Sefton's Climate Change Emergency Implementation Plan

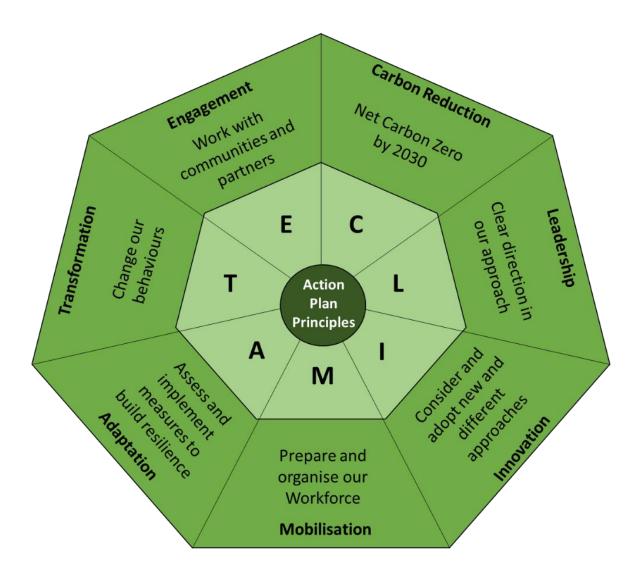
Phase 2: 2023-2026

Sefton Council are coming to the end of phase 1 delivery (2020 –2023) of the Climate Change Emergency Plan. A huge amount of work has been undertaken during this phase to create the foundations for success in future stages and undertake initial work which has already resulted in significant carbon savings.

As Phase 2 is due to begin, this document highlights the challenges and opportunities associated with the next stage of work to ultimately reach net zero by 2030.

There is increasing commitment through government policy, law and voluntary commitment across the Uk to a net zero carbon target. Sefton Council have an operational target of meeting net zero by 2030. However, as part of the Liverpool City Region, we have a target for the whole borough to be net zero by 2040, ten years ahead of the national target.

The work undertaken by the Council will be aligned to the delivery of the Sefton 2030 Vision and the Council's Core Purpose with the aim of making Sefton a great place to be. We will achieve this by following the below principles as set out in our climate strategy:



The Council's action plan includes both mitigation and adaptation measures. This recognises that some impacts of a changing climate cannot be changed in the short/medium term. Some impacts, such as future sea level rises and an increase in summer temperatures will pose risks and opportunities to how we live and work, so we must alter our approach via adaptation measures. Offsetting is included within mitigation and is the practice of increasing carbon capture to compensate for carbon release that cannot be avoided.

We have defined our organisation as, Council depots, leisure centers, libraries, fleet vehicles and office spaces. We have defined our emissions according to the Greenhouse Gas Protocol. This will include the most direct emissions Scope 1 and Scope 2, with some additional emissions captured within Scope 3, namely business travel and commuting.

Phase 1 Summary

Phase 1 work included much of the groundwork for management, governance and monitoring of the Council's commitment. This included measuring carbon emissions, training staff, introducing climate assessments in decision making, reporting to a cross party elected Member Reference Group and engaging the community.

In this period the Council's carbon footprint has fallen 13% since 2019/20, based on the last review in 2021/2 with an additional fall expected for 2022/23 which is positive.

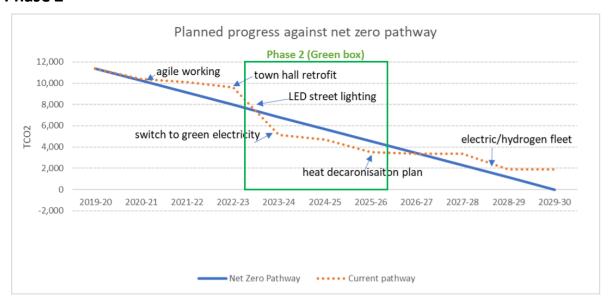
The reduction in emissions during this period was driven by

- the Council continuing with an agile working policy
- the continued roll out of energy efficient street lighting across the Borough
- improvements to the national energy mix (greener electricity coming through the grid).
- Upgrade of Bootle and Southport Town Halls (insulation and windows)

There has been significant work assessing and responding to a changing climate including adoption of a Flood Risk Strategy, updated surface water flood model maps and a coastline future prediction report has been produced and the potential impacts assessed.

There have been many significant challenges during this time including the Covid 19 pandemic and the recent extreme energy price rises which has made the need to reduce energy use more urgent but at the same time made funding the interventions more challenging.

Phase 2



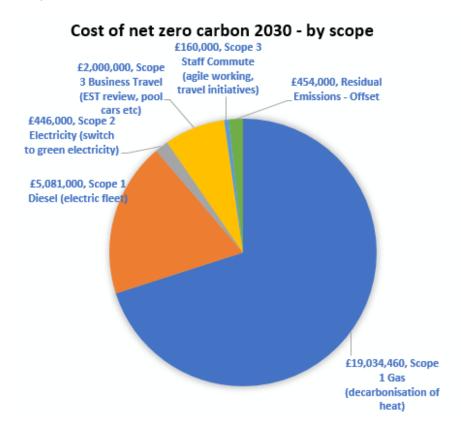
The chart above shows the Council's planned progress to reach net zero in 2030. Phase 2 is highlighted as a period, by the green box. Sefton Council start this period on track with

above 13% reduction expected for 22/23, and an expected reduction in emissions of $^{\sim}60\%$ by the end of phase 2.

The chart overleaf demonstrates some of the key actions needed over the next three years which include;

- The switch to 'green' electricity (100% renewable or zero carbon electricity).
 Electricity accounts for around a third of the Councils carbon footprint, and so switching to zero carbon electricity will have a significant impact. As you can see from the chart below, the cost of this significant reduction represents value for money.
- The heat decarbonisation of buildings (reducing gas use). Gas usage is the second
 most significant element of Council emissions. If electricity emissions are removed,
 then this rises to around 40% of remaining emissions. However, there is no easy low
 carbon alternative to gas usage and a full change to building fabric and heating
 system will be required. Hence below the significant cost to reduce gas emissions.
- Ongoing reduction of transport commuting and home working costs. As Scope 3
 emissions, the Council has less control of this area, however, travel accounts for
 around 10% of the carbon footprint.

This phase of activity will require significant investment which is shown in the chart below (using 2022 data).



During Phase 2 specifically includes action on

- decarbonisation of heat (through switching away from gas for space and water heating) with an estimated cost of £19M (2022 prices). The cost of this is substantial and an estimate for work to decarbonise heat from 18 buildings is £19M (2022 prices). External funding from sources such as the government "Public Sector Decarbonisation Fund" will be required, which necessitates a match funding contribution. It will also require additional staff to deliver the building retrofit works.
- Switch to green 100% renewable electricity which incurs an annual cost determined at market rates, estimated cost £200K (2022 prices) the cost of which will be met from existing budgets and reviewed annually.
- Action to reduce emissions from business travel / commuting costs in phase 2 could include investment in electric vehicle charging facilities. Estimated cost £1M (2022 prices). External funding would also be required from sources such as the governments "Workplace Charging Scheme" which provides 75% of the costs.
- Energy efficiency measures information and behaviour change to encourage a reduction in fuel use. Any reduction will have a positive impact on Council finances and costs can be met from within existing budgets.

Previous work on carbon reduction has focused on energy reduction alone, which has an associated direct financial saving. Whilst this work, to reduce consumption, will continue through communications, reducing carbon emissions to zero will require investment that will not necessarily achieve a financial saving but will save carbon.

Additionally work will continue to engage the public, train staff, assess operational risks and secure external funding. As well as the usual monitoring and reporting.

In order to achieve success during this phase, the Council will require support to be available from external funding sources such as the Public Sector decarbonisation fund and expertise to be made available through programmes such as the NW net Zero hub and LCR collaborative groups. If funding and other support is not available, the risk of not meeting net zero targets increases. Officers will continue to provide information to senior officers and elected members, MPs on opportunities and potential barriers to ensure external organisations such as central government are aware of the importance of this support.

The 2040 Liverpool City Region Target

The Liverpool City Region Strategy 'Pathway to net zero' sets out an ambitious plan to reduce carbon emissions across the entire LCR to net zero by 2040. Sefton officers are working with other LCR members to realise these aims.

Actions will be needed across all sectors including business & industry, domestic properties, transport. Some of the key actions include;

- Retrofit of housing stock (domestic emissions account for a third of LCR emissions)
- Delivery of the Mersey tidal electricity generation project
- Delivery of the Hynet hydrogen and carbon capture network

It is estimated that Liverpool City Region needs around £45bn investment over the next 20 years to deliver the carbon reductions needed, which will bring economic benefits (e.g. green jobs).

To reach the net zero carbon 2040 goal, the area needs to halve the amount of energy that is used from any source. All remaining energy will be from, renewable energy sources that don't produce any carbon emissions at all. This will require considerable early action across all sectors.

Following our Climate Strategy principles C.L.I.M.A.T.E., our action plan outlines the key areas of work we will undertake over the next 3 phases of our journey to 2030. This is revised and updated each year in order to capture achievements, opportunities, technological developments and additional challenges, with quarterly reporting to senior officers and elected members.

Phase 2 activities are shaded below (Yellow highlight = new activity)

| Local Commitment | Local Action | Impact | Phase |
|--|---|--------|-------------|
| "We will" | "by" | H/M/L | |
| <u>C</u> arbon Reduction | | | |
| work towards becoming net carbon zero by 2030. | Maintain (and refine) the carbon baseline for Council emissions | High | Phase 1-3 |
| | Identify all current/planned projects and evaluate their contribution/risk to the climate emergency agenda | High | Phase 1 |
| | Explore options to improve thermal efficiency at council sites through retrofit. | High | Phase 1 |
| | Reduce electricity and gas usage: no/low cost energy saving and reduction schemes e.g. Education and awareness campaigns | Low | Phase 1 |
| | Reduce energy (and water) consumption: development of a utilities reduction strategy | Medium | Phase 2 -3 |
| | Reduce electricity and gas usage: medium / high cost energy saving and reduction schemes e.g. Street lighting LED upgrade | High | Phase 1 & 2 |
| | Explore the opportunities and feasibility for expanding sustainable transport networks and facilities such as cycle routes. | Medium | Phase 1 - 3 |
| | Reduce fuel consumption through promoting ecodriving, and reduced travel via agile working etc. | Medium | Phase 1 |
| | Move to low carbon fleet vehicles | Medium | Phase 3 |

| achieve 100% clean energy by 2030 | Investigate self-supply of Biogas (generation) - e.g. through use of municipal waste streams and agricultural waste stock. | High | Phase 2 -3 |
|---|--|--------|--|
| | Develop renewable energy (electricity) generation across Sefton – solar, on shore wind. | Medium | Phase 1 -2 |
| | Supply of Biogas via Gas purchase agreement / renewable electricity - purchase REA & REGO certificates with a direct agreement between company generating and Sefton. | High | Phase 2 (elec.) Phase 3 (gas) |
| | Investigate Carbon offsetting options — local then global | Low | Phase 3 |
| <u>L</u> eadership | | | |
| Provide clear direction in our approach | Lobby central government for increased funding for climate related projects | High | Phase 1 -3 |
| | Review new policies and strategies, forthcoming budget proposals, Treasury Management Strategy and all cabinet and council decisions to ensure they have considered climate change adaptation and mitigation issues. | Medium | Phase 1 |
| | Sharing expertise and advice with our community, providing details of the Council's commitments and encouraging behaviour change in local homes, businesses and schools. | High | Phase 1 - 3 |
| | Work with local partners across the LCR to a co-ordinated approach and to identify areas for collaboration and resource. | High | Phase 1 - 3 |
| | Use our role as a large organisation to encourage change in the borough, by requiring large suppliers to report on climate impact of activities carried out on our behalf. | High | Phase 1 - 3 |
| | Assess the impacts of local events and activities via the Southport Master Plan and seek to mitigate where necessary | High | Phase 1 |

| | Use our role as a local authority to develop Community Energy and build upon the emerging wind turbine development (Southport Dunes/Ecocentre Feasibility Study) | | |
|---|--|--------|-------------|
| <u>I</u> nnovation | | | |
| consider and adopt new & different approached | Explore options for investment in low carbon energy & innovative technology and seek innovative low carbon options for any new developments. | High | Phase 1 - 3 |
| | Approach the climate emergency with a long term mindset, exploring 'spend to save' methods of climate action. | High | Phase 1 - 3 |
| | Explore options for local offset via climate adaptation programmes and local landscape enhancement | Medium | Phase 1 - 3 |
| | Identify and channel the existing enthusiasm for climate action in the workforce | High | Phase 1 |
| | Continue to invest in Sustainable IT systems to allow for flexibility for agile and home working | Medium | Phase 1 |
| | Develop a Green Sefton membership scheme for our communities to inspire them to take action and buy into the approach being taken by the Council | Medium | Phase 1 |
| <u>M</u> obilisation | | | |
| prepare and organize our workforce to support climate change action | Develop and deliver training & awareness raising for staff at all levels, to encourage low carbon and adaptation measures and informed decision making, among our workforce. | High | Phase 1 |
| | Support departments to assign responsibility and actively contribute to the officers/members working group(s) | High | Phase 1 |
| | Provide timely reporting to members (Cabinet and Overview & Scrutiny Committees) and staff on progress and other | High | Phase 1 - 3 |

| | developments | | |
|---|--|--------|-------------|
| | Improve knowledge and understanding of how the Council is affected by extreme weather events in terms of providing its services and financial impacts. | High | Phase 1 - 3 |
| <u>A</u> daptation | | | |
| Access and implement measures to build resilience | Complete a full risk assessment of Climate Change impacts, identifying threats and how they can be managed as well as realising the opportunities (such as offsetting emissions and assessing carbon capture). | High | Phase 1 - 2 |
| | Develop a place based strategy/framework for Sefton's landscape portfolio for the delivery of any carbon offsetting, adaptation and mitigation measures whilst working with natural processes. | Medium | Phase 1 |
| | Identify and quantify opportunities for carbon offsetting, urban greening and improved site sustainability; through local landscape management | Medium | Phase 1 |
| | Review impacts of measures on air quality outcomes. | Medium | Phase 1 |
| | Work with the Planning Authority on developing guidance for development, that includes climate benefits, for the built and natural environment. | Medium | Phase 1 |
| <u>T</u> ransformation | | | |
| Change our behaviour | Align our climate work with the 2030 vision and other transforming principles. | High | Phase 1 - 3 |
| | Utilise existing groups and tools internally to engage staff and raise awareness of low carbon & adaptation activities and encourage action. | Medium | Phase 1 |
| | Reducing commuting and business travel impacts through the implementation of a council travel plan and associated policies. | High | Phase 1 |

| _ | Embed responsibility for delivery this agenda at all levels. Support those people to fully understand the expectations of their position in relation to the climate emergency. | High | Phase 1 |
|------------------------------------|--|------|-------------|
| <u>E</u> ngagement | | | |
| work with communities and partners | Ensure all information on our climate emergency is available in an easy read format and is accessible to all our residents | High | Phase 1 |
| | Establish and engage with an expert panel and a diverse citizens panel (including youth) | High | Phase 1 -2 |
| | Work with partners (Schools, New Directions, Businesses etc) to adopt low carbon & adaptation measures | High | Phase 1 - 3 |
| | Engage our communities to raise awareness of the Council's commitments and encourage appropriate behaviour change | High | Phase 1 - 3 |