Climate Emergency Annual Report 2023-24

Foreword from Councillor Doyle

This is now the third annual report we have published setting out our progress over the past year, as well as laying out our future ambitions. Climate change impacts seem to be constantly in the news alongside the ongoing cost of living crisis impacting everyone's daily lives and the Council's available budgets. Despite these challenges, we will continue to act. Work to reduce carbon emissions is vital. During 2023, for the first time, global warming has exceeded 1.5C across an entire year. Although this alone doesn't breach the commitment made by world leaders in 2015 (The Paris Agreement) it is a worrying development. That is why I am delighted that Sefton made the transition to use 'clean electricity' from 1 April 2023. This means all of our electrical equipment in buildings and our streetlights had no carbon emissions. This has helped to significantly reduce our carbon impact.

I'm also very pleased that work has progressed in the past year on engagement and communications with our communities. We now have a dedicated climate hub on the Council website and a quarterly climate e-newsletter that highlights local news, events and actions residents can take.

We know that a changing climate is of concern to our residents, and we hope to support them this year through the delivery of more Electric Vehicle charging infrastructure, particularly for residents without access at home. And we will support people to access green job opportunities with the Cambridge Road Adult Education centre.

As well as reducing our carbon emissions, we must also ensure that we can continue to deliver our services knowing we face the challenge of more extreme weather events, such as flooding and heat waves. And so, in the past year the Council has been starting those assessments to be better prepared.

There are signs of positive action across the globe. The rate of deforestation in the Amazon rainforest dropped sharply last year, after the Brazil government pledged to stop deforestation. And it was also the year energy from renewables, like wind and solar, grew faster than the world's power demand did. This means emissions from burning fossil fuels is on a downwards trend for the first time.

I hope this report helps to show that we can all make a difference.

Executive Summary

This report provides an update on the progress that has been made in 2023-24, in-line with the climate emergency strategy and action plan.

The report includes the following:

- Sefton Council's carbon footprint for 2023-24
- Liverpool City Region (LCR) 2040 net zero carbon update
- Progress on key priorities in 2023-24
- Other Council projects and LCR wide initiatives
- Challenges
- Key areas of focus for the next 12 months
- Conclusions

<u>Introduction</u>

In July 2019 Sefton Council declared a Climate Emergency and set an ambitious target to achieve net zero carbon emissions by 2030.

This annual report outlines the sources of carbon emissions linked to the Council's estate and operations. And also highlights the key projects and achievements from the last year inline with the climate emergency strategy and action plan.

All activity described in the report relates to the period April 2023 to March 2024 (Phase 2, Year 1 of the action plan).

It also focuses on the challenges encountered and what the key priorities for the next year will be.

Sefton Council Carbon Footprint

The Government has identified 3 types of emissions:

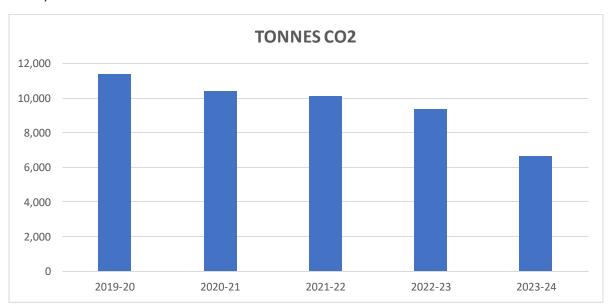
Scope 1 - Emissions from activities that are owned or controlled by the Council and are released straight into the atmosphere, for example, from Council owned gas/oil boilers and diesel/petrol vehicles.

Scope 2 - Emissions released due to electricity use.

Scope 3 - Emissions from equipment or vehicles that do not belong to the Council but are used to deliver Council functions, for example, officers using their own diesel/petrol cars for Council business.

Sefton Council started to track its emissions in 2019-20. Over the last 4 years there has been an overall reduction of 4,701 tCO2, which represents a 41% decrease.

The graph below shows the annual breakdown. It demonstrates that emissions have continued to reduce every year with last year (2023-24) achieving a reduction of 29% (2,665 tCO2).

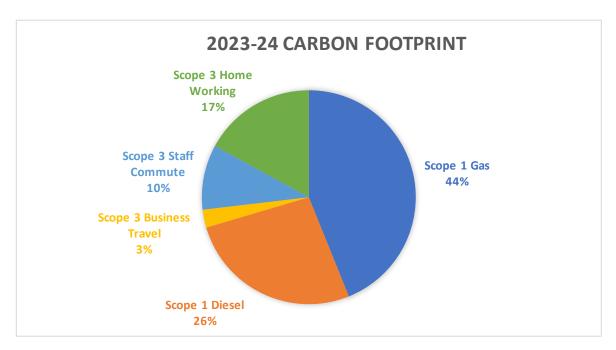


Data from the following activities was used when measuring the Council's carbon footprint:

- Scope 1 Council Buildings (Gas)
- Scope 1 -Operational Fleet (Diesel)
- Scope 2 Council Buildings (*Electricity)
- Scope 2 Street Lighting (*Electricity)
- Scope 3 Business Travel
- Scope 3 Staff Commute
- Scope 3 Home Working

The pie chart below shows a breakdown of the Council's operational carbon footprint for 2023-24.

^{*}From 1 April 2023 Sefton Council moved to a 100% clean electricity tariff backed by REGO (Renewable Energy Guarantees of Origin) certification.



A significant proportion of emissions in 2023-24 came from gas use in Council buildings (44%), followed by emissions associated with the operational fleet (26%), home working (17%), staff commute (10%) and business travel (3%).

Electricity and Gas (Scope 1 and 2)

Emissions are calculated using consumption figures taken from utility supplier billing as well as meter readings.

Electricity usage (kilowatt hours) has continued to decrease since 2019-20 for corporate buildings and street lighting.

The reduction has been driven by the large scale 4-year LED street lighting project, proactive installation of energy efficiency measures, changes to building use and the decarbonisation of the national grid.

Since April 2023, all electricity purchased for the Council's energy supply (corporate buildings and street lighting) has been moved to a REGO-backed (Renewable Energy Guarantees of Origin) clean electricity source. This is a key action in order to reach net zero by 2030.

It allows the Council to report electricity emissions as 'zero' under Scope 2 of the Greenhouse Gas Protocol. However, we can show that if we had not used clean electricity in our operations we would have emitted 2,944 tCO2. Without this intervention, the Council would have seen a 3% increase in overall emissions (instead achieving a 29% decrease).

Overall gas emissions have reduced by 8% since 2019-20. Although in 2023-24 they increased by 12% (312 tCO2), making gas the Council's largest emissions source. The main reason for the increase in consumption is the reopening of Splash World in May 2023, following this consumption more than doubled.

Operational Fleet (Scope 1)

Emissions are calculated using the fuel consumption data provided by the Fleet and

Transport Team. Based on this information, transport is the Council's second largest emissions source (26%) and has increased by 18% since 2019-20.

The Council aims to move to a low carbon fleet by 2030 and actions are included in the third phase of the Council action plan (2026-29).

A small percentage of the fleet has already been switched to electric vehicles, but a lot of work is still required to transition the wider fleet.

The Strategic Transport Planning and Investment Team are continuing the process of developing strategies, while working with colleagues across the Council to process the findings from the Fleet Review completed by the Energy Saving Trust.

Staff Travel (Commute and Business) and Home Working (Scope 3)

During 2023-24, emissions from staff commute increased by 6% compared to the previous year as officers return to the office (post Covid19 pandemic). This equates to an increase of 39 tCO2. However, emissions from business travel and home working decreased by 43 tCO2 in total.

Staff commute and business travel continue to remain significantly lower than pre-pandemic levels and it is encouraging to see a working pattern which overall supports a reduction in emissions.

The Council continues to promote agile working and is committed to reducing emissions through the travel plan and associated policies.

<u>Liverpool City Region – 2040 Net Zero Carbon Target</u>

All six authorities in the Liverpool City Region (LCR) have declared a Climate Emergency and are taking targeted action. Working collaboratively, authorities in the LCR share creative ideas and lessons learned to help the whole city region achieve net zero carbon by 2040 or sooner.

Territorial emissions for the UK are estimated by Central Government and made publicly available online. There is a two-year delay in data released, meaning this report refers to 2021 results.

In 2021, the LCR's emissions increased by 5.6% from 2020 but are still lower than they were in 2019 (down 4.4% overall).

Whilst this Sefton Council strategy relates only to Council operations, the LCR Combined Authority (LCRCA) strategy relates to all aspects of society and includes all homes, businesses, transport and public sector organisations.

In early 2023, the LCR Combined Authority published the 'Pathway to Net Zero' strategy which outlines an ambitious plan to reduce carbon emissions across the entire LCR.

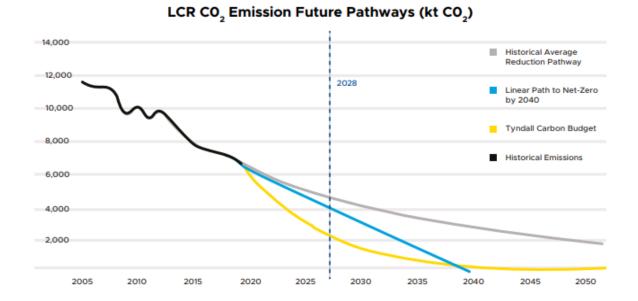
Later the same year, a 5-year Climate Action Plan 2023-28 was published, which set actions for the Combined Authority to complete that will help contribute towards decarbonising the LCR.

The plan is divided into 5 pillars shown below:



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All actions have timescales for completion – short-term (1-2 years), medium-term (3-4 years) and long-term (up to 5 years or potentially running after 2028).



Progress towards achieving the actions in the 5-year plan will be tracked by the LCRCA and reported publicly.

In 2023-24 Sefton Council worked with the LCRCA on a number of key projects including:

- External funding opportunities Public Sector Decarbonisation Scheme and Low Carbon Skills Fund, Local Electric Vehicle Infrastructure funding
- Retrofit and social housing initiatives
- Biodiversity e.g. Local Nature Recovery Strategy
- Solar Together Project

This work is on-going and will continue in 2024-25.

Climate Change Action Plan

We said, We did

In last year's annual report, the Council set out four key priorities for the year 2023-24. Progress has been made in all areas, as set out below.

1. Public Engagement

Sefton Council undertook a Climate Consultation in Summer 2022 for a period of 10 weeks. There were a number of key takeaways from the consultation which were used to form a 9-point engagement plan to raise the visibility of climate actions and facilitate involvement.

Progress has been made in 2023-24 on the following key actions:

- Launched a quarterly e-newsletter that highlights local and global news, events and actions people can take.
- Created a specific climate homepage (sefton.gov.uk/climate) which is updated with information and news in a clear and user-friendly way.
- Launched a climate 'stamp' logo and brand identity (climate stripes) to make climate related activity more recognisable. The materials will used by Council departments and on projects where there is a climate focus, i.e. Transport, Green Sefton and Regeneration.
- Created a climate email address (climate@sefton.gov.uk) that is actively used and promoted.
- Supported national and global climate-related campaigns across social media channels and on the Council website to help share important messages such as COP28, Net Zero Week, World Environment Day, World Oceans Day and Plastic Free July.
- Supported LCR schemes through regular promotion across Council networks.

2. Transport Strategies and Plans

The Strategic Transport Planning and Investment Team (STPI) have been continuing the process of developing strategies around low carbon transport and are planning to issue a Position Statement in Summer 2024, which will lead to a wider public facing communications campaign and further development.

A baselining report for borough wide carbon emissions from transport has been undertaken, with key priority areas being identified.

Leading on from this, major highways/active travel schemes are being trialled through a carbon assessment tool, which will help to understand and enhance the approach to carbon within a scheme's lifecycle.

The Council has also been looking at Electric Vehicle (EV) charging across the borough with the opportunity to obtain some Local Electric Vehicle Infrastructure (LEVI) funding to provide publicly available charging spaces.

Work is also continuing with colleagues across the Council to explore the use of EV's and lower carbon technologies within the operational fleet.

The STPI Team are also continuing to embed a Healthy Streets and Active Travel focus into all schemes and develop a strategic borough wide Local Cycling and Walking Infrastructure Plan (LCWIP).

3. Climate Adaptation

Climate adaptation is about managing or avoiding the risks that climate change will bring. Some of the most significant climate hazards Sefton faces are more severe storms, with intense downpours, leading to urban and coastal flooding and erosion, and heatwaves impacting health, infrastructure and transport.

Since Autumn 2023, the Council have undertaken work to embed long term climate risks into day-to-day risk management processes. Working alongside the Council's risk management team, all departments were invited to a Climate Change Adaptation workshop event and follow-up meetings. From which an agreed framework and scoring system was established.

This process is ongoing under the direction of the Strategic Leadership Board. All service areas are now required to consider climate change related risks in their risk registers. This will allow service areas to be more resilient to immediate risks such as extreme weather events (e.g. flooding or heatwaves) and plan to reduce the costs and impact of risks in the future.

Furthermore, oversight will be given to these risk registers to 'Build adaptive capacity' into decision making processes for policies, projects and investment to ensure the Council adopts the most cost-effective and well-adapted options. An example to demonstrate this is to include shade as part of building design and to plant more trees for shading, to provide natural cooling during future prolonged hotter summers and avoid the costs of airconditioning.

This work is on-going and will continue in 2024-25.

4. Funding Opportunities

Public Sector Decarbonisation Scheme - Phase 3c

The LCRCA co-ordinated a combined bid for funding to the Public Sector Decarbonisation Scheme (PSDS) Phase 3c in October 2023.

If successful, the current heating system would be replaced with a low carbon alternative such as Air Source Heat Pumps and improvements would also be made to the overall energy efficiency of the buildings by installing measures such as LED lighting, solar panels and insulation.

Authorities in the LCR put forward circa 50 sites (10 buildings in Sefton including Bootle Town Hall, Meadows Leisure Centre and Crosby Lakeside). The total project costs for Sefton would be circa £8m with approximately £5.6m being grant funded.

A final decision on the funding application is pending, however it has been indicated that Sefton and the LCR will receive a proportion of the funds requested and 2-3 buildings from the 10 will be decarbonised. This will help to reduce the Council's emissions by 1-2%.

Low Carbon Skills Fund - Phase 4

The LCRCA submitted a combined bid to create Heat Decarbonisation Plans (HDPs). This application was unsuccessful, although another collaborative bid with the LCR has recently been submitted for round 5.

The buildings put forward are a mix of Corporate buildings (6), Family Well Being Centres (3), Schools (17) and New Direction (4) sites. If successful, all visits will be carried out and reports compiled during 2024-25.

A decision is expected by the end of July 2024.

Other Projects

In addition to the four achievements above, there are also a number of other projects in 2023-24 which helped contribute towards achieving the aims of our strategy and action plan and the wider LCR target.

The strategy and action plan have seven key principles which make up a C.L.I.M.A.T.E. acronym.

Carbon Reduction Leadership Innovation Mobilisation Adaptation Transformation Engagement

The principles guide our work in this area.

Carbon Reduction

LED Street Lighting Project

In 2020, the Council approved a £12.75m invest to save project for the roll out of more energy efficient LED street lighting across the borough. The work is on-going and is expected to be completed in June 2025.

To date, 19,772 lanterns have been changed, along with 4,162 full lighting columns. Saving a total of 9-million kWh and two-thousand tonnes of carbon since April 2021. When complete, the project will have reduced the carbon footprint by ~6%.

Solar Together LCR Project

Solar Together is a unique group-buying scheme that enables residents to register for solar PV and battery storage systems to receive competitive prices from pre-vetted installers.

The programme was administered by the LCRCA to support reaching the ambitious target to achieve net zero carbon by 2040 or sooner.

To date there has been two Solar Together schemes, with round two being delivered during 2023-24. In total 2,431 (Round 1 - 1,857, Round - 2 574) residents in Sefton (10,400 residents across the LCR) registered interest, with 279 (Round 1 - 232, Round 2 - 47) properties in the borough being fitted with energy-saving solar panels and/or battery storage, enabling residents to cut their energy costs while also reducing carbon emissions.

Leadership

Liverpool City Region (LCR) Community Environment Fund

The LCR Community Environment Fund, aims to encourage long-term behavioural change, while improving the city region's environment and safeguarding its greenspaces.

To date, there has been two rounds of funding, supporting 92 projects across the LCR. Altogether 14 (Round 1 - 9, Round 2 - 5) projects have taken place in Sefton and 5 (Round 1 - 4, Round 2 - 1) projects have covered multiple authorities including Sefton.

The projects have covered various environmental themes ranging from creating a community garden to enhancing the climate and environmental literacy of young people across the LCR.

Funding for round 3 has recently been approved and will be implemented in 2024-25.

Climate Emergency Training for Report Authors

All Cabinet and Council decision papers include an assessment of the potential climate change impacts.

A training package has been designed to provide officers with the information they need to complete the 'Climate Emergency Implications' section of the report template. To date, 63 officers have completed the training.

Public Events

The Council has a leadership role within the community to promote climate change action. As such, officers attended the Sefton CVS Annual Conference for community groups in November 2023.

Officers also attended a Scaling to Reach Net Zero event held in Liverpool. The conference provided valuable insights and networking prospects as authorities work towards creating a sustainable future.

Innovation

Climate Emergency Training

In 2021, the Energy and Environmental Management Team developed a Climate Emergency eLearning training module which to date has been rolled out to 2,540 officers.

The eLearning module is currently being reviewed and updated and will be re-launched in September 2024.

Other Funding Opportunities

In 2023-24, the Council applied for other external funding (alongside the Public Sector Decarbonisation Scheme and Low Carbon Skills Fund) and an award was made from Sports England Swimming Pool Improvement Fund for just under £200,000. The funding will be used to provide additional photovoltaic (PV) panels to both Meadows Leisure Centre and Formby Pool and the installation of heat recovery pumps to the Air Handling units at Meadows Leisure Centre.

More recently the Council has developed a bid for "Pathways2Resilience" funding as part of the EU Horizon funding stream.

This funding, if successful, would support Sefton to map out wider risks across key

infrastructure and develop robust plans such as a baseline report, and climate resilience strategy and action plan.

Mobilisation

Affordable Warmth Service

The Council's Affordable Warmth Service helps vulnerable residents to stay warm and reduce fuel poverty.

Fuel poverty can be caused by living in a poorly insulated home, having a poorly performing heating system, and the subsequent costs of running these to keep the home warm.

The service supports residents to install insulation which helps improve efficiency, and there is now a move to the installation of low carbon heating systems which also helps to reduce emissions.

Key achievements in the last year are set out below.

- Brought in £390,500 funding to the Council to finance the service.
- Directly helped over 200 vulnerable residents with heating system repairs and replacements.
- Processed 210 applications for ECO4 Energy Efficiency Grant for insulation, heating and renewable technology.
- This work has on average saved residents £240 per year on their energy bill as well as reducing measure/installation costs.
- The improvements are estimated to have saved 117 tonnes of carbon emissions per year across the borough. This is the equivalent of taking 69 cars off the road.

The service and all activity is provided based upon successful funding bids submitted by the Council.

Environmental Support for Businesses in Sefton

Earlier this year, over 30 accommodation providers from Sefton attended an event to take up support from Sustainable Sefton.

Thanks to funding from the UK Government and in partnership with Invest Sefton, environmental consultants Groundwork kickstarted a new programme of activity aimed at supporting businesses with their sustainability credentials.

Sustainable Sefton will provide funded sustainability support to 60 businesses from the hospitality and retail sectors over the next 12 months, all of which will be supported by Groundwork consultants to develop a bespoke sustainability action plan.

Adaptation

Green Sefton

Sefton's natural environment is a significant and valued asset and makes the borough an attractive and prosperous place to live, work and visit.

The natural environment also plays an important role in Sefton's decarbonisation journey. Natural landscape can absorb and store carbon dioxide which in turn can support better air quality and reduce flood risk.

During 2023-24, Green Sefton progressed in a number of key areas, these include:

- Reviewing new national coastal erosion risk maps, taking into account climate change predictions for sea level rise.
- Installing water level monitoring equipment on smaller watercourses to understand changes in localised flows due to changes in the weather patterns.
- Planting 635 standard trees (6,878 since 2019-20).

Transformation

Retrofit

Domestic retrofit schemes offer an opportunity to improve the energy efficiency in some of the most poorly insulated homes in the borough. Activities can range from fitting energy-efficient light bulbs to installing sustainable heating technology, such as air source heat pumps.

The most recent domestic retrofit scheme delivered was the Sustainable Warmth Fund (SWF). This consisted of 2 funding streams, Local Authority Delivery (LAD3) and Home Upgrade Grant (HUG1).

During this scheme, the Council improved a total of 386 properties (installing 418 energy-saving measures) with all work fully funded. Measures consisted of external wall insulation, cavity wall insulation, loft insulation, underfloor insulation, air source heat pumps, solar PV and window replacement.

The SWF scheme was completed in Autumn 2023. However, Phase 2 of the HUG scheme is being delivered by the Liverpool City Region Combined Authority and will continue until 2025.

Engagement and Education

School Engagement

In 2023-24 through the Council's ECO Saver programme, schools received the following support:

- Bespoke support was provided to schools requesting an energy and water reduction audit. With additional signposting to wider climate information.
- Awareness raising through Assemblies and Governor training.

- Regular updates were provided on consumption of electricity and gas use on site and how to reduce.
- Switch off Fortnight in November 2023 was promoted and supported.
- Automatic Meter Reading (AMR)/Remote Meter Reading (RMR) devices were installed on 10 school water meters to support the reduction of water use and identify issues on site.
- Energy and water saving posters and thermometers were distributed to schools taking part in Eco Savers.
- Support for small energy saving measures such as radiator reflector foil was provided.

Eco Centre

The Council run a dedicated environmental learning centre, known as the Eco Centre, which offers learning opportunities for Sefton residents and school children from across the city region.

In 2023-24, the teaching staff delivered climate related education to over 3,400 school children.

The Clean Air Crew resource has been recognised beyond the city region as a pioneering AQ resource. It is recognised as an important educational tool and has been adopted by other local authorities, which has helped continue to fund its present and future development.

The teaching staff have delivered a number of successful campaigns throughout the year, one of the projects, 'Coasts for Kids', recently won the prestigious "Climate Creatives Challenge", securing top spot in the Coastal Change theme which saw entries from 56 countries. The project showcases a diverse array of creative expressions focused on the theme of Coastal Change and strategies for adaptation. More information can be found at www.southportecocentre.com.

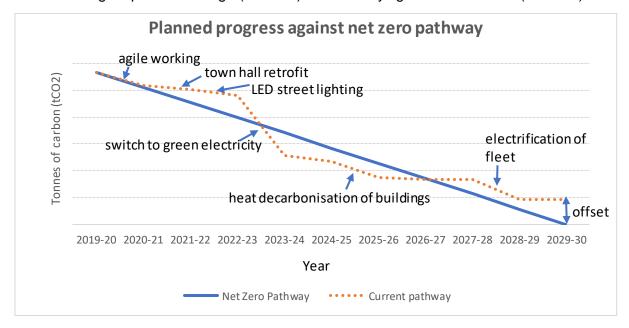
In 2024-25, the team will launch an interactive immersive experience, created and designed in-house, in support of retrofit and green jobs in partnership with the Cambridge adult education centre.

Challenges

A considerable amount of work has been undertaken to date. However, to maintain this momentum, the climate emergency strategy and action plan will need to be continued and further progressed in order to reach net zero carbon within six years.

All activity described in this report relates to Phase 2, Year 1 of the action plan. The graph below shows the linear pathway to net zero by 2030 (blue line) and maps the current pathway (red dotted line).

It also focuses on the work carried out to date along with future projects such as decarbonising corporate buildings (Phase 2) and electrifying Council vehicles (Phase 3).



Given the Council's financial pressures and limitations to internal funding streams, ongoing collaborative work with the LCR, plus the identification of external and innovative funding mechanisms to increase capacity to act, will be crucial to the delivery of this agenda.

As mentioned above, the Liverpool City Region has set a 2040 net zero target for the entire area. The Council do not have direct control over these emissions but instead seek to influence and encourage others to adopt net zero approaches.

Priorities for 2024-25

Overall good progress is being made on the delivery of the climate emergency strategy and action plan through various activities and programmes outlined in this annual report.

The focus for 2024-25 will be to:

- Continue to build on the engagement work completed in 2023-24, connecting with local communities and encouraging behavioural change.
- Work with the Strategic Transport Planning and Investment (STPI) Team to develop a low carbon transport approach.

- Continue to submit funding applications, in order to maximise available capital to the Council.
- Identify the Council's approach towards offsetting and explore potential in-setting opportunities while quantifying the potential cost.
- Promote the updated Climate Emergency eLearning module and provide support to officers.

Conclusions

The Council has long been committed to protecting the environment, and this annual report reaffirms the pledge made in July 2019 with an overall decrease in emissions of 41% since that date.

The report highlights some key projects and achievements over the last year with one of the main ones being the purchase of clean electricity from April 2023.

The Council remain broadly on track to reach net zero by 2030 but recognise that significant capital work and large-scale investment will be needed during phase 2 and 3 (Phase 2: 2023-25) (Phase 3: 2026-29). The Council are relying on external funding opportunities to help support these programmes and accept that there are inherent risks with this approach.

Work on the regional 2040 targets are developing and Sefton are working with LCR partners to align with those ambitions.