



Surrey County Council's Net Zero 2030 Progress Report 2023 - 2024

November 2024

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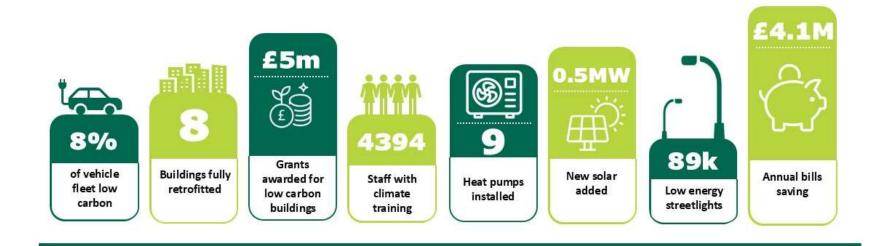
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Summary Report

This is the annual progress assessment for Surrey County Council's 2030 net-zero carbon¹ target for the 2023/24 financial year, including the steps being taken to tackle indirect carbon emissions² and to respond to current and future climate risks such as extreme weather resulting from increasing global average temperatures.

The Council's 2030 net-zero target remains on track, achieving a carbon emissions reduction of 38% in 2023/24 compared to the interim target of a 40-69% reduction by 2025/6.

Figure 1: Infographic showing the cumulative benefits brought about by the 2030 Net Zero Programme



¹ Greener futures climate change delivery plan 2021 to 2025 - Surrey County Council

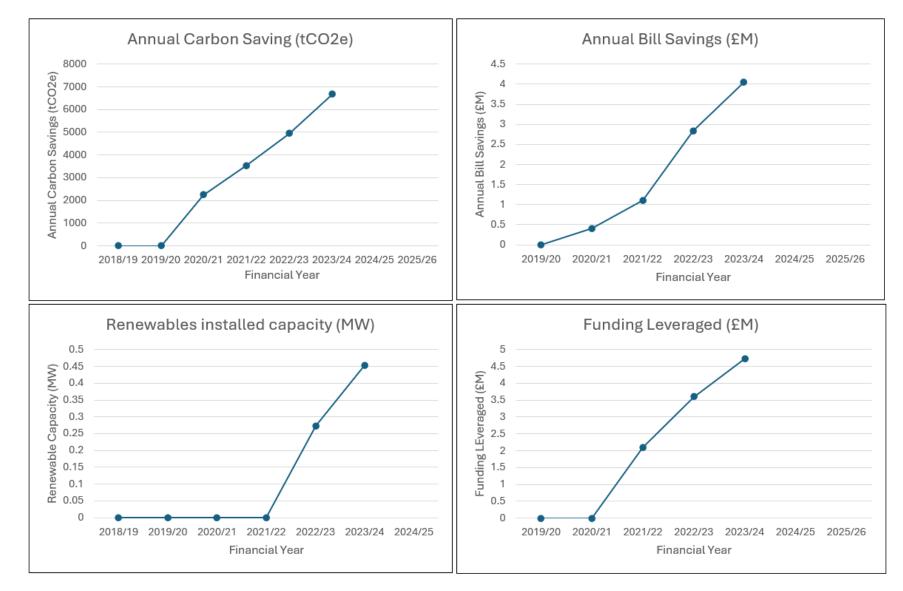
² Emissions resulting from the council's actions but owned by another organisation.

In addition to achieving carbon savings of 6,700 tonnes CO₂e³ per year, the programme also brought about bill savings of over £4m per year and added 0.5MW solar energy generation capacity onto the estate. This work has been part funded by £4.5M of grants.

The graphs below show the cumulative benefits that the SCC 2030 Corporate Programme has delivered for the Council.

³ Carbon dioxide equivalent gases; a common unit to measure multiple greenhouse gases in the equivalent amount of carbon.

Figure 2: Summary of cumulative benefits



These achievements are mainly due to the success of the streetlighting LED replacement programme which has delivered a 74% reduction in streetlighting carbon emissions. Other successes include the continuation of the building retrofit programme, which has treated 6 buildings so far and has a further pipeline of projects, using grants to part-fund the works. Significant progress has been made in reducing indirect emissions through the implementation of the Environmentally Sustainable Procurement Policy and other activities to embed the Enabling a Greener Future objective into all service areas across the Council.

Despite delivering significant benefits, the progress of individual projects has been mixed, with many needing to scale up in order to reduce the council's carbon emissions by 2030. Table 1 below shows progress against key decarbonisation projects.

Action area	What needs to happen by 2030	Progress needed by 2025/6	Progress to March 2024
Streetlighting LED	100%	100%	100%
Replacement	LED streetlights	LED streetlights	LED streetlights
Council buildings	191	36	8
and renewables	Buildings are within the target (may be revised to align with reduction of corporate estate)	Buildings retrofitted	Buildings retrofitted

Table 1: Table showing progress of key projects affecting direct emissions

Fleet	487	196 ⁴	39
decarbonisation and	Low carbon vehicles	Low carbon vehicles	Low carbon vehicles
Active travel			

Although not subject to the 2030 net-zero target⁵, actions are also being taken to reduce the Council's indirect emissions and embed the Enabling a Greener Future objective into all service areas. The table below shows progress of some of the key projects.

Table 2: Progress of key projects affecting indirect emissions

Action area	What needs to happen by 2030	Progress needed by 2025/6	Progress to March 2024
Schools and leased	Target to be defined (this will	Target to be defined	1
buildings	depend on the decisions made by		School entered a Solar Power
	SCC regarding the ambition and investment for schools'		Purchase Agreement ⁶ with SCC
	decarbonisation and approach to leased buildings.		5 schools were retrofitted with heat pumps and insulation
Procurements	£900M	£750M	Not known ⁷
	Council spend compliant with	Council spend compliant with	Council spend compliant with
	Environmentally Sustainable	Environmentally Sustainable	Environmentally Sustainable
	Procurement Policy	Procurement Policy	Procurement Policy

⁴ Subject to the development of the fleet decarbonisation policies and programme

⁵ The 2030 target applies only to our direct scope 1 and 2 emissions.

⁶ A solar Power Purchase Agreement (PPA) is a contractual agreement that enables SCC to invest, own and maintain solar panels on a school or leased building and sell the energy to the building occupier, recouping the investment and potentially generating a profit. ⁷ It is currently very difficult to extrapolate the value of contracts from which the Environmentally Sustainable Procurement Policy has been applied.

Staff	10,127	5000 ⁸	4394
	Staff taken climate change training	Staff taken climate change training	Staff taken climate change training

Reflecting on the key risks and challenges, the following list are the key areas of focus for 2024/25:

- (1)**Delivery of the Council's rooftop solar:** with increasing barriers to delivering ground-mounted solar PV, implementing solar PV on rooftops across the council's estate is essential to reduce exposure to high energy prices, pay back borrowing and offset carbon emissions for areas that are technically unfeasible or prohibitively expensive to decarbonise. **Focus in 2024/25**: officers are developing a programme of solar rooftop schemes and will continue to explore potential opportunities for ground mounted solar.
- (2)Decarbonising the Council's fleet: delays in installing EV charging infrastructure have slowed our ambitions to decarbonise the council's 487 vehicles. The Council's policies and Staff Travel Plan have not yet been updated to encourage reduced travel emissions in line with our targets. Focus in 2024/25: to accelerate installation of EV charging points for key council sites, EV infrastructure will now be considered alongside the estate decarbonisation programme. A new approach to the way the Council purchases energy will be required to access lower night-time tariffs.

⁸ Subject to a decision to make climate change training mandatory

- (3)**Further decarbonisation of estate:** the current pipeline of retrofit projects includes buildings which are the most cost effective to decarbonise due to end-of-life heating systems. Officers are continuing to apply for funding for eligible buildings. **Focus in 2024/25**: Officers will collaborate with FM provider Macro to create a costed decarbonisation road map for the corporate estate to 2030. This will build upon the results of the lifecycle condition surveys recently conducted as well as the emerging Asset Strategy and Climate Resilience Strategy.
- (4)**Offsetting, staff behaviour and indirect emissions:** To ensure that the Council reduces its emissions as far as possible before considering carbon offsetting, action to date has focused primarily on the reduction of direct emissions; however, it is important to start considering the offsetting that will be required, and to continue other actions that can drive the reduction of indirect emissions. Focus in 2024/25: We will continue to provide training and policies for Council staff to deliver low carbon and environmental outcomes alongside key service provision, targeting the areas such as financial decision-making and infrastructure which can have the most impact. Key areas such as offsetting and indirect emissions will be important areas of focus in the next Greener Futures Climate Change Delivery Plan 2026-2031.

1. Introduction

This report marks the third annual progress assessment for Surrey County Council's 2030 net-zero target, established in response to the Council's Climate Emergency declaration in 2019 and the

launch of its first Greener Futures Climate Change Delivery Plan 2021-2025. The report reviews the Council's progress toward achieving net-zero carbon emissions by 2030, focusing on the decarbonisation of streetlighting, buildings, and fleet operations. Additionally, it outlines efforts to reduce indirect carbon emissions from procured goods and services, leased buildings, and staff activities, as well as initiatives to adapt to climate risks associated with rising global temperatures, such as extreme weather events.

The assessment provides a comprehensive view of the Council's trajectory toward its 2030 goals, evaluates individual project progress, and identifies key challenges and risks. These insights inform the recommended areas of focus for the upcoming year.

Although the report primarily covers progress during the 2023/24 financial year, it also evaluates the cumulative impact and benefits of the broader net-zero 2030 programme. Looking ahead, in 2025, Council officers will develop a costed decarbonisation roadmap for achieving net-zero within Surrey County Council's estate by 2030. This roadmap will be incorporated into the next Greener Futures Climate Change Delivery Plan (2026-2031).

2. Progress against the council's net-zero 2030 target

Progress: On track, with risk of slowing down in future if some projects do not scale up.

The Council is set out to achieve a reduction in carbon emissions of between 40-69% by 2025-6⁹. With emissions in 2023/4 of 10,956 tonnes, a 38% decrease has been achieved so far, which is broadly keeping on track to meet the council's net-zero target by 2030.

Figure 2 is a bar chart showing the reduction in the Council's carbon emissions each year since 2019/20. The shaded area between

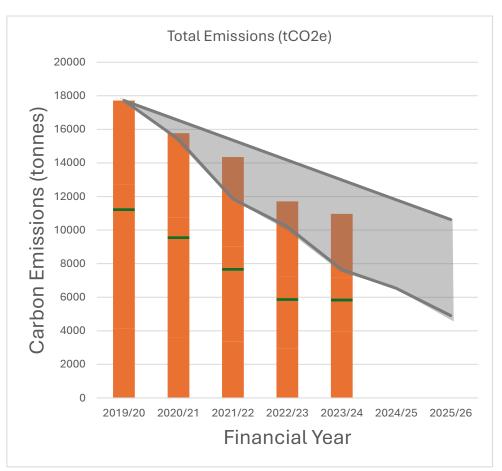


Figure 3: Graph showing SCC's emissions

⁹ Greener futures climate change delivery plan 2021 to 2025 - Surrey County Council

the two grey lines on the graph represents the targeted range of emissions reduction that the Council must stay within to achieve net-zero by 2030.

3. Progress of key projects

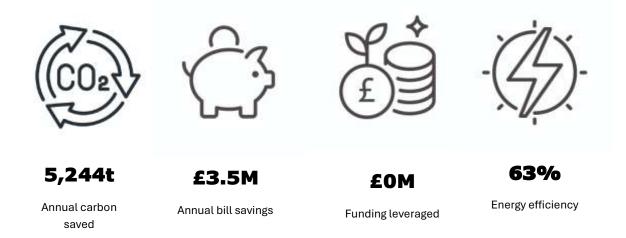
3.1 Streetlighting

Streetlighting was responsible for 16% of the Councils direct carbon emissions in 2023/24.

Table 2: Progress and next steps of Streetlighting

Project	Progress in 2021/22	Progress in 2022/23	Progress in 2023/24	Total so far	Ambition by 2025/26	Next steps
Streetlight	71%	93%	~100%	~100%	100%	A county wide network has been installed on all
LED Conversion	Complete	Complete	Complete	Complete	Complete	streetlamps to allow system improvements, street monitoring and to enable future connectivity. There is
						scope to further improve efficiencies across the network by moving from fixed to adaptive dimming profiles based on real-time traffic information.
						moving from fixed to adaptive dimming profiles bas

Progress in 2023/24: Replacing around 89,000 bulbs, the streetlighting LED replacement programme is essentially complete and uses 100% renewable electricity.



Impact: This is a highly effective programme with a 74% reduction in streetlighting emissions achieved by 2023/24, and £3.5m of annual financial savings.

3.2 Council's estate and renewables

Council owned and operated buildings made up 70% of the Council's direct carbon emissions in 2023/24. Around half of these emissions are from gas consumption and another half is from electricity use.

Table 3: Progress and next steps of estate retrofit

Project	Progress in 2021/22	Progress in 2022/23	Progress in 2023/24	Total so far	Ambition by 2025/26 (accumulated)	Next steps
Building Retrofit	-	5	3	8	36	Complete retrofit works in 6 SCC corporate
(heat and insulation)		Buildings	Buildings	Buildings	Buildings	sites and 3 SCC schools by end of 24/25.
						Initiate the delivery of the next phase of the
						retrofit programme, which currently includes 14
						corporate sites to be decarbonised between
						2024 and 2026.
						Seek to obtain further government grant
						funding for corporate retrofits.
						Develop a detailed roadmap for
						decarbonisation of the SCC estate by 2030 to
						focus in addition on climate resilience.
Installation of	-	5	2	7	40	6 solar rooftops to be completed in 24/25 in
Solar PV		Buildings	Buildings	Buildings	Buildings	buildings that have been recently retrofitted with heat pumps.
						An additional programme for the installation of
						1.4MWp of solar capacity at 27 buildings to be
						considered by Cabinet in January 2025.
						Installation intended in 25/26. Estimated to

						save £103,000 in electricity bills per year and to save 2255 tons of CO2e in their lifetime.
Implementation of the SCC Policy for "Achieving Greener Futures in Building and Infrastructure Projects"	-	-	Policy developed and trialled Heat pumps start replacing most end- of-life boilers		Low carbon standards applied to all new builds	Expand the trial to include all new buildings
Grid Edge	-	-	3 Buildings installed	3 installed	4 installed	There are plans to introduce Grid Edge to one more site for a 2-year programme of energy use optimisation.

Progress in 2023/24: whole building retrofit completed at three SCC buildings in 23/24, and others continue their installation phase in 24/25. Not all the anticipated projects went ahead due to delivery challenges and uncertainty on the future of some buildings. A significant amount of Government grant funding for 14 buildings was obtained for the next phase of corporate retrofits and these schemes are currently being developed. Three Grid Edge building management systems were installed for

increased energy use efficiency. Work was started to contribute towards a decarbonisation road map for the 2030 target. This included the production of lifecycle condition surveys of all buildings in the estate and the development of carbon reduction strategies for the highest emitter buildings.

Large-scale ground-mounted solar projects were stalled mainly due to challenges with the capacity of the electricity grid, however officers continued to explore options to overcome those challenges, such as private wires or purchasing existing solar farms. There was an increased focus on solar rooftops and carports at the SCC estate, with one solar rooftop and one solar carport being installed in 23/24, and with a large pipeline of 33 buildings being considered for solar in 24/25 and 25/26.

The SCC Policy for "Achieving Greener Futures in Building and Infrastructure Projects" was developed. The six buildings trialling the policy are set to avoid 67 tonnes of CO2e and avoid around £98,000 of additional energy bills, in addition to other co-benefits like preventing fuel poverty amongst residents of Supported Independent Living Developments.



664t



Annual bill savings

£0.72M





£2.6M

Funding leveraged

Renewable Energy Capacity

0.2MW

16

Annual carbon saved

Impact: The SCC estate decarbonisation programme has delivered significant on-going carbon savings and bill savings so far, but the rate of building retrofit and solar PV installations is not yet enough to achieve a net-zero estate by 2030 without significant carbon offsetting. To compensate for the challenges to delivering large ground-mounted solar arrays, a re-focus on delivering rooftop solar projects at scale is needed.

3.3 Fleet and Active Travel

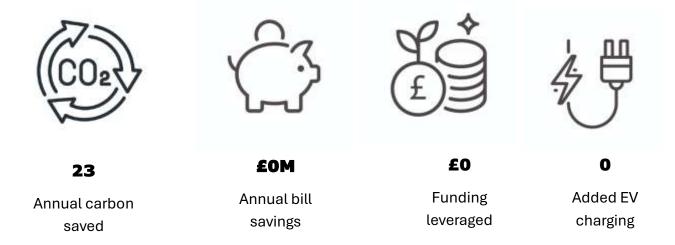
Council-owned fleet makes up 12% of direct carbon emissions.

Table 4: Progress and next steps of fleet decarbonisation

Project	Progress in 2021/22	Progress in 2022/23	Progress in 2023/24	Total so far	Ambition by 2025/26	Next steps
Fleet replacement	0 Low carbon vehicles	38 Low carbon vehicles	1 Low carbon vehicles	39 Low carbon vehicles	196 Low carbon vehicles in fleet	Implementation of fleet management and decarbonisation policies are being prioritised, without which further progress on infrastructure and fleet decarbonisation cannot be made.
Additional EV Charge Points					Not yet established	EV Charging Point delivery to be aligned with the estate decarbonisation programme to achieve synergies.

Progress in 2023/24, the Council's fleet contained 39 hybrid vehicles. Although some key sites have EV charging points, the delivery of EV charging on the SCC Estate has been delayed due to challenges with the framework infrastructure provider, and lack of direct budget for provision for EV charging. This has directly impacted on the organisation's ability to transition to a zero-emission fleet. There is ongoing work to coordinate the fleet function corporately across the council with policies that support

and prioritise SCC's decarbonisation objectives both for the procurement and operational management of its fleet.



Impact: The key foundations needed for rapid fleet decarbonisation are not yet in place and plans to improve cycling facilities at key offices have been made.

3.4 Schools and Leased Buildings

Schools and leased buildings are not subject to the Council's net-zero 2030 target, but carbon emissions from these buildings are likely to exceed emissions from the Council's main estate and the Council can play an influencing role. The targets for decarbonisation of these sites have not been established yet. There are some retrofit projects for schools being delivered and to be completed in 24/25, however the programme is now paused for any new projects until there is further clarity on the ambition and level of investment for schools' decarbonisation. There is scope for SCC to invest on further solar projects at schools, offering a Power Purchase Agreement which could result in energy bill savings for the school and income generation for SCC; however, this is dependent on SCC's decisions regarding prioritisation of investments for the next financial years.

Other buildings owned by SCC but leased to third parties will be considered for energy efficiency improvements in order to meet the requirements of the Minimum Energy Efficiency Standards regulations by 2028.

Table 5: Progress and next steps of leased building decarbonisation

Project ir	n in	rogress Progress n in 022/23 2023/24	Total so far	Ambition by 2025/26	Next steps
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Retrofit – heat	-	-	5 schools	5 schools	Not yet	SCC secured government grant funding to
decarbonisation			retrofitted	retrofitted	established	decarbonise 3 schools in 24/25.
Retrofit – Solar	-	-	1	1	Not yet	Some schools continue under consideration
PV			achaol	achaol	established	for a solar Power Purchase Agreement;
			school	school		however, it is unclear if these projects will go
			retrofitted	retrofitted		
						ahead.

Progress: In 2023/24, 5 schools were retrofitted with heat pumps and insulation measures (part funded by a government grant), and funding was obtained to retrofit a further 3 schools in 24/25. Solar PV was installed at one school through a successful solar rooftop Power Purchase Agreement pilot, and interest was demonstrated from many other schools and academies to access this opportunity should SCC decide to expand it.



26t

Annual carbon saved



£0.01M

Annual bill savings



£2.1M

Funding leveraged



62MW

Renewables

Impact: Depending on the decision made by SCC regarding the prioritisation of investments for schools and leased buildings, there is scope to expand the solar and heat decarbonisation schemes to a wider set of schools and leased buildings, and further influence the setting of targets and actions plans to reduce their emissions.

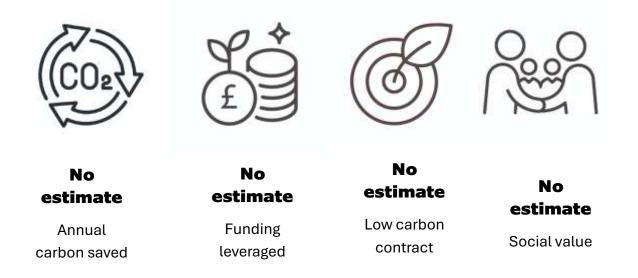
3.5 Procurements

Procured services do not fall within the council's net-zero 2030 target, however these services are responsible for a large proportion of the SCC's indirect carbon emissions, expected to be in the order of 400,000 tonnes. Therefore, the Council has an influence over these emissions through its procurements.

Project	Progress in 2021/22	Progress in 2022/23	Progress in 2023/24	Total so far	Ambition by 2025/26	Next steps
Uploading	-	-	-	No	£750M	Continue to implement the Environmentally Sustainable
suppliers				estimate	Council	Procurement policy and improve carbon measurement through
to use					contracts	uploading suppliers to use Climate Essentials. Deliver minor
Climate					have	policy updates, improving internal systems to ensure the policy
Essentials					suppliers	is applied to the appropriate contracts.
tool					using the	
					Climate	
					Essentials	
					Tool	

Table 6: Progress and next steps of procurement decarbonisation

Progress: The Climate Essentials supply chain carbon tool has been procured and we are in the process of uploading our suppliers. The tool calculates the council's share of the suppliers' carbon emissions based on how much money we spend with them, which helps to improve the accuracy of the data on the council's indirect emissions. The tool also allows the suppliers to create decarbonisation plans and track their progress annually. As of August 2024, there are 155 suppliers on the system, equating to 28% of annual spend.



Impact: The Environmentally Sustainable Procurement Policy will apply to all new contracts above a threshold so will have a significant influence on emissions but will not cover all contracts. The Climate

Essentials tool allows us to more accurately measure the emissions from our procurement but does not directly reduce procurement emissions. The tool does allow suppliers to create Carbon Reduction Plans, but it does not ensure their implementation.

3.6 Staff and embedding

The actions that staff take to deliver the Enabling a Greener Future strategic objective alongside service delivery affects both direct and indirect emissions.

Table 7: Progress and next steps of staff behaviour decarbonisation

Project	Progress in 2021/22	Progress in 2022/23	Progress in 2023/24	Total so far	Ambition by 2025/26	Next steps
Green Champions	116	153	143	143	Mostly self- autonomous	The Green Champions Network is being reshaped to the Green Committee – a more independent
Staff Network	Staff	Staff	Staff	Staff	committee	and self-autonomous committee.
Carbon Literacy Training	-	137 Trained staff	194 Trained staff	194 Trained staff	All tier 1, 2 and 3 leaders trained	Carbon Literacy Training will focus on senior leaders. Once this has been achieved the programme will be extended to the next tier of management.
Olive Climate Training	-	3357 Trained staff	1027 Trained staff	4394 Trained staff	5000 Trained staff	

Embedding	-	-	-	100% departmental	Following the publication of the Surrey Climate
				business plans contain	Change Adaptation & Resilience Strategy, all
				Enabling a Greener	services will be undertaking a climate change risk
				Futures objectives	& vulnerability assessment alongside other
					requirements.

Progress: Whilst Carbon Literacy Training and the Green Champions Staff Network were paused to review their efficacy, resource was redirected to ensure that all service areas effectively incorporated Greener Futures objectives and outcomes into major processes such as Business Planning, financial decisions, scheme designs and delivery. 58 out of 214 delivery activities in 2024/25 Business Plans (which are developed in 2023/24) self-selected a contribution to Enabling a Greener Future, the second most popular strategic objective, however the vast majority were from EIG, and self-selection doesn't require a contribution to GF.



No estimate

> Annual carbon saved





Funding leveraged



No estimate

Avoided Mileage

143 Green Champions

27

Impact: It is challenging to estimate the impact of staff engagement. Many staff at all levels show signs of actively incorporating Enabling a Greener Future thinking into their service areas, but when surveyed 26% of staff are not yet confident on how get the best climate and environmental outcome.

END.