

November 2020

Knowsley Council's Climate Emergency Action Plan

COUNCIL'S ESTATE AND SERVICES



A large, sculpted iceberg floats in the ocean. The iceberg has a complex, jagged shape with a prominent peak on the left and a long, curved ridge extending towards the right. The water is a deep blue, and the sky is a pale, hazy blue. The text 'Background...' is overlaid in the center of the image in a white, outlined, sans-serif font.

Background...

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- 1.1 At the Council meeting on 29 January 2020, Knowsley Council declared a Climate Emergency and made a commitment to develop an action plan with the aim of achieving net zero carbon emissions from the Council's estate and services by 2040. A further commitment was made to work with partner agencies across the Liverpool City Region to reduce carbon emissions across the borough.
- 1.2 In making these commitments, the Council recognised that the impacts of climate change are now being seen across the world and there was no doubt that urgent action was needed to reduce greenhouse gas emissions and limit global warming to 1.5°C as recommended by the Intergovernmental Panel on Climate Change (IPCC).

- 1.3 The IPCC state that limiting global warming to 1.5°C will require rapid and far-reaching transitions in land, energy, industry, buildings, transport, and cities. To achieve this, global net human-caused emissions of carbon dioxide (CO₂) would need to fall by about 45% from 2010 levels by 2030, reaching net zero around 2050. The Government subsequently adopted this 2050 target. The target date for the Council to achieve net zero carbon emissions is 2040, ten years ahead of the national target, but in line with the target adopted for the Liverpool City Region by the Combined Authority.
- 1.4 The Council's Climate Emergency Declaration related to two specific areas. The first relates to the Council's estate and services and the requirement to approve an Action Plan by the end of 2020 that specifically focuses on reducing carbon emissions to net zero by 2040. The second area relates to the actions that Knowsley can take to reduce carbon emissions in the wider community and includes working at a Liverpool City Region level.

The background of the slide is a blurred photograph of a city street. In the upper left, a modern grey building with windows is visible. To its right is a brick building with several white-framed windows. The foreground shows a dark asphalt road with a metal drainage grate and a white line marking. The overall scene is captured from a low angle, looking down the street, with a strong sense of motion blur.

**Progress to date
in reducing carbon
emissions from the
council estate
and services**

2.1 In 2010 the Council enrolled on the Carbon Trust's Carbon Management Programme, working with specialists at the Trust to develop a Carbon Management Plan for the Council's estate and services. A target of a 22% reduction in carbon emissions from the levels in 2009/10 by 31 March 2016 was set.

2.2 The data collated on the Council's emissions included the following sources:

- Electricity and gas use in Council buildings;
- Electricity use in street lighting;
- Fuel use in fleet transport and hire vehicles;
- Miles travelled by staff in their own vehicles on Council business; and
- Miles travelled by staff using rail and air travel on Council business.

2.3 Not included were carbon emissions from waste and water use. This was due to issues with data collation. However, action was still taken to reduce emissions from these sectors.

2.4 The target set was exceeded with a reduction of 36% achieved by 2016. Projects that contributed to this reduction included:

- Solar PV array fitted to the Huyton Municipal Annex;
- Energy efficiency projects in buildings;
- LED lighting in Huyton Multi-storey car park;
- Fleet fuel management plan;
- Staff Travel Plan;
- Street lighting replacement;
- Smarter Driver Training;
- Staff behaviour change programme; and
- Asset rationalisation programme.

2.5 Energy efficiency projects have continued since 2016 via the RE:FIT Energy Performance Contract, which involved a £1m investment in improving the energy efficiency of eleven Council buildings. This included boiler and lighting replacements and insulation improvements.

2.6 Data on the Council's carbon emissions for 2019/20 is currently being calculated, however data has been collated for 2018/19. This showed that a 59% reduction in carbon emissions has now been achieved since 2009/10.

2.7 Data from 2018/19 shows that the majority (72%) of Council emissions are from electricity and gas use, with 16% from street-lighting and 12% from the Council's vehicle fleet and staff travel.

A close-up photograph of a person's hand, with a gold ring on the ring finger, holding a small, vibrant green seedling with several leaves. The hand is positioned over a mound of dark, rich soil. The background is softly blurred, showing more soil and a wooden handle, possibly of a trowel. The overall scene conveys a sense of care, growth, and environmental stewardship.

**Development of
a new climate
emergency
action plan**

3.1 Following the Climate Emergency Declaration it was recognised that achieving the Council's target will require radical action in the way that the organisation operates and delivers its services. A new Climate Emergency Scrutiny Committee was subsequently established charged with the oversight and scrutiny of matters related to the development of an action plan aiming to achieve net zero carbon emissions from the Council's estate and services by 2040. A new post of Climate Emergency Officer was also established.

3.2 A review of actions required to reduce the Council's carbon emissions was undertaken using guidance from recognised organisations such as the Association of Public Service Excellence (APSE), the Carbon Trust and Friends of the Earth.

3.3 It was not possible to set out detailed actions that outline exactly how the Council will achieve the zero carbon target or what the ultimate cost will be. This is because some of the required technology is either yet to be developed or it is not commercially available or viable at present. For example, the development of refuse vehicles that are powered by electricity or hydrogen, or hydrogen sources to replace gas for space heating. It is also anticipated that new

funding streams to support this agenda will become available over the coming years that will support the Council to deliver key elements of the plan.

3.4 Therefore the plan identifies the key areas for action, noting that some will require further feasibility, project development and business case approval to support the Council to reduce carbon emissions as far as possible by 2040 and then use offsetting to achieve the net zero target.

3.5 The Action Plan outlines a number of actions under the following themes:

- (1) Green spaces for carbon offsetting and climate resilience;
- (2) Reducing carbon emissions from street lighting;
- (3) Reducing carbon emissions from fleet vehicles, maintenance plant and equipment;
- (4) Reducing carbon emissions from energy and water use in Council buildings;
- (5) Reducing carbon emissions from waste from Council services;
- (6) Reducing carbon emissions from staff travel on council business
- (7) Sustainable energy generation;
- (8) Reducing carbon emissions through council commissioning and procurement;

(9) Reducing carbon emissions through communication and staff behaviour change;
and

(10) Embedding carbon reduction and climate action across the Council's plans, policies and services.

3.6 Significant actions include:

- A £5m scheme to replace almost 20,000 streetlights with low energy LED lighting;
- Planting over 3,000 trees with an investment of £1.4m from the Urban Tree Challenge Fund, with additional trees to be planted under the Trees for Climate Scheme;
- Ensuring carbon reduction and sustainable energy generation are key elements of the proposed Council Headquarters in Huyton Centre; and
- Radical changes to ensure that action on carbon reduction is embedded across the Council, including a review of policies and strategies, carbon literacy training for staff and elected members, and addressing climate change in Service Business Plans and the Council's decision making process. Business cases will be developed for additional schemes such as replacing the Council's fleet vehicles to achieve the Council's net zero target by 2040

Next Steps



4.1 The Action Plan will be delivered and progress will be monitored and overseen by the Climate Emergency Scrutiny Committee. An Annual Progress Report will be produced and submitted to Cabinet. The Action Plan will be a 'live' document that will be updated as projects are developed and new technology and funding streams become available.

4.2 A separate Knowsley Action Plan will be developed to address the Council's influence on carbon emissions across the wider borough, building on existing programmes to reduce emissions further. Again, the Scrutiny Committee will have oversight of this work and have agreed a series of eight key themes to set a framework against which actions can be developed:

- (1) Protecting and enhancing Knowsley's green spaces;
- (2) Reducing carbon emissions from transport in Knowsley;

- (3) Reducing carbon emissions from new development in Knowsley;
- (4) Reducing carbon emissions from energy use by businesses in Knowsley;
- (5) Reducing carbon emissions from energy use in residential properties in Knowsley;
- (6) Reducing carbon emissions from schools in Knowsley;
- (7) Reducing carbon emissions from waste generation in Knowsley; and
- (8) Community engagement and awareness in Knowsley.

For further information on this Action Plan please contact Knowsley Council's Environmental Sustainability Service:
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net zero

2040

Reducing carbon emissions from the Council's estate and services to net zero by 2040

10 Key Themes

1. Green spaces for carbon offsetting and climate resilience
2. Reducing carbon emissions from street lighting
3. Reducing carbon emissions from fleet vehicles, maintenance plant and equipment
4. Reducing carbon emissions from energy and water use in Council buildings
5. Reducing carbon emissions from waste from Council services
6. Reducing carbon emissions from staff travel on council business
7. Sustainable energy generation
8. Reducing carbon emissions through commissioning and procurement
9. Reducing carbon emissions through communication and staff behaviour change
10. Embedding carbon reduction and climate action across the Council's plans, policies and services

Theme 1 – Green Spaces for carbon offsetting and climate resilience

Ref	Action	Date	Cost	Impact	Lead Officer
1.1	Work with 'Friends of Parks' Groups and local volunteers to develop projects that will protect and enhance Knowsley's parks and green spaces.	Ongoing	Officer time Grant funding	Protection of green spaces for carbon offsetting and climate resilience	Head of Environmental Sustainability
1.2	Continuation of Ranger led events in parks and green spaces including environmental awareness raising, and encouragement for walking and cycling through "Pedal Away" events.	Ongoing	Officer time Within current resources	Reduce carbon emissions from transport	Development Manager (Initiatives)
1.3	Ensure that the existing designated parks and green spaces that are owned by the Council are protected from the risk of future development such as whole scale housing and/or commercial development and where possible necessary improvements/ enhancements to their infrastructure are undertaken e.g. Fields in Trust designations.	31.03.21	TBC	Protection of green spaces for carbon offsetting and climate resilience	Head of Environmental Sustainability
1.4	Work with the Mersey Forest to develop new woodland planting schemes as part of the 'Trees for Climate' project.	31.03.21	TBC Government funding available	Offset Carbon emissions Provide shade in extreme heat.	Development Manager (Strategy)
1.5	Complete the delivery of the Knowsley Tree Planting Scheme (3,424 trees) supported by funding from the Urban Tree Challenge Fund.	31.03.21	£1.376m Grant from Urban Tree Challenge Fund	Offset Carbon emissions. Provide shade in extreme heat.	Development Manager (Strategy)
1.6	Undertake a survey of trees within the Borough to determine the opportunities available for significant tree planting.	31.03.21	Officer time Within current resources	To determine scope for tree planting and carbon offsetting	Development Manager (Strategy)

Ref	Action	Date	Cost	Impact	Lead Officer
1.7	Undertake research in respect of accredited carbon offsetting schemes to determine how this can be used to contribute to the net zero carbon target.	31.03.21	Officer time Within current resources	To determine scope for tree planting and carbon offsetting	Climate Emergency Officer
1.8	Investigate feasibility of planting hedgerows in relevant greenspaces near to roads to absorb carbon and reduce air pollution.	31.03.21	Officer time Within current resources Funding will need to be identified for any schemes developed	Offset Carbon emissions	Development Manager (Strategy)
1.9	Update the Woodland Management Plans for Knowsley's existing 46 community woodland sites.	31.03.22	Officer time Within current resources	Offset Carbon emissions Provide shade in extreme heat.	Development Manager (Strategy)
1.10	Develop projects that alleviate existing surface water problems in green spaces that are likely to intensify in future as a result of climate change, including St Chads Gardens, Court Hey Park, Stadt Moers Park, Halewood Park, Northwood Forest Hills, Lord Derby Playing Fields, Oak Plantation, Saxon Green, Goddard Green, Woolfall Heath Meadow and Eddie McArdle Playing Fields.	31.03.25	Officer time Within current resources Funding will need to be identified for any schemes developed	Alleviate surface water flooding likely to be intensified by climate change.	Development Manager (Strategy)
1.11	Investigate feasibility of utilising wood products from Knowsley's woodlands including small scale enterprise developments, wood allotments, re-evaluation of the 'New Use for Vacant Industrial Land' (NUVIL) Scheme.	31.03.25	TBC	Reduce carbon emissions from energy use	Head of Environmental Sustainability

Theme 2 - Reducing carbon emissions from street lighting and traffic signs

Ref	Action	Date	Cost	Impact	Lead Officer
2.1	Design and implementation of the low energy LED lighting replacement programme to replace 19,445 lanterns in street lighting and traffic signage.	31.03.24	£5m (0% interest loan) £0.500m (PFI reserve for business case and feasibility)	Reduction of 2,917 carbon tonnes per annum Annual reduction of 3.39m kwh energy, £0.491m (at 2019-20)	Head of Neighbourhood Services

Theme 3 - Reducing carbon emissions from fleet vehicles, maintenance plant and equipment

Ref	Action	Date	Cost	Impact	Lead Officer
3.1	Investigate the feasibility of replacing waste collection, Streetscene and Parks and Cemeteries Service vehicles with low carbon alternatives such as electric, hydrogen/diesel or hydrogen, including required infrastructure e.g. charging / refuelling points and renewable sources of electricity.	31.12.21	TBC	Reduced carbon emissions	Head of Neighbourhood Services/Fleet Operations Manager
3.2	Investigate feasibility of replacing plant and equipment with low carbon alternatives such as electric or hydrogen, including required infrastructure e.g. charging/refuelling points and renewable sources of electricity.	31.12.21	TBC	Reduced carbon emissions	Head of Neighbourhood Services/Fleet Operations Manager

Theme 4 - Reducing carbon emissions from energy and water use in Council buildings

Ref	Action	Date	Cost	Impact	Lead Officer
4.1	Work with Water Plus to provide accurate real time data on water use in council buildings, similar to the data provided by energy suppliers to monitor and assess usage.	31.12.20	Officer time Within current resources	Improved monitoring of water use to inform reduction strategies	Energy Officer
4.2	Assess the Council's RE:FIT energy performance contract to determine progress and impact of energy efficiency measures installed.	31.03.21	Officer time Within current resources	Reduced Carbon emissions	Development Manager (Strategy)
4.3	For Council buildings which are anticipated to still be operational in 2040, develop proposals for improving energy and water efficiency, installing renewable energy.	31.12.22	TBC – improving efficiency is usually viable on an invest to save basis	Reduced Carbon emissions	Energy Officer Mechanical and Electrical Engineer
4.4	Ensure that carbon reduction is a key element in the design and construction of the proposed new Council Headquarters in Huyton Town Centre.	31.03.23	Additional cost of further Carbon reduction measures to be confirmed.	Reduced Carbon emissions	Programme Manager – Major Developments
4.5	Rationalisation and demolition of existing buildings within the Huyton Council Campus as part of the proposal to deliver a new Council headquarters.	TBC	Included in the cost of the redevelopment	Demolition of Council buildings where adaptive re-use or retrofitting for energy and water efficiency are unviable. Reduced Carbon emissions	Head of Assets

Theme 5 - Reducing carbon emissions from waste from Council services

Ref	Action	Date	Cost	Impact	Lead Officer
5.1	Review recycling facilities and practices across the Council estate and improve facilities where necessary.	31.03.21	Officer time Within current resources	Reduced carbon emissions	Climate Emergency Officer
5.2	Develop a strategy to reduce paper use across the Council.	31.03.21	Officer time Within current resources	Reduced carbon emissions	Climate Emergency Officer
5.3	Develop method of calculating amount of waste generated and recycled from Council buildings.	31.03.21	Officer time Within current resources	Improved monitoring of waste production to inform waste reduction strategies	Climate Emergency Officer
5.4	Investigate the use of single use plastic across the Council and eliminate its use where possible through awareness raising, supplier engagement and procurement specifications.	31.12.21	Officer time Within current resources	Reduced carbon emissions	Climate Emergency Officer
5.5	Develop a Recycling Guide for schools	31.12.20	Officer time Within current resources	Reduced carbon emissions	Environmental Initiatives Officer
5.6	Develop a Recycling Guide for staff and promote key messages.	31.03.21	Officer time Within current resources	Reduced carbon emissions	Environmental Initiatives Officer

Theme 6 - Reducing carbon emissions from staff travel on council business

Ref	Action	Date	Cost	Impact	Lead Officer
6.1	Review the results of the staff survey on home working to look at the feasibility of increasing the amount of home working under normal conditions following the end of the Covid-19 lockdown in addition to the promotion of virtual meetings.	31.03.21	TBC	Reduced carbon emissions	Head of Information Technology Head of Human Resources
6.2	Investigate the feasibility of providing and encouraging the use of low carbon pool cars and electric cycles.	31.12.21	TBC	Reduced carbon emissions	Head of Neighbourhood Services/Fleet Operations Manager/ Climate Emergency Officer
6.3	Review cycle stand facilities at all Council buildings and increase provision if necessary.	31.12.21	TBC	Reduced carbon emissions	Climate Emergency Officer
6.4	Review the Council's Cycle to Work Scheme – a salary sacrifice scheme for cycle purchase.	31.03.21	TBC	Reduced carbon emissions	Climate Emergency Officer

Theme 7 - Sustainable energy generation

Ref	Action	Date	Cost	Impact	Lead Officer
7.1	Assess the impact of nationwide electricity grid decarbonisation on future energy use and carbon reduction targets.	31.03.21	Officer time Within existing resources	Predicting future carbon emissions	Climate Emergency Officer
7.2	Assess regional and national proposals for sustainable heat generation.	31.03.21	Officer time Within existing resources	Predicting future carbon emissions	Climate Emergency Officer
7.3	Determine feasibility of relocating existing solar panel array on the Huyton Municipal Annex.	31.12.21	TBC	Retain existing renewable energy generation capacity.	Energy Officer Mechanical and Electrical Engineer
7.4	Investigate feasibility of retrofitting sustainable energy generation for other Council buildings which are likely to be still operational in 2040.	31.12.21	TBC	Reduced carbon emissions	Head of Assets Energy Officer Climate Emergency Officer
7.5	Incorporate the generation of sustainable energy into the proposals for the new Council Headquarters in Huyton.	31.03.23	Additional cost of further Carbon reduction measures to be confirmed.	Reduced Carbon emissions	Programme Manager – Major Developments
7.6	Incorporate the generation of sustainable energy into the proposals for the redevelopment of the buildings at Court Hey Park.	31.03.23	TBC	Reduced carbon emissions	Energy Officer Climate Emergency Officer
7.7	Investigate the feasibility of off-site sustainable energy projects as a means of offsetting the Council's own carbon emissions.	31.03.23	TBC	Reduced carbon emissions	Development Manager (Strategy)

Theme 8 - Reducing carbon emissions through commissioning and procurement

Ref	Action	Date	Cost	Impact	Lead Officer
8.1	Undertake a review of the Council's Procurement Policy to determine whether there is scope to reduce carbon emissions further through procurement e.g. use of local suppliers and green supply chain, including carbon emissions as part of evaluation criteria etc.	31.04.21	Officer time Within existing resources	Reduced carbon emissions	Procurement Manager
8.2	Investigate the feasibility of introducing carbon emission reporting requirements into major contracts.	31.12.21	Officer time Within existing resources	Reduced carbon emissions	Procurement Manager
8.3	Develop training for Commissioners on incorporating carbon reduction into tender specifications	31.12.20	Officer time Within existing resources	Reduced carbon emissions	Climate Emergency Officer

Theme 9 – Reducing carbon emissions through communication and staff behaviour change.

Ref	Action	Date	Cost	Impact	Lead Officer
9.1	Promotion of key messages through Bertha, Team briefings, Chief Executive's Briefing	Ongoing	Officer time Within existing resources	Reduced carbon emissions	Climate Emergency Officer Communications Manager
9.2	Undertake regular staff surveys to identify ideas, issues, solutions	Ongoing	Officer time Within existing resources	Reduced carbon emissions	Climate Emergency Officer
9.3	Re-institute the Staff Climate Champions Programme	31.12.21	TBC	Reduced carbon emissions	Climate Emergency Officer
9.4	Undertake building audits to identify issues (e.g. control of heating systems, recycling facilities etc.)	31.12.21	Officer time Within existing resources	Reduced carbon emissions	Climate Emergency Officer Energy Officer

Theme 10 - Embedding carbon reduction and climate action across the Council's plans, policies and services

Ref	Action	Date	Cost	Impact	Lead Officer
10.1	Develop a suite of measures and indicators to enable effective performance monitoring of progress with this Action Plan	31.12.20	Officer time	Ensuring progress with the implementation of the Plan	Development Manager (Strategy)
10.2	Publish an annual performance report on carbon emission reduction.	Annually	Officer time	Reduced carbon emissions	Head of Environmental Sustainability
10.3	Undertake an annual review of this Action Plan to ensure that it remains current, relevant and effective as work on the Climate Emergency Agenda evolves	Annually	Officer time	Ensuring the Plan is flexible and remains fit for purpose	Development Manager (Strategy)
10.4	Establish a Climate Emergency Scrutiny Committee to monitor the Council's performance on responding to the Climate Emergency.	31.07.20	Officer and Member time	Reduced carbon emissions	Scrutiny and Partnership Manager
10.5	Incorporate requirements to address carbon emissions in the development of individual Service Business Plans and include this within the Performance Management process.	31.03.21	Officer time	Reduced carbon emissions	Principal Performance Officer
10.6	Include an assessment of the impact on carbon emissions in the Capital Investment Outline for all capital projects.	31.03.21	Officer time	Reduced carbon emissions	TBC
10.7	Include an assessment of the impact on carbon emissions in the Standard Report Template to ensure that this is embedded within the Council's decision-making process.	31.03.21	Officer time	Reduced carbon emissions	Head of Democratic Services

Ref	Action	Date	Cost	Impact	Lead Officer
10.8	Undertake a review of existing key policies and strategies to determine any significant impact on carbon emissions and alignment with the climate emergency declaration.	31.12.21	Officer time	Reduced carbon emissions	Climate Emergency Officer
10.9	Provide carbon literacy training to key officers and Elected Members, and prepare written guidance on assessing the carbon impact of projects.	31.12.21	TBC	Reduced carbon emissions	Climate Emergency Officer
10.10	Ensure that all funding opportunities provided by the Government and other bodies for carbon reduction projects are fully assessed and utilised wherever possible.	Ongoing	Officer time	Funding for carbon reduction projects	Climate Emergency Officer
10.11	Work with the Liverpool City Region Combined Authority on issues which are more appropriate to be addressed at a regional level whilst lobbying the Government for support to local communities to address climate change	Ongoing	Officer time	Identification of opportunities that will support progressing the Climate Emergency agenda in Knowsley	Development Manager (Strategy)

TAKING
ACTION ON



Climate Change

IN KNOWSLEY

