Kg CO2 e | | Total Percenta | ge +/- | |
|------|---|---|---------------|--------------------|--------------------------------------|--------|--|
| | | | 474,242 | 474,242 553,210 | | | |
| | | | 553,210 | | | | |
| | 20/21 | | 505 547 | | 9% | | |
| | Priority Objective | Ad | tions Measure | | Target | RAG | Responsible service area |
| 3.1 | Crematorium refurbishment | Construct new plant room, install new fuel efficient cremators and heat recover unit. | | kgCO2e | 10% reduction on site baseline | Green | Major Developments/Comm unity Services |
| Prog | ress Update (Sept 20 Second Chapel co |)21 Status) mpleted in July 2021 | | | | | · · · · |





| • | • Construction of new plant room underway and due to complete by December 2022 ready for installation of new cremators. | | | | | | |
|------|---|--|---------------|------------------|-------------|-----------------------|--|
| 3.2 | Priority Objective | Actions | Measure | Target | RAG | Responsible service | |
| | | | | | | area | |
| | Central Market | Undertake a feasibility study and secure planning | Kg CO2e | 100% | Green | Major Developments | |
| | refurbishment | permission. | | reduction on | | | |
| | | | | site baseline | | | |
| | | Carry out fabric improvements to the building | | | | | |
| | | fabric, new extension, and low carbon heating. | | | | | |
| | | | | | | | |
| Prog | ress Update (Sept 20 |)21 Status) | | | | | |
| • | Towns Funding se | cured. | | | | | |
| • | Feasibility comple | te and identifies the following measures | | | | | |
| • | Fabric first approa | ich, replace lantern roof with new double glazing, re | place gas hea | ting with ASHP E | PC G to B | 263 kg CO2 to 49kgCO2 | |
| • | Planning permission | on granted in June 2021 | - | - | | | |
| • | Await final decisio | on on the business case from BEIS (Towns Deal projec | ct). | | | | |
| 3.3 | Priority Objective | Actions | Measure | Target | RAG | Responsible service | |
| | | | | - | | area | |
| | Heat | Review heating of all buildings and identify | Kg CO2 e | TBD | | Property services | |
| | Decarbonisation | appropriate low carbon solutions to be | _ | | | Manager/ CCM | |
| | Plan | implemented over the next 10 years to achieve | | | | | |
| | | net zero. | | | | | |
| Prog | ress Update (Sept 20 |)21 Status) | | | | | |
| Exte | rnal funding required | I to deliver this project and will need to be secured fi | om the Publi | c Sector Decarb | onisation S | Skills fund or the | |
| Midl | ands Energy Hub 'De | carbonisation of the Public Estate in the Midlands' fu | und in 2022/2 | 3 | | | |



Lincoln | Together, let's deliver Lincoln's ambitious future

Transport – Council's direct and indirect

The Council lease and operate a fleet of 84 vehicles which deliver the council's housing repair services, as well as community support, environmental health and parking services. In addition the Council have a contract to deliver the Council's refuse, recycling and street cleansing services which requires 11 refuse vehicles and 16 vans and account for 65% of total fleet emissions due to their size and high mileage. Most vehicles are diesel powered, with one electric vehicle used by the parking services team. The common decarbonisation pathway for transport is electrification, and the share of electric vehicles in the Council's fleet will have to grow to achieve decarbonisation targets over the next 10 years.

| | Year | | Kg CO2 e | | Tota | tal Percentage +/- | |
|------|---------------------------|--|----------------------|---------------|------|--------------------------|--|
| | 18/19 Baseline | | 220214 | | | | |
| | 19/20 | | 160454 | | - | 27% | |
| | 20/21 | | 122465 | | - | 24% | |
| | | | | | | | |
| | Priority Objective | Actions | Measures | Targets | RAG | Responsible Service Area | |
| 4.1 | Agile Working Policy | Introduce Agile working practices | Kg CO2e | 20% of | G | Agile Working group | |
| | | to enable staff to work from | | 37351 | | | |
| | | home, attend virtual meetings on | | | | | |
| | | a long term basis. | | | | | |
| Prog | ress Update (Sept 2021 St | atus) | | | | | |
| • | Staff consulted on agile | working policy and new ways of work | king determined fo | or all teams. | | | |
| • | Roll out of IT devices to | officers adopting agile working practi | ces underway. | | | | |
| • | Significant reduction in | staff travel by rail and car due to tran | sition to virtual me | eetings. | | | |
| | Priority Objective | Actions | Measures | Targets | RAG | Responsible Service Area | |





Transition to ultra low Review Council fleet contract and Kg CO2e 10% Housing Repair Service G emission fleet vehicles opportunity to increase the reduction by 2030 number of ultra low emission on fleet vehicles. emissions baseline. Progress Update (Sept 2021 Status) • Review of lease contract determined the introduction of 5 ULEVS to the fleet in 2022 complete.

Parking Service van is currently the only electric vehicle in the fleet. •

- Contract to be reviewed in 2026 with the intention to increase the number of electric vans where possible in the fleet. ٠
- Plans in place for Mayors car to be sold and new lease for an electric vehicle due to commence in 2022.

| | Priority Objective | Actions | Measures | Targets | RAG | Responsible Service Area |
|-----|-----------------------|----------------------------------|----------|-----------|-----|--------------------------|
| 4.3 | Trial new working | Introduce a new area based | kgCO2e | 20% | G | Housing Repair Service |
| | practices for housing | working for the housing repair | | reduction | | |
| | repair service | service to improve efficiency of | | on | | |
| | | repair work and reduce vehicle | | baseline | | |
| | | mileage. | | | | |

Progress Update (Sept 2021 Status)

4.2

Successful trial of area based repair work completed and introduced across the whole housing repair service with 44% reduction in CO2e emissions from fleet vehicles since the baseline year. (42815kg exceeding target set)

| | Priority Objective | Actions | Measures | Targets | RAG | Responsible Service Area | |
|---|------------------------|--------------------------------|----------|-----------|-------|--------------------------------|--|
| 4.4 | CoLC Staff Travel Plan | Complete staff travel survey | Kg CO2e | 5% | Green | Travel Plan Working group (HR, | |
| | | | | reduction | | Finance, CCM, procurement) | |
| | | Review and update TP | | on | | | |
| | | | | baseline | | | |
| | | Deliver new sustainable travel | | | | | |
| | | initiatives | | | | | |
| Progress Update (Sept 2021 Status) | | | | | | | |
| Staff travel survey completed in July 2021. | | | | | | | |





- Report to CMT in October on findings of the survey and confirm priority incentive schemes to be introduced for 2022/23
- TP working group commenced investigation of incentive schemes
- Travel Plan updated and latest version published on the Council's website <u>Microsoft Word City of Lincoln Council Travel Plan 2019 2024</u> (updated Sept 2021)

| | Priority Objective | Actions | Measures | Targets | RAG | Responsible Service Area |
|-----|----------------------|----------------------------------|----------|-----------|-------|--------------------------|
| 4.5 | Working with Refuse | Review of refuse contract and | Kg Co2 e | TBC | Amber | Community services |
| | contractor to reduce | opportunity for introducing fuel | | following | | |
| | refuse fleet vehicle | efficient vehicles | | review | | |
| | emissions. | | | | | |

- A review of new refuse fleet is currently underway and the council are seeking to purchase fuel efficient vehicles as part of the new refuse contract.
- Fleet route reviews take place on a regular basis to reduce mileage and to include new housing sites.
- Contract to be reviewed in 2025 and opportunities for replacing diesel fleet with electric vehicles will be considered.

| | Transport – City Wide 2018 63.1 kt CO2 2019 61 kt CO2 – 3% reduction | | | | | | |
|------|---|---|----------|--------|-------|---------------------|--|
| | Priority Objective | Action | Measure | Target | RAG | Responsible service | |
| | | | | | | area | |
| 5.1 | Ensure Lincoln is Electric | Work with Lincolnshire Highways Authority | No of EV | 100 by | Green | Parking | |
| | venicie ready | to secure ORCS funding for EV charge points | charge | 2025 | | Services/Climate | |
| | | for use by city centre residents without | points | | | Change Manager | |
| | | access to off road parking. | | | | | |
| Prog | ress Update (Sept 2021 Sta | tus) | | | | | |



- Installation of 8 additional EV charge points completed in July 2021.
- As of Sept 2021 Lincoln has 60 electric vehicle charging devices (EV chargers) and is in the top 10 in the UK
- A review of new locations underway in preparation for new application to ORCS fund
- Opportunity to trial on street electric vehicle charge points in Castle and West End wards being investigated with Lincolnshire County
 Council

External funding will need to be secured from the Office for Zero Emission Vehicles to support this project going forward

| | | | · | - | | |
|-----|---------------------------|---|----------------|-----------|-------|---------------------|
| | Priority Objective | Action | Measure | Target | RAG | Responsible service |
| | | | | | | area |
| 5.2 | Let's make walking, | Launch the online Lincoln sustainable | % of cycling 3 | 1% | Green | Major Developments |
| | cycling and the use of | toolkit. | times per | increase | | |
| | public transport the best | | week. | | | |
| | and favourite way to | Work with Lincolnshire County Council to | | | | |
| | move around Lincoln | secure funding for cycling infrastructure | City tCO2 e | 2% | | |
| | | and secure cycle storage. | Transport | reduction | | |

Progress Update (Sept 2021 Status)

- DfT Active Travel fund secured for temporary new cycle route, 18 month trial underway for 2021/22 on Newark Road, Wigford Way and Brayford Wharf East and additional cycle storage in the city centre. Awaiting news from LCC on whether routes to become permanent in 2022/23.
- Additional funding application being prepared to make new cycle routes permanent
- Towns Funding secured to complete feasibility study for Wigford way improved cycling and pedestrian provision and reduce vehicles.
- FT funding secured to create Sincil Bank green corridor for new cycling pedestrian priority route.
- Sustainability Toolkit published on council website. Green and sustainable living City of Lincoln Council
- 18/19 6.7% of people in Lincoln cycle 3 times per week and 5% cycle 5 times per week.

Progress is subject to external funding from Lincolnshire County Council, Department for Transport, or any other external funding source to deliver infrastructure projects.



| | Priority Objective | Action | Measure | Target | RAG | Responsible service |
|------|----------------------------|--|---------|-----------|-------|---------------------|
| | | | | | | area |
| 5.3 | Work with our strategic | Prepare Cycling and Walking Network Plans | tCO2 e | 2% | Green | Lincoln Transport |
| | partners on the Lincoln | to identify priority routes for investment for | | reduction | | Board |
| | Transport Taskforce to | 2020-2025 | | of city | | |
| | deliver the Lincoln | | | wide | | |
| | Transport Strategy. | | | CO2e on | | |
| | | | | 2018 | | |
| | | | | level | | |
| Prog | ress Update (Sept 2021 Sta | tus) | | | | |

- Lincoln Transport Strategy completed and published on County Council website.
- Local Transport Plan consultation underway (October -December 2021)
- Cycling and Walking Network Plans underway
- Awaiting Planning permission for Western Growth Corridor and new cycling and walking infrastructure upgrade and transport hub.

| Waste - Council Offices Waste and recycling is prod calculated based on the vol | Waste - Council Offices Waste and recycling is produced from council offices the volume of waste is recorded on a monthly basis and the CO2e emissions are calculated based on the volume and type of waste | | | | | | | | |
|---|---|----------------------|--|--|--|--|--|--|--|
| | | | | | | | | | |
| Year | Kg CO2 e | Total Percentage +/- | | | | | | | |
| 18/19 Baseline | 5887 | | | | | | | | |
| 19/20 | 1539 | -74% | | | | | | | |



| | 20/21 | 844 | <u></u> | -45% | | |
|-----|---|---|---|--|------------|-----------------------------|
| 6 | Priority Objective | Action | Measure | Target | RAG | Responsible service area |
| 6.1 | Reuse and recycle all IT waste where possible. | IT Recycling Contract | kg CO ₂ e | ТВС | Green | IT |
| | Progress Update (Sept 2021 Contract in place to e Not currently include | Status) ensure all IT equipment no longer re ed in the council's waste stream so | equired is reused or rec need to start recording | ycled. and monitoring v | olume of | IT waste and CO2e |
| 6.2 | Priority Objective | Action | Measure | Target | RAG | Responsible service area |
| | Promote recycling in offices to reduce waste. | Ensure all office communal areas have access to recycling for plastic, cans and glass. Reduce, reuse and recycle paper waste Undertake an audit of general waste and recycling bins to establish content and extent of contamination. | Kg CO2e | Convert 1% general waste to recycled waste stream | Amber | Property services |
| | Progress Update (Sept 2021 Waste Audit complet | Status) red in June 2021 – Overall volume o | of waste reduced signifi | cantly, largely due | e to reduc | ed staff presence in |

offices during 2020. There was a 4% increase in general waste to recycling ratio and therefore this project is on Amber.

- All kitchen areas on each wing have access to separate glass bin and combined plastic/cans bin.
- All offices have a paper recycling bin (confidential waste) and shared general waste bin.
- All individual desk rubbish bins have been removed to encourage staff to use the recycling bins provided.
- Caretakers regularly check bins and remind staff if they identify recycling bins are not being used.
- Posters and stickers are located in communal areas to remind staff what to put in the bins.



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Together, let's deliver Lincoln's ambitious future

| 6.3 | Priority Objective | Action | Measure | Target | RAG | Responsible service |
|-----|--|---------------------------------------|---------------------------|---------------------|-----------|------------------------|
| | | | | | | area |
| | Review of Housing Repair | Research and Development group | kgCO2e | 100% recycled | Green | Housing repair Service |
| | Service to identify | set up to identify the next | | | | |
| | opportunities to reduce | generation of materials and | | | | |
| | waste materials. | products within the housing stock. | | | | |
| | Progress Update (Sept 2021 | Status) | | | | · |
| | Currently no housing | repair waste is sent to landfill, 37 | % recycled, 63% RDF | | | |
| | Reduce and reuse po | licy in place for disposal of materia | lls, reducing overall was | te. | | |
| | • Target 100% of house | ehold waste materials to be recycle | ed. | | | |
| | To reduce waste and | materials used tiles have been ren | laced by boards Reduci | ing waste tiles /of | fouts and | grout |

| | The Natural Environment | The Natural Environment | | | | | | | |
|-----|---|--|---------|--------|-------|---|--|--|--|
| | We have a responsibility to conserve Lincoln's natural environment and enhance it, not only for the fabric of the natural environment, but for the health of our future economy. Lincoln has 47 Local Wildlife Sites, making up 740 hectares and account for 21% of the land, including grassland, woodland and wetlands areas which sequestrate carbon, act as shade reducing the Urban Heat Island effect and an important blue water footprint to reduce flooding. | | | | | | | | |
| 7 | Priority Objective | Action | Measure | Target | RAG | Responsible Service | | | |
| | | | | | | area | | | |
| 7.1 | Maintain and enhance biodiversity, green spaces, woodlands, wetlands in the City. | Complete audit of local wildlife sites. Brayford Pool Environment Plan | ТВС | TBC | Green | Community Services/ Planning Policy/Development Management | | | |





| | | CoLC Rewilding programme | | | | | |
|-----|---|--|----|----|------|-----------------------|--|
| 7.2 | Progress Update (Sept 2021 Status) Review of Local Wildlife Sites completed in Feb 2020. Trial rewilding sites completed in 2020 and rolled out over multiple sites in 2021 including wildflower planting on roundabouts, grass verges. Reduced grass cutting/hay meadow for large grass areas. ERDF application for enhancement of Boultham Mere and Swanpool, subject to planning permission | | | | | | |
| 7.3 | Boultham Park Restoration Project | Improving the water quality of the lake Improvements to the biodiversity of the plants and wildlife Restoring the lake banks. | NA | NA | Blue | Community services | |
| | Progress Update (Sept 2021 Status) Marginal Planting around the lake. Dredging the lake to improve water quality. New pumps installed to aerate the water and maintain water quality. New information boards and wildlife trails in place. | | | | | | |

8 The Built Environment

The City of Lincoln Council is responsible for various aspects of the built environment through the planning process as well as the Council's New Homes Programme. Domestic properties in Lincoln make up 35% of Lincoln's total emissions and so if we are to meet a net zero target for the whole city, all new homes need to be 'zero carbon.' It is also important to take into account the embodied carbon in new buildings as well as ensure new housing developments are 'climate ready' and can adapt to our changing climate.



| | Priority Objective | Action | Outcome | Measure | Target | RAG | Responsible Service |
|-----|---|--|--|---------|----------|---------------------|--|
| | | | | | | | area |
| 8.1 | Review the Lincoln Homes Standard to improve the energy performance of Council homes. | Carry out review (following Gov't decent homes standard.) Deliver Lincoln Homes Standard across all council homes | Raise the standard of all council homes to an average EPC 'C' rating. | EPC | C rating | Amber | Housing Strategy and Housing Investment Teams. |
| 8.2 | Deliver new energy efficient, low carbon homes on Rookery Lane | Homes due to be completed | Achieve a 20% carbon uplift on current Building Regulation requirements. Includes:- -EV charge points -Sustainable Urban Drainage -Mechanical Heat Recovery. | EPC | В | | Housing Strategy / Major Developments |
| 8.3 | All new Council Homes to be 'zero carbon' ready. | Review opportunities for ensuring the council's new homes are net | Raise the standard of all new council homes to an EPC 'A' rating. | EPC | A | Commence 2022/23 | Housing Strategy / Major Developments |



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| | | zero carbon or 'A' | Commence zero | | | | |
|-----|----------------------------|--------------------|---------------------------------|------------|-----------|------------|-------------------------|
| | | rated. | carbon ready homes | | | | |
| 8.4 | Consider deep retrofit | Commence trials | Identify solutions to | EPC | А | Commence | Housing |
| | solutions to raise the EPC | (subject to | retrofit 'hard to treat' | | | 2022/23 | Investment/Climate |
| | of existing Council | funding) | homes to the net | | | | Change Manager |
| | homes. | | zero standard. | | | | |
| | | | | | | | |
| | | | 2019 fuel poverty | | | | |
| | | | data for Lincoln – | | | | |
| | | | 6568 homes (15.4%) ² | | | | |
| 8.5 | Central Lincolnshire | CLLP review | Adopt new policies | Citywide | TBC | Green | Planning Policy |
| | Local Plan (CLLP) review | underway | related to climate | CO2 | | Due to | Manager and CLLP |
| | | | change. | | | complete | Team |
| | | | | | | 2022 | |
| 8.6 | Sustainable Warmth | Strategy drafted | Reduce fuel poverty | No of | 10% | Green, due | Housing |
| | Strategy | and approved. | and raise the | Households | reduction | to | Strategy/Private Sector |
| | | | standard of private | in Fuel | | complete | Housing/ Climate |
| | | Secure | housing | Poverty | | Jan 2022 | Change Manager |
| | | Sustainable | | | | | |
| | | Warmth Funding | | | | | |
| | | and delivery | | | | | |
| | | private sector | | | | | |
| | | housing retrofit | | | | | |
| | | scheme . | | | | | |
| | | | | | | | |
| | | | | | | | |

² <u>Sub-regional fuel poverty data 2019 - GOV.UK (www.gov.uk)</u>



