

Net Zero Carbon Council Plan 2030 —2021 Summary



Introduction

This plan outlines our approach and that of those areas that are key emitters. It is part of a set of reports that collectively report on the council's approach to Carbon Management. Those reports are:

- Annual Report for the Council's emissions, and individual Carbon Reports—outlining historic emissions and progress to date
- Net Zero Action Plans for key emitters currently produced for Corporate Properties and Street Lighting, and setting out their emissions trajectory to 2030, and how they will achieve it.
- Carbon Budget Report—the Budget Strategy Group approves an annual carbon budget and has set a budget for 2030.

Net Zero Target

On the 8th October 2019, the council committed to signed its Statement of Intent on the Climate Emergency and set a target to become:

Net Zero by 2030 from its operations.

What is 'net zero'? 'Net zero' is one of many terms, and it is necessary to ensure a clear definition is adopted to avoid confusion with other terms such as 'zero carbon' and 'carbon neutral'.

The government has defined it as: 'Net zero' means any emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.

However, in theory, an organisation could do nothing to reduce its emissions and in 2030 just 'offset' its emissions and reach 'net zero'. This is one criticism of the term. Therefore a more meaningful definition of 'net zero' needs to be set, and the Council has adopted the below:

A 'net zero' organisation will set and pursue an ambitious 1.5°C aligned science-based target for its full value-chain emissions. Any remaining hard-to-decarbonise emissions can be compensated using certified greenhouse gas removal.

This is aligned with the wider Paris Agreement ambitions, and is more specific about how the Council achieves zero carbon. It is taken from the Carbon Trust's definition.

Hierarchy of action—below is the hierarchy that is being used to prioritise action.

Firstly—**Reduce Energy Demand** by Eliminating use e.g. reduced portfolio of buildings; and Energy efficiency— e.g. low energy lighting.

Secondly—**Switch to Green Energy** through Self Generated Energy— e.g. solar PV on owned roofs; and Zero Carbon Grid Supply

After these opportunities have been exhausted, then the council will need to **offset** any remaining emissions

Scope—At the moment the emissions included in this plan are:

Street lighting – the operation of street lights on all roads managed by the Council

Corporate properties – Council offices (including some SCH offices)

Strategic Environment Contract – domestic waste and recycling collection, management of parks, verges and open spaces.

Transport – a catch all for SMBC transport—both inhouse and partners.

Achieving the target

To achieve a robust approach to net zero there will be many actions, and these will be delivered throughout the next decade. The diagram adjacent shows the progress, and the timing. These actions will be added to further reduce the dependency on offsetting.

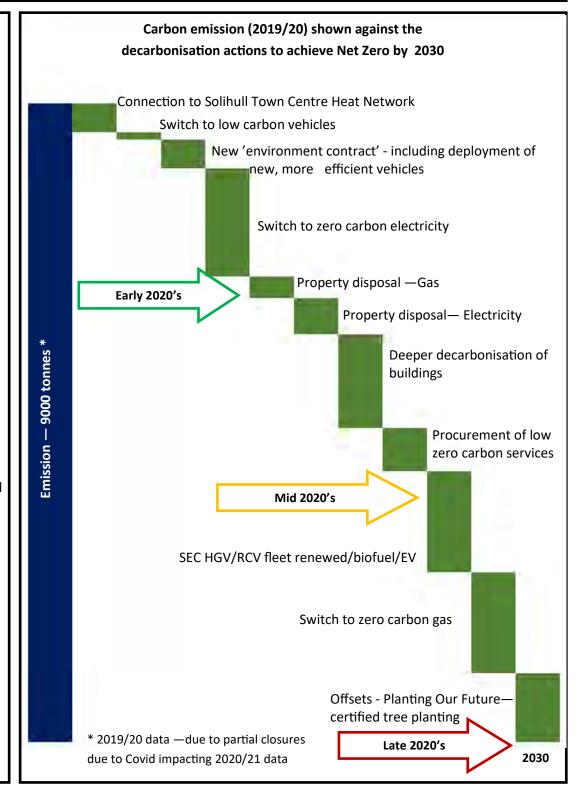
In the early 2020's the biggest impact could come from the switch to a zero carbon electricity supply for buildings. Street lighting already made the switch in 2020. There will be initial gains on the new Strategic Environment Contract and once completed the heat network in Solihull Town Centre will contribute the decarbonisation of the Council House and the Core.

There is likely to be major changes to the councils property portfolio, with a some high consuming buildings due to be disposed of. By this time work on deeper decarbonisation of buildings will be further developed.

Towards the end of the decade the availability of zero carbon gas is likely increase and can be used where a dependency of gas remains, for instance, the cremators. SEC partners will also have aligned their operations with Council targets and there will be opportunities to switch to alternative fuels (e.g. biofuels).

There may be emitters that the Council can not fully eliminate at this point, for instance if appliances can not use biogas. The Council's Planting Our Future should by 2030 have available offsets from certified tree planting.

The individual emitters are developing their actions which will add to the progress and add to the certainty of how the Council meets the net zero target.



Net Zero Carbon 2030 Action Plans for Corporate Properties, Street Lighting and SEC

Although individual to each emitter, all plans will need to address:

- Strategy—how does the service intend to reduce its emissions
- Emissions trajectory to 2030
- Actions—how the target is going to be met (e.g. low carbon projects, service changes, green tariffs, offsets).
- Wider opportunities and challenges— there are factors that are either external factors such as availability
 of alternatives (e.g. transition from diesel fuel will be mid/late decade for HGVs) or commitments (e.g.
 leisure CHP installed recently is not planned to be replaced before 2030).

The Net Zero Carbon Action Plans for Corporate Properties and Street Lighting have been developed. The SEC provider will need to work with the council to develop one for this service. Other plans are in development such as one for SMBC transport.

Key headlines from the reports

- Corporate Buildings have a started to develop the trajectory, however due to the complex nature of the portfolio it probably does not represent the true picture. Further inclusion of projects, changes in the portfolio and external factors (such as decarbonisation of the grid) is required. With regard to reducing emissions, the development of Decarbonisation Plans for large emitters has commenced. This is in addition to the carbon reduction being embedded in the Corporate Landlord approach.
- Street Lighting went zero carbon in October 2020. Assuming the service can remain on this tariff, the trajectory to 2030 is established. This tariff is sourced from 100% renewable generation, and therefore actual zero, not net zero and not requiring any offsets. Despite this they remain a significant user of electricity, and therefore remain relevant.

Other emitters

There are smaller emitters that will need to be further quantified and plans developed, such as for the schools transport service and the Strategic Highways Contract. In addition to those already identified, there are many other smaller emitters not yet routinely monitored. To begin to assess 'unknown' emitters, the Directorate Sustainability Plans can begin to risk assess and monitor these emitters. These will also be used to assess the wider emissions as a result of our partners, services and wider supply chain. In some sectors, this indirect emissions within the supply chain is significant and can account for over half the organisations emission.

Budget Strategy Group—Carbon Budget

Annually the Budget Strategy Group set s the Carbon Budget for the following year. Going forward these will be increasingly linked to both the forecast emissions, and the trajectory needed to reach net zero in as set out in the Council's ambitions.

Emissions for 2020/21 are within the budget set by the Budget Strategy Group. In addition to the Street Lighting switch having a greater impact than anticipated, the closure of the leisure centres reduced emissions, due to Covid 19 lockdown measures. The actions in this year are difficult to make sense of, as some services reduced there emissions, and other increased them due to the impact of Covid.

The 2030 budget was set in 2019 based on assumptions, as seen in the table. These targets need to be challenged against wider targets and the cost of offsetting 4,000 tonnes, that will be needed from 2030 to remain 'net zero' until the council reaches 'zero carbon'.

Service Area	Activity and assumptions that the 2030 emission is based upon	2009/10 Baseline emissions	Latest 2020/21 emissions	Budget emission 2020/21	% reduc- tion needed	2030 Target Emissions net zero carbon
		Tonnes	Tonnes		from	'Budget'*
Corporate Properties	Approximately 60% reduction in carbon emitted from grid electricity. No change in carbon emitted from grid gas	8,430	4,300	4,810	2019/20 65%	1,789
Street Lighting	Switch to zero carbon tariff—October 2020 Currently due to be zero carbon by 2021/22#	7,313	702	888	60% (zero)	0 (zero)
Strategic Environment Contract	Decarbonisation of transport, with an assumption that 'hybrid' technology will be widespread in 2030, and that services changes will also deliver reductions.	2,981	1,789	1,959	30%	1,371
Other services—	Decarbonisation of transport, with an assumption that 'hybrid' technology will be widespread in 2030.	1,200	1,200	1,200	33%	840
Remaining emissions—	Further reductions needed with any remaining emission requiring Offsetting					(4,000
Total Carbon Emissions		19,924	7,991	8,857	65%	(4,000

^{*} Abridged table from Budget Strategy Group—Carbon Report 2021—November 2021

Short Term Actions—2021 to 2023

To further deliver both the Net Zero Carbon 2030 Council Plan and the emitter action plans, the below short term actions are identified on the plan:

- Trajectories to 2030 are in place for Corporate Properties, Street Lighting and the Strategic Environment Contract These will be used to set future budgets.
- Assessment of trajectory against wider borough, national and international targets i.e. align with Paris Agreement.
- Draft Zero Carbon Energy Plan develop approach to switching to low and zero carbon energy (e.g. zero carbon tariffs, self-generation though installation of solar PV).
- Draft Offsetting Plan assessment of offsetting opportunities.
- Review strength of action and the 'risk' in the wider context
- Align reporting with national Greenhouse Gas Reporting Standards i.e. report by Scope 1, 2 and 3 ensuring the alignment with national and global standards on reporting will make reporting and comparisons easier.

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