

Report to: Cabinet

Date of meeting: 29 September 2022

By: Director of Communities, Economy and Transport & Chief Operating Officer

Title: Annual progress report to full Council on the County Council's progress towards net zero

Purpose: To consider the progress report.

RECOMMENDATION: Cabinet is recommended to:

(1) consider the progress report and advise on changes required.

1 Background

1.1 In October 2019 the County Council declared a climate emergency. It set a target of achieving carbon neutrality from its activities as soon as possible and in any event by 2050 and committed to reporting annually to full Council on its progress towards meeting this target. Appendices 1 and 2 of this report sets out the draft progress report, which will be presented to Full Council on 11 October 2022.

2 Supporting Information

2.1 In October 2019 the County Council agreed the following Motion, that the County Council:

(i) supports the aims and implementation of the UN Sustainable Development Goals.

(ii) recognises and declares a Climate Emergency.

(iii) will set a target of achieving carbon neutrality from its activities as soon as possible and in any event by 2050, in line with the new target for the UK agreed by Parliament in 2019.

(iv) will build upon the work we have undertaken to date, will commit resources where possible and will align our policies to address the Climate Emergency.

(v) will set out a clear plan of action to reduce our carbon emissions.

(vi) will report annually at the May County Council Meeting on its progress towards the target.

(vii) will investigate all possible sources of external funding and match funding to support this commitment, as well as writing to central government with respect to the emergency to request funding to implement swift appropriate actions.

(viii) will use our Environment Strategy to provide a strong unified voice in lobbying for support to address this emergency, sharing best practice across East Sussex and more widely through other partners.

2.2 In line with the commitment made in the Motion agreed in 2019, the County Council developed a Climate Emergency Action Plan to set out how the organisation would go about

reducing its carbon emissions. The Action Plan was agreed by Cabinet in June 2020 and built on work undertaken since the first Carbon Management Plan was put in place in 2009. The Action Plan covers 2020-22 and set out the scale of the carbon footprint, described the carbon budget that the Council will aim to keep within, and included a set of actions. In 2021-22 Cabinet agreed a further £9.867m to support the work to enable the Council to become carbon neutral.

2.3 An updated corporate climate emergency plan is being developed to cover 2023-25. It will be brought to Cabinet in January 2023, once a working group of the Scrutiny Place Committee has reviewed and commented on the draft plan during September to November, and to Full Council in February 2023 for discussion and approval. This progress report covers the current climate emergency plan covering 2020-22 and not the draft action plan for 2023-25.

3. Assessing the Council's carbon emissions

3.1 A clear understanding of the carbon emissions generated by our activities is a key foundation for working towards carbon neutrality. The corporate Action Plan set out an initial assessment of the carbon emissions from the Council's activities using the Greenhouse Gas (GHG) Protocol, an accepted global standard for measuring and reporting on an organisation's GHG emissions. The Protocol divides GHG emissions into three categories, referred to as Scope 1, 2 and 3. Together, these represent the total GHG emissions related to an organisation and its activities. Each scope covers the following emissions:

- Scope 1 – emissions from the combustion of gas, oil, petrol, diesel, coal, or wood. For the Council this covers buildings and vehicles where the Council is responsible for paying for the fuel
- Scope 2 – emissions from the electricity purchased by the Council
- Scope 3 – emissions that result from all other activities of the Council. There are 15 different scope 3 categories defined in the Protocol, some of which do not apply to a local authority (e.g. emissions from manufactured goods). The categories that do apply include emissions from business travel, water usage, waste, procurement and staff commuting. In other words, the County Council's scope 3 emissions mostly comprise the scope 1 and 2 emissions of other organisations (e.g. contractors).

3.2 The County Council has measured scope 1, 2 and some scope 3 emissions since 2008-9. Data in relation to scope 1 and 2 is of higher quality whereas data in relation to most scope 3 emissions is much more varying in detail and quality. The current Action Plan highlights that scope 3 emissions are by far the largest part of the Council's estimated carbon footprint, notably through the supply chain i.e. the goods, works and services that are purchased by the County Council in order to deliver its functions. This is typical for a local authority, as most of the Council's revenue and capital budgets are used to procure goods, services and works from third parties. For an upper tier authority this includes major services such as highways maintenance, waste disposal, and education, as well as social care provision commissioned from a myriad of relatively small independent providers. The Action Plan also highlights that the largest proportion of scope 1 and 2 emissions is from schools. Overall, this means that the majority of carbon emissions generated by the Council's activities are from sources over which the Council has influence but limited direct control.

3.3 The County Council therefore has a large and complex carbon footprint. Further work is required to quantify most scope 3 emissions before they can begin to be integrated reliably into the Council's carbon footprint and modelled for future emission reductions, notably from procurement. Consequently, the current Action Plan focusses primarily on reducing scope 1 and 2 emissions first, for example carbon emissions from buildings, and investing in more renewable energy. This is a similar approach to that adopted by most local authorities.

4 Working towards carbon neutrality from our activities

4.1 The approach adopted in the Action Plan is that, in order to make its fair contribution to reducing county-wide emissions, the County Council will aim to cut its own emissions by half in the 5 years between 2020-25. This is based on a recognised methodology developed by the UK's Tyndall Centre for Climate Change Research for calculating the carbon budget by local authority area. A carbon budget represents the total quantity of greenhouse gases which can be released to the atmosphere if we are to contain temperature rises to a given level – this can be calculated globally and then broken down into national and sub-national budgets. The Tyndall model, based on current scientific understanding, indicates that to stay within a budget based on a rise of no more than 1.5 degrees centigrade above pre-industrial levels (as set out in the UN Paris Agreement on Climate Change) requires cutting emissions from East Sussex by half roughly every 5 years.

4.2 This science-based reduction target is what the County Council is working towards, rather than a fixed end date by which it will become carbon neutral. This approach is in line with advice to Councils from the Local Government Association, which has stated that: *“There is no science to picking an end year where emissions are zero. Setting a target year by which emissions will be zero can be symbolically important. However, what counts is the trajectory of the commitments to carbon reduction between now and the target zero emissions year. This defines the actual level of emissions reduction being promised over the budget period. This is what matters to climate change”*.

4.3 Cutting emissions by half every 5 years is extremely challenging. The County Council has had a significant programme of activity in place to cut carbon emissions for a number of years. It has reduced scope 1 and 2 corporate carbon emissions by over 66% between 2008-9 and 2021-22. In 2020-21 the Council achieved a 13% reduction in its scope 1 and 2 carbon emissions, which was partly due to the effect of Covid-19 lockdowns, as fewer buildings were open and staff travelled less for business. In 2021-22 the Council achieved a 7% reduction in its scope 1 and 2 carbon emissions. This lower rate of reduction was because buildings reopened, and Covid ventilation requirements meant that the heating was on and windows were open, and business mileage increased. Appendix 1 sets out a summary of the carbon reduction measures implemented by the Council to cut its own corporate emissions as well some of the many programmes and projects that the Council has implemented to cut carbon emissions as part of the services it delivers across the county. These include, amongst others, significant programmes to address fuel poverty, to enable more walking, cycling and use of public transport, and to support local businesses to reduce their energy bills and carbon emissions.

4.4 Appendix 2 provides a summary of the status of the actions in the climate emergency plan. A number of the actions will be carried forward into the next climate emergency plan, covering 2023-25, as they are long term actions (e.g. installing electric vehicle charge points and working in partnership with other organisations).

4.5 It is likely to become more costly and complex to reduce carbon emissions over time as the ‘quick wins’ – the more cost effective and simpler measures, and those which are within the Council’s direct control - are completed. Officers have successfully bid for additional external funding to increase the County Council’s ability to deliver greater carbon reduction and are continuing to bid for further external funding. In addition, the Council has commissioned modelling work to identify the options to get to net zero and the associated net costs. This modelling will be used to inform the development of the corporate climate emergency plan for 2023-25.

4.6 In 2020-21 the Place Scrutiny Committee undertook a Scrutiny Review of Becoming a Carbon Neutral Council. The review looked at the work underway to make progress towards

net zero emissions from the Council's activities and made a number of recommendations which were accepted by Full Council. Of the 27 actions, 6 (22%) have been completed and 21 (78%) are on-going. The large number of actions that are on-going reflect that getting to net zero is a journey that, in many areas, takes time and because some actions are not within the Council's control (for instance technology changes, such as hydrogen for heating or transport).

4.7 Contracts with external providers make up the largest proportion of our carbon footprint, as part of Scope 3 emissions. The Council can influence emissions from our supply chain by requiring carbon reduction targets when renewing relevant contracts, which is the approach adopted in the current highways contract. Many smaller contractors and suppliers will not have data on their emissions, or will have relatively small-scale emissions, or do not have the capital funding available to make the significant changes required to reduce their emissions. Consequently, the Council is focusing on contractors and suppliers where the likely scale of their emissions and the ability of the Council to influence these emissions are greatest, for instance where the Council is a major client.

4.8 The Council is working closely with its Orbis partners to share costs and expertise in driving down carbon reduction from its supply chain. This includes working with Surrey County Council to trial a database that will enable suppliers to measure their baseline emissions and set a carbon reduction target, and commissioning specialist consultancy support to assess the potential cost of decarbonising the supply chain. These actions will enable carbon emissions from procurement to be more complete and reliable, which will enable the Council to then set a base year against which to measure progress in cutting carbon, potentially on a sector-by-sector basis.

4.9 Progress towards becoming a carbon neutral council is overseen by the Climate Emergency Board, which has senior representatives from every department and is co-chaired by the Chief Operating Officer and the Director for Communities, Economy and Transport. Reporting on progress is made quarterly to Officers and annually to Full Council and is set out on the Council's website.

5 Conclusion and Reasons for Recommendations

5.1 The Council has recognised the severity of the climate crisis by declaring a climate emergency, setting a clear science-based target and committing an additional £9.9m of funding to cutting corporate carbon emissions. The scale of the Council's functions and the diversity of providers the Council works with makes this a complex and substantial task. Significant work has already been undertaken to reduce emissions and will continue to be undertaken. This progress report sets out what has been achieved to date.

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LOCAL MEMBERS: ALL

BACKGROUND PAPERS: None

Appendix 1 – The Council’s progress in becoming carbon neutral

Between 2008-9 and 2021-22 the Council cut its scope 1 and 2 emissions by over 66% (see figure 1). This is due to a combination of factors, including national decarbonisation of the electricity grid - as coal has largely been replaced by gas and renewables - by investment in a number of measures that have reduced emissions, and by a reduction in the size of the corporate estate (eg. through the conversion of some schools to Academy status).

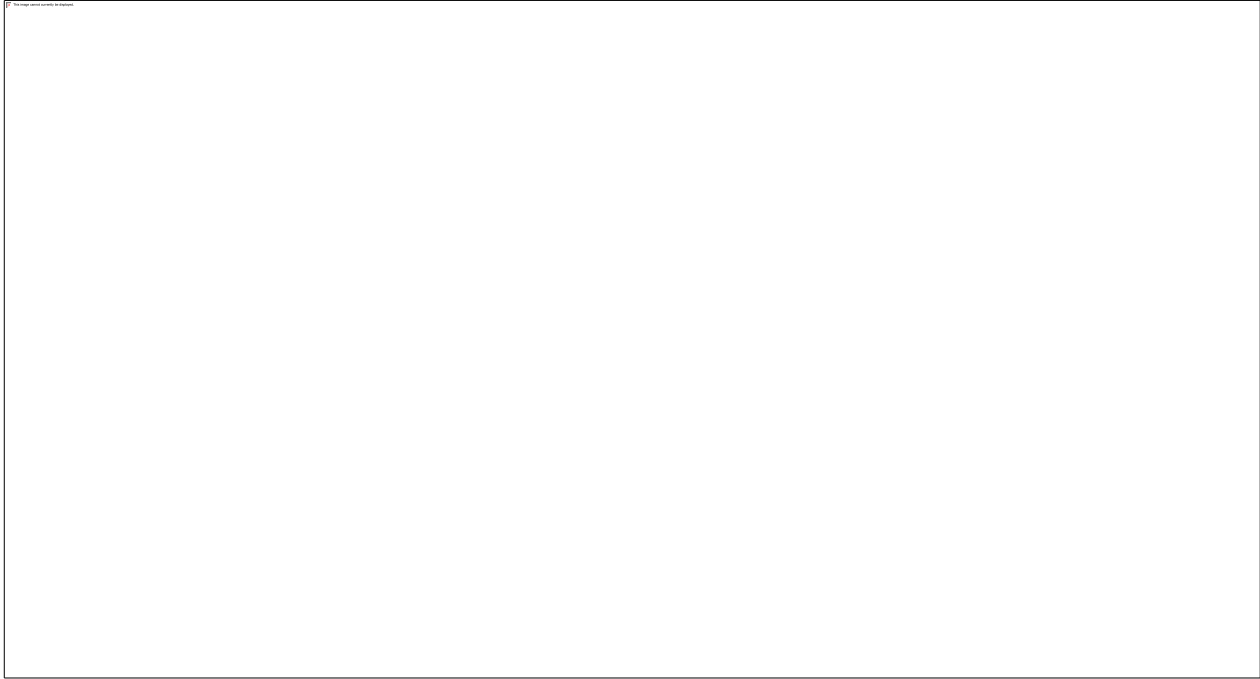


Figure 1. The Council’s carbon reduction between 2008-9 and 2021-22.

The following are some of the measures that the Council has delivered:

1. Installed a number of energy efficiency measures in ESCC buildings and street lighting using part of the additional £9.9m budget agreed by Cabinet and using the £1.025m Salix invest-to-save fund and County Council maintenance budgets. The Salix fund, for example, has been used with nearly 300 projects worth £3.8m, generating annual savings of over £850,000.
2. Installed 1.4MW of renewable energy generation on buildings, with 26 on schools and 12 non-school sites which, in addition to reducing energy bills, generated a total income from the Renewable Heat Incentive and Feed In-Tariff of about £8,000 in 2021-22.
3. Changed the way we work. For example, our post Covid agile working programme enables staff to work flexibly from a range of sites, including home, and so enables a reduced number, and more efficient use of, buildings and enables a reduction in travel through staff and Members being able to be connected whilst working remotely.
4. Made our connectivity more energy efficient, for instance through moving to the Surrey Data Centre.
5. Encouraged behaviour change, for example by providing the ICT equipment, tools and support to enable Members and staff to work digitally and providing discounted bus travel and season-ticket loans to encourage the use of public transport.

6. Changed our approach to procurement to enable more goods and services to be delivered by local businesses, which reduces the transport impact of our supply chain.

7. Purchased electricity for buildings and street lighting that is supplied from renewable sources, independently certified through the Renewable Energy Guarantees of Origin scheme (REGOs). This started from 1 April 2020 and will continue, subject to availability and price. This applies to corporate sites and has been offered to schools. The purchase of green electricity is not counted towards the Council's carbon reduction target as this is not considered to be good practice as it does not directly increase the investment in renewable energy generation.

The Council has also delivered a number of programmes and projects that have reduced carbon emissions across the county, often in partnership with others. These include:

- The fuel poverty programme, overseen by the East Sussex Energy Partnership, which has coordinated a programme worth £3.6m over the last few years to reduce fuel poverty. This has included hundreds of targeted interventions to improve heating and insulation measures and connecting fuel poor households to the gas network. Successful bids, notably to the national Green Homes Grant fund, have secured an additional £4.2m in 2020-23, which will enable the scaling up of low carbon retrofit to those in fuel poverty.
- Investing over £20m since 2014 to deliver improvements to walking and cycling infrastructure.
- Securing over £40m to improve bus services in the county.
- Working with public sector partners to develop a co-ordinated plan for the roll-out of electric vehicle infrastructure in the county.
- Delivering approximately £500,000 of grants to local businesses since 2018 to implement energy efficiency measures, which cut their energy costs and carbon emissions.
- Supported over 250 households over the last couple of years to install solar PV panels on their properties through the Sussex Solar Together programme.

The corporate climate emergency plan for 2020-22 set out a 5 year carbon budget for scope 1 and 2 emissions covering the period 2020-25. Table 1 provides a summary of progress to date in cutting carbon emissions within this first 5 year carbon budget and figure 2 provides a summary of progress to date against the overall science-based target to get to net zero.

Table 1. Scope 1 and 2 target and actual emissions (2019-20 to 2024-25)

Year	Target footprint (CO ₂ e)	Actual emissions (CO ₂ e)	Actual reduction (%)	Cumulative reduction (%)
2019-20	Baseline year	12,461	n/a	n/a
2020-21	10,841	10,791	-13%	n/a
2021-22	9,432	9,991	-7%	-20%
2022-23	8,206			
2023-24	7,139			
2024-25	6,211			
Totals:	n/a			

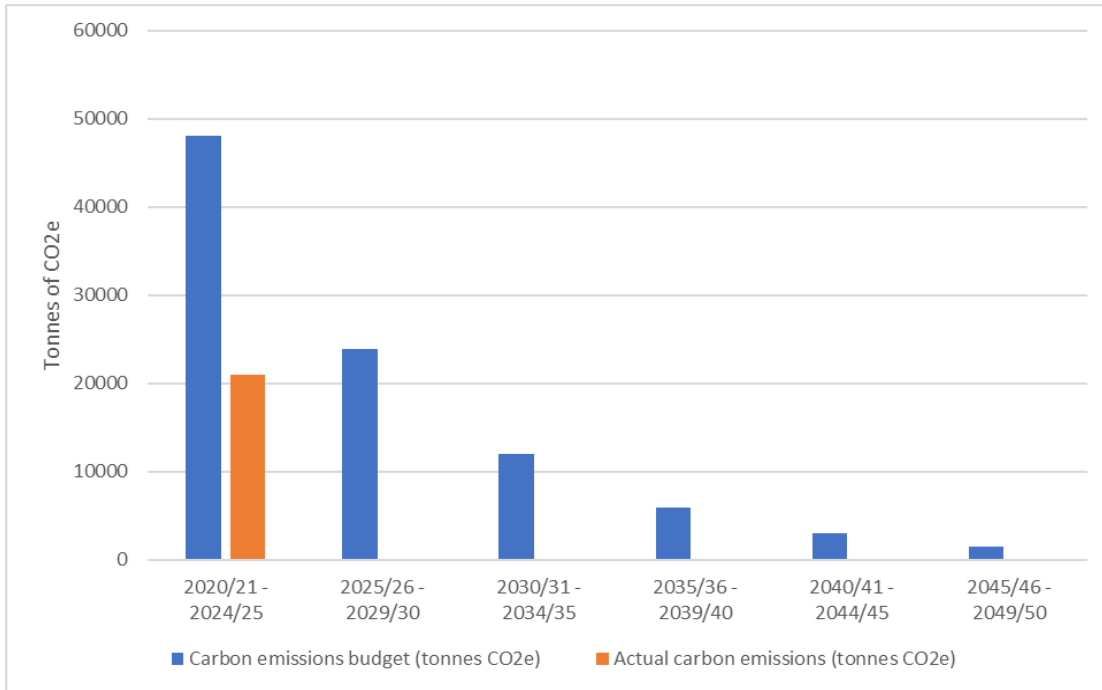


Figure 2. Five year carbon budgets, and actual scope 1 & 2 emissions to date (2020-50).

Appendix 2 – Progress against the Action Plan for 2020-22

Action	Description of action	Status (red/amber/green)
Framework (governance, leadership, communications, data, policy & partnership working):		
Set up robust governance	Establish a senior Officer board to oversee delivery of this plan.	Completed
Develop a communications plan	Set out clear messages and comms routes, Member and staff engagement, & integrate public engagement via the Environment Strategy	An initial comms plan was completed in 2021, which included carbon literacy training. An updated comms plan will be included with the new climate emergency plan for 2023-25.
Improve greenhouse gas baseline data	<p>1) Update ESCC's GHG data management plan and improve transparency by explaining the methods, data, processes, assumptions, estimates, changes and quality checks used.</p> <p>2) Obtain more accurate GHG data for staff commuting, priority suppliers and renewables already installed at schools.</p>	<p>1) Completed</p> <p>2a) A staff survey in autumn 2022 will provide data on staff commuting.</p> <p>2b) Data have been obtained from our highways and waste contractors. Data will be required from key suppliers during procurement.</p> <p>2c) An estimate of renewables installed at schools has been completed.</p>
Review ESCC's policies, strategies, programmes, projects and practice to align with the climate emergency	Policy should provide clear and stable direction and a simple set of rules that supports corporate climate change mitigation and adaptation	Options to take climate change into account in decision-making will be considered during 2022-23, learning from others.
Work in partnership with other organisations to share resources & good practice	<p>1) Continue to work with all Sussex local authorities on developing organisational and area-wide carbon plans.</p> <p>2) Work with SE7 partners on the same.</p>	<p>1) An East Sussex wide climate emergency road map has been produced with partners.</p> <p>2) Good practice is shared with a number of organisations and partnerships (eg. the LGA, ADEPT, East Sussex District and Borough Councils).</p>

Action	Description of action	Status (red/amber/green)
Framework (governance, leadership, communications, data, policy & partnership working):		
Produce an annual progress report	Report to County Council on progress and identify additional resources that may be required	Completed
Emissions from buildings:		
Behaviour change programme – corporate	Develop an engagement plan to create an energy-aware culture amongst staff and Members & develop a network of climate emergency champions to accelerate change	A communications plan was developed in 2021, which has included delivering a number of carbon literacy training sessions, and an updated plan will be included in the Council's climate emergency plan for 2023-25
Behaviour change programme - schools	Update & disseminate the energy saving guide for schools.	Completed
Planned Maintenance & Capital programmes	<ol style="list-style-type: none"> 1) Establish a robust process for identifying, prioritising and delivering projects. 2) Prepare an annual programme of energy efficiency projects linked to the maintenance and capital programmes. 3) deliver a pipeline of whole-building energy efficiency projects. 	<ol style="list-style-type: none"> 1) Completed 2) a number of energy efficiency projects were delivered in 2020-21 and 2021-22, and this year the plan is to complete 10 LED lighting projects, 10 solar PV projects and 1 heat decarbonisation project. 3) a prioritised list of whole-building heat decarbonisation projects has been developed and external funding is being assessed to support delivery.
Install low carbon heating in buildings to replace gas boilers	Review boiler replacement programme and assess options for replacing with heat pumps	Completed
New build	Ensure the 2008 ESCC sustainable buildings policy is being implemented and report on its effectiveness	The 2016 Sustainable Buildings Policy will be reviewed during 2022-23 in light of changes to the Building Regs, planning policy and good practice.
Emissions from street lighting:		

Action	Description of action	Status (red/amber/green)
Framework (governance, leadership, communications, data, policy & partnership working):		
Improve energy efficiency –street lighting	1) Install energy efficient LED lights. 2) review dimming and switch-off policy.	1) Completed 2) The policy will be reviewed in 2022-23.
Emissions from transport, including commuting:		
Grey fleet review	Commission review by the Energy Savings Trust.	Completed
Develop and implement a staff travel plan	To cover both business mileage and commuting.	A survey of staff travel patterns will be carried out in autumn 2022 to help a Ladder to Leadership team to develop a staff travel plan.
Install EV charge points	Identify where to locate which types & number of chargers, and delivery mechanism, for staff & visitor use	Charge points are currently planned to be installed at County Hall by Christmas and other sites will be assessed during 2022-23.
Emissions from water & waste:		
Reduce waste	1) Consider requiring all sites to sign up to the same waste contract. 2) Set up food waste collections from kitchen areas.	1) Completed 2) Food waste from the County Hall canteen is being composted.
Reduce water usage	Install water efficient fittings in all appropriate toilets, urinals, taps & showers	Water efficiency improvements are delivered as part of building maintenance works.
Emissions from procurement:		
Engage priority suppliers	1) obtain scope 1 & 2 GHG footprints of transport & construction contracts above >£1m p.a. 2) embed low carbon outcomes into new contracts.	1) Completed 2) the highways re-procurement includes a stringent carbon reduction target. A list of procurements due over the next 2-3 years has been drawn up where opportunities to require carbon reduction will be explored.
Offer practical support to all other suppliers	Provide energy audits and grants to local SMEs in the supply chain (e.g. via LoCASE) and eco-driver training for transport providers	The LoCASE offer has been promoted, and will continue to be promoted, to local suppliers.

Action	Description of action	Status (red/amber/green)
Framework (governance, leadership, communications, data, policy & partnership working):		
Renewables:		
Improve data on school installs	Obtain data on renewables installed at schools	Completed
Identify opportunities to install PV and other renewables on buildings & land	Commission viability assessment of renewables on buildings & land	A programme of solar PV schemes has been on-going for a few years (eg. at County Hall). A further 10 schemes are due to be installed during 2022-23.
Off-setting:		
Explore carbon off-setting	Work with the Sussex Local Nature Partnership to explore options and costs for off-setting with natural capital benefits	The Council is leading a SELEP-funded project to understand the science, the availability of carbon offsets, the costs and the risks. The project will complete in 2022-23 and recommendations made to the Council during Q2 of 2023-24.
Grid flexibility:		
Assist integration of low carbon technologies into the national grid	Review ESCC estate for opportunities to provide Grid Flexibility services such as Demand Side Response and Battery Storage	The Council has installed battery storage with some of its solar PV schemes and will continue to do so where appropriate.