Net Zero Emissions Action Plan

This updated version of the Council's Net Zero Emissions Action Plan evolves the first one approved by the Council's Cabinet in July 2021. It summarises the actions that have been completed and progressed, as well as new actions added. Progress since July 2021 includes:

- Completing the switchover of the Borough's 26,000 street lights to LED
- Installing solar panels and loft insulation to improve the energy efficiency of 669 lower income Swindon households, through the Local Authority Delivery scheme
- Launching an innovative group-buying scheme (Solar Together) giving over 350 Swindon homeowners easy access to installing solar panels
- Installing the Borough's first on-street electric vehicle charging points
- Progressing plans for the rollout of a Borough-wide food waste collection service to an additional 90,000 households from autumn 2023
- Purchasing new ultra low emission operations vehicles to decarbonise the Council's fleet, currently featuring 27 full electric and 7 hybrid vehicles
- Installing new battery storage and vehicle charging points at the Council's operations depot to fully harness solar energy
- Planting around 51,500 new trees across the Borough new trees across the Borough, including 18 sites in the Great Western Community Forest area
- Progressing a large scale habitat creation partnership with Wiltshire Wildlife Trust, including the Swindon Forest Meadows programme and creating new woodland, scrub and grassland at Mouldon Hill
- Offering carbon literacy training for councillors and senior officers
- Running the ongoing 'Be the Change' campaign, showcasing actions taken by individuals and organisations across Swindon in response to the climate emergency

Through the delivery of this plan, the Council will continue to use the available resources at its disposal to play its part in addressing the climate emergency, progressing its commitments to:

- 1. Achieve net zero in the Council's organisational greenhouse gas (GHG) emissions by 2030
- 2. Support residents and organisations across the Borough on the journey to achieve net zero GHG emissions by 2050, which links to the UK-wide same date target set by the UK Government

Context

Climate change is happening. There has been 1°C global warming from pre-industrial levels and we are already seeing the devastating impacts this is having on people's lives and the infrastructure and ecosystems that we all depend on. In the UK, we have seen around 1.2°C global warming from pre-industrial levels and we are seeing increasing incidents of flooding due to heavier rainfall¹. Meanwhile, 2022 was warmest year on record for the UK with a new record-high temperature of 40.3°C recorded in July 2022².

¹ UK Climate Change Committee. June 2021

https://www.theccc.org.uk/2021/06/16/uk-struggling-to-keep-pace-with-climate-change-impacts/

² Met Office, December 2022

There have been two UN Climate Change Conferences (2021 and 2022) since the Council's first Net Zero Emissions Action Plan was developed and UK climate policy has continued to evolve. Rising fossil fuel prices in 2022 as a result of Russia's invasion of Ukraine have underlined the importance of future energy security. The high level of inflation and sharp rise in energy costs in 2022/23 has highlighted the need to make our homes and buildings more energy efficient, making greater use of domestically generated renewable and clean sources of power.

What do we mean by 'net zero' greenhouse gas emissions?

- The term 'net zero' refers to achieving a position where total greenhouse gas (GHG) emissions are equal to or less than the emissions removed from the environment.
- This can be achieved by a combination of emission reduction and emission removal. When the amount of GHG emissions produced by a country, community or organisation are cancelled out by the amount removed, it will be a net zero emitter.
- GHG emissions can be removed by the natural environment (e.g. stored in soils, trees and the ocean) or by using technologies like carbon capture, usage and storage. The lower the emissions, the easier this becomes.
- The target of achieving net zero emissions has been set at a global, country³ and also increasingly at a local area and organisational level.
- In discussions on climate change, the focus is often on carbon dioxide (CO₂) the most dominant anthropogenic greenhouse gas⁴ in terms of the quantity released and total impact. This is produced by burning fossil fuels, industrial production and land use change.
- A number of other GHGs are also driving global climate change: methane, nitrous oxide, and trace gases such as the group of 'F-gases'. These have contributed a significant amount of warming to date.
- The term "carbon" can be confusing as it is often used as shorthand to refer interchangeably to either CO₂ or GHGs in general (although not all GHGs contain carbon). For clarity, this Action Plan refers to "GHG emissions", covering all greenhouse gases.

International context

- Globally, greenhouse gas emissions have grown by 53% from 1990 to 2019 and are still climbing⁵.
- Energy consumption is by far the biggest source of human-caused greenhouse gas emissions, responsible for a 75.6% worldwide. The energy sector includes transportation, electricity and heat, buildings, manufacturing and construction, fugitive emissions and other fuel combustion.
- The Paris Agreement was the first-ever universal, legally binding global climate change agreement, adopted at the Paris climate conference (COP21) in December 2015. It sets out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C.
- In April 2022, the Intergovernmental Panel on Climate Change (IPCC) advised that "limiting warming to around 1.5°C requires global greenhouse gas emissions to peak before 2025 at the latest, and be reduced by 43% by 2030; at the same time, methane would also need to be reduced by about a third."

³ As of March 2021, 59 countries have communicated a net-zero target, representing 54% of global GHG emissions, although they vary as to whether the target is a political pledge, incorporated into a policy document, or enshrined into law (e.g. France, Germany, and the UK have legally binding 2050 net-zero GHG emissions goals): https://www.everycrsreport.com/reports/IF11821.html

⁴ Greenhouse gas generated by human activity

⁵ World Resources Institute Greenhouse Gas Emissions by Countries and Sectors (June 2022) https://www.wri.org/insights/4-charts-explain-greenhouse-gas-emissions-countries-and-sectors

⁶ Intergovernmental Panel on Climate Change (IPCC) media release (April 2022): https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/

 Analysis by the United Nations (October 2022) determined that the combined climate pledges of 193 Parties under the Paris Agreement could put the world on track for around 2.5 degrees Celsius of warming by the end of the century⁷.

UK context

- Carbon budgets were introduced in the UK under the 2008 Climate Change Act. Each carbon budget provides a five-year, statutory cap on total GHG emissions, which should not be exceeded, in order to meet the UK's emission reduction commitments.
- June 2019: the UK Parliament passed legislation (2019 Climate Change Act) requiring the UK Government to reduce the UK's net emissions of GHGs by 100% relative to 1990 levels by 2050. Doing so would make the UK a net zero emitter. Prior to this, the UK was committed to reducing net GHG emissions by at least 80% of their 1990 levels, also by 2050.
- June 2021: the UK Government enshrined in law a new climate change target to reduce GHG emissions by 78% by 2035 compared to 1990 levels. This takes the UK more than three-quarters of the way to reaching net zero by 2050⁸.
- October 2021: the UK Government published a Net Zero Strategy⁹ setting out how the UK will deliver on its commitment to reach net zero emissions by 2050. It also published a Heat and Buildings Strategy¹⁰ setting out how the UK will decarbonise homes and commercial, industrial and public sector buildings, as part of setting a path to net zero by 2050.
- January 2023: the UK Government published Mission Zero¹¹, a review led by former Energy Minister Chris Skidmore MP of its approach to delivering its 2050 net zero target, which made 129 recommendations covering areas including the greater role that business can be supported to play, making better use of infrastructure and delivering more energy efficient homes.
- Key UK Government Net Zero policies include:
 - Ending the sale of new petrol and diesel cars and vans by 2030, with all new cars and vans being fully zero emission from 2035
 - Planned review of the National Planning Policy Framework to make sure it contributes to climate change mitigation and adaptation as fully as possible
 - Introducing the Future Homes Standard by 2025, which will require new build homes to have low carbon heating and high levels of energy efficiency. This is expected to include a ban on the installation of gas or oil boilers in new homes
 - Getting as many homes to energy performance certificate (EPC) band C by 2035 as is cost-effective, practical and affordable. Reducing fuel poverty by ensuring as many fuel poor homes in England, as reasonably practicable, achieve a minimum energy efficiency rating of band C by the end of 2030
 - From October 2023, banning single-use plastic items such as plates, trays, bowls, cutlery and certain types of polystyrene cups and food containers

⁷ United Nations media release October 2022:

https://unfccc.int/news/climate-plans-remain-insufficient-more-ambitious-action-needed-now

⁸ The estimates of the UK's GHG emissions used as the baseline for monitoring the Climate Change Act net zero target include and exclude specific activity:

 $[\]frac{https://www.ons.gov.uk/economy/environmental accounts/articles/netzero and the different official measures of the uksgreen house gasemissions/2019-07-24$

⁹ UK Government Net Zero Strategy October 2021:

https://www.gov.uk/government/news/uks-path-to-net-zero-set-out-in-landmark-strategy

¹⁰ UK Government Heat and Buildings Strategy October 2021:

https://www.gov.uk/government/publications/heat-and-buildings-strategy

¹¹ Mission Zero: Net Zero Review January 2023:

 $[\]underline{\text{https://www.gov.uk/government/news/net-zero-review-uk-could-do-more-to-reap-economic-benefits-of-green-growth}$

Local government context

- The 2019 Climate Change Act did not include a statutory duty for local authorities to develop plans and deliver cuts in line with the UK carbon budgets (statutory cap on total GHG emissions). Nor did it set local authorities their own carbon budgets.
- The Government's Net Zero Strategy (October 2021) did not set targets for local authorities, but more recently the Mission Zero net zero review (January 2023) called on it to "introduce a statutory duty for local authorities to take account of the UK's net zero targets, based on a clear framework of local roles and responsibilities."
- Alongside its work on the Sixth Carbon Budget, the Climate Change Committee (CCC)¹² published an accompanying report in 2020 on the role of local authorities in delivering the UK's net zero ambition¹³. The report comments that: "Local authorities are directly responsible for between 2-5% of their local area's emissions. However, local authorities have many levers that can be used to deliver wider local action to reduce emissions and prepare local areas for a changing climate."
- Local authorities are well placed to drive and influence action on climate change through the services they deliver, their regulatory and strategic functions, and their roles as community leaders, major employers, large-scale procurers and social landlords. They also provide an important leadership role, setting an example for others to follow.
- At the same time, local authorities have to be realistic and pragmatic on what they can
 achieve. Many face significant resource constraints amplified more recently by the impact of
 high inflation and service cost pressures. Progressing climate work is often dependent on
 local authorities competing to secure limited Government funding.
- The Mission Zero review (January 2023) included a recommendation that "Central government should simplify the net zero funding landscape for all local authorities by the next Spending Review. This should include consolidating different funding pots, reducing competitive bidding processes, giving longer lead-in times where bidding remains and providing funding over the medium rather than the short-term."

Swindon Borough Council context

- In Swindon, around 80% of the Council's total general fund budget in 2023/24 will be prioritised on essential social care services to support the wellbeing and safety of residents. The Council has a statutory duty to deliver a balanced budget and will need to achieve £26m in savings in 2023/24 (13% of the Council's net budget).
- Nevertheless, the Council is seeking to use its available resources, powers and influence wherever possible to help address the climate emergency.
- The Council has a track record of seizing opportunities and taking action to reduce GHG
 emissions generated through its operations. For example, working with ethical investment
 company Abundance, the Council raised more than £4.2 million from the public to build two
 new solar parks through public investment offers.
- The first offer, to build the 4.8 MW Common Farm solar park¹⁴, was the first council solar bond to be launched in the UK. The second, to build the 5 MW Chapel Farm solar park¹⁵, coincided with the launch of the Abundance ISA, making it the UK's first ever ISA-eligible solar bond.
- Renewable energy generated by Council-owned solar parks (Common Farm and Chapel Farm) and sold to the grid is equivalent to 40-50% of the total electricity used by the Council.

¹² The Climate Change Committee (CCC) is an independent, statutory body established under the Climate Change Act 2008. Its purpose is to advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change.

¹³ An independent report for the Climate Change Committee: Local Authorities and the Sixth Carbon Budget December 2020: https://www.theccc.org.uk/wp-content/uploads/2020/12/Local-Authorities-and-the-Sixth-Carbon-Budget.pdf

¹⁴ Common Farm solar park https://www.publicpowersolutions.co.uk/development-projects/common-farm-solar-park

 $^{^{15}\,} Chapel\, Farm\, solar\, park\, \underline{https://www.publicpowersolutions.co.uk/development-projects/chapel-farm-solar-park}$

The creation of the 'Waterside Innovation Hub' at the Council's main operations depot has included the installation of battery storage and electric vehicle charging points to harness renewable energy from the nearby Council-owned 2.5 MW Barnfield solar park¹⁶ on a former landfill site in Swindon. Energy from the solar farm will also supply power for local homes via a new 12MW/24MWh battery due to be energised in May 2023.

Context for this updated version of the Net Zero Emissions Action Plan

- In January 2020, the Council passed a motion¹⁷ that: "Commits the Council to an 80 per cent reduction in the council's corporate carbon emissions no later than 2030, striving towards 100 per cent with carbon offsetting by the same date, with the aim of making the council's estate and activities net-zero carbon by 2030."
- The Council has also taken the additional commitment to support the wider borough to transition to net zero GHG emissions by 2050. This was set out in the Carbon Reduction Strategy¹⁸ approved by the Council's Cabinet in February 2021, following public consultation on the draft strategy held between November 2020 and January 2021.
- For clarity and consistency in our terminology, rather than using the terms "carbon reduction" and "carbon emissions", we refer more precisely to reducing all GHG emissions (measured in carbon dioxide equivalent, CO2e).

Key elements of this Net Zero Emissions Action Plan

- This Action Plan makes a distinction between:
 - 1. Actions that will make a direct causal link in reducing GHG emissions; and
 - 2. Enabling actions which once completed, should identify further opportunities to reduce GHG emissions which can either be implemented within existing operations or may be subject to securing new sources of funding.

Progressing the Council's organisational target to reach net zero emissions by 2030

This involves addressing three types of GHG emissions:

- **Scope 1** are direct GHG emissions from sources that we own or control as a Council, for example emissions from fuel combustion (gas/oil boilers) and council vehicles.
- **Scope 2** are indirect emissions from purchased electricity that we consume (e.g. street lighting, libraries and offices).
- Scope 3 are indirect emissions that we do not directly control, but we have some responsibility and influence over. Examples include: emissions generated from the energy usage of tenants living in our circa 10,300 social housing properties; business travel, commuting, grey fleet (employee-owned cars claiming mileage back); waste disposal for contracted out waste processing; from wider supply chains (often reaching international jurisdictions); emissions from the use of our services; contracted out services; leased assets; investments; and purchased goods and services. We have a strong influence over some of these emissions and less over others.

¹⁶ Barnfield solar park https://www.publicpowersolutions.co.uk/development-projects/barnfield-solar-park

¹⁷ Council Agenda and Minutes – 23 January 2020:

http://ww5.swindon.gov.uk/moderngov/ieListDocuments.aspx?Cld=284&Mld=9909

¹⁸ Cabinet Agenda and Minutes – 03 February 2021:

Resourcing and governance

- Capacity and resources to progress the actions in this Net Zero Emissions Action Plan are set
 against the backdrop of the Council needing to achieve £26m savings in 2023/24. However,
 additional funding was approved as part of the Council's 2023/24 budget to consolidate with
 existing unallocated salary budget to seek to recruit dedicated roles to work on this agenda.
- The delivery of the Net Zero Emissions Action Plan is overseen by the Chief Operating Officer working closely with officers across the Council responsible for specific actions.
- The Resources and Corporate Overview and Scrutiny Committee has oversight of the Council's climate change work, with an agenda item tabled in February 2022¹⁹ and further update scheduled for March 2023.
- The Cabinet Member for Climate Change, Finance and Commercialisation has also overseen a Climate Change Members Advisory Group that meets regularly.

Quantifying and monitoring progress in delivering this Action Plan

- A key capability gap to be addressed is being able to produce a pathway that quantifies the
 impact of this Action Plan in reducing the Council's scope 1 and 2 emissions over the next
 seven years. This would show the remaining emissions that would need to be offset in order
 for the Council to achieve its 2030 Net Zero target. Also producing an annual summary of
 emissions based on energy and fuel consumption.
- The Council has previously produced a 2018/19 baseline analysis of its scope 1 and 2 emissions, but will need to recruit the necessary skillset to update this to assess the impact of the ongoing delivering of this Net Zero Emissions Action Plan. Some local authorities have chosen to engage external consultancy support in this endeavour, while the Net Zero Review (January 2023) recommended that "central government should provide guidance reporting mechanisms, and additional capacity and capability support to enable local authorities to better monitor and report their net zero progress."
- It is anticipated that the switchover to LED street lights, the purchase of more ultra low
 emission operations vehicles and the installation of new infrastructure to harness more
 renewable at the Council's operations depot, will have had most impact on reducing the
 Council's emissions footprint over the past two years. Renewable energy generated by
 Council-owned solar parks (Common Farm and Chapel Farm) and sold to the grid is
 equivalent to 40-50% of the total electricity used by the Council.

¹⁹ Resources and Corporate Overview and Scrutiny Committee, agenda February 2022 https://ww5.swindon.gov.uk/moderngov/ieListDocuments.aspx?Cld=1002&MId=10522&Ver=4

Our organisation – progressing target to achieve net zero organisational emissions by 2030

Scope 1 and 2 emissions: actions to reduce GHG emissions

This section focuses on actions to reduce the Council's GHG emissions falling under Scope 1 and Scope 2. Our Scope 1 direct emissions arise from sources that we own or control as a Council, from directly burning fossil fuel, such as gas boilers used in our buildings and our vehicle fleet (combustion engines). Our Scope 2 emissions are generated from purchased electricity that we consume through Council-owned assets and services such as street lighting, traffic signals and buildings operated across the Borough.

Actions on progress to reduce Scope 1 & 2 emissions that contribute directly to our target of becoming a net zero organisation by 2030

No.	Action	Status	Officer sponsor	Commentary
A1	Reduce energy usage through LED	Complete	Syed Shah	18-month £7.2m programme to convert 26,000 street lights to LED units
	street light replacement programme			completed in August 2022. Expected to deliver electricity savings of approximately 60%.
A2	Pilot project to optimise energy usage of LED street lights	Ongoing	Jon Harris	Energy conservation pilot undertaken in Old Town in March 2023 to inform wider energy optimisation of LED street lights.
А3	Reduce energy usage through LED traffic signals and signs replacements	Ongoing	Mike Best	193 Swindon traffic light sites use LEDs, with a further 20 sites remaining to be upgraded via the refurbishment programme and capital schemes.
A4	Reduce energy usage through LED replacement programme in social housing communal areas	Ongoing	Mike Ash	Improvements in Walcot East are at the planning stage and due to be included in the 2023/24 housing repair and maintenance works programme.
A5	Harness solar energy through Waterside Innovation Hub: installation of 0.5MW battery at Council's operations depot	Ongoing	Paul Smith	New 0.5MW lithium-ion battery will store excess renewable energy generated annually from the nearby 2.5MW Barnfield solar farm. Used to supply the Council's operations depot, rather than being sold to the grid. Funded through a Council bid to the Government's Public Sector Decarbonisation Scheme.

Actions on progress to reduce Scope 1 & 2 emissions that contribute directly to our target of becoming a net zero organisation by 2030 – continued

No.	Action	Status	Officer sponsor	Commentary
A6	Harness solar energy through Waterside Innovation Hub: install eight new double-headed electric vehicle charging points at the Council's operations depot	Complete	Brian Pinchbeck	Fast-charge points installed in February 2022 to enable the Council to charge 16 electric vehicles simultaneously.
A7	Purchase additional electric vehicles as part of the wider Council fleet replacement strategy	Complete	Brian Pinchbeck	As of February 2023, the Council operates 27 full electric vehicles, following the purchase of 17 new electric vehicles in 2020/21. It operates seven hybrid vehicles including three that replaced high mileage diesel vehicles used by Homeline. Work is being completed in 2023/24 on the charging infrastructure at the depot, with further ultra low emission vehicle purchases planned for 2024/25.
A8	Reduce energy usage through rationalisation of corporate estate	Ongoing	Rob Richards	Across 2021/22 and 2022/23, five buildings have been vacated including four floors of the Wat Tyler East office building on Civic Campus.
A9	Reduce energy usage through application of new technologies	Complete	Phil Murkin	New fly-tipping reporting system for Council team which supports crews to optimise routes for the team to reduce mileage, energy and emissions. Within Council buildings, adopting the use of automated air quality sensors, reducing the energy and emissions generated by roaming site visits for manual monitoring.

Enabling actions to support future delivery of solutions to reduce Scope 1 & 2 emissions

No.	Action	Status	Officer sponsor	Commentary
B1	Organise carbon literacy training for	Complete	Sam Mowbray	Accredited carbon literacy training provided by Association for Public Service
	councillors and senior officers			Excellence (APSE) for all councillors and around 100 senior officers.
B2	Develop Council fleet strategy to	Ongoing	Brian Pinchbeck	Continue to procure electric or hybrid Council vehicles to add to existing 27 full
	continue transition to ultra low			electric and 7 hybrids. Technology advances are required before in a position to
	emission vehicles			purchase larger electric vehicles (waste fleet and gritters). The Council operates
				just under 300 vehicles, including 144 that are parked near drivers' homes
				overnight which carries a consideration around overnight charging. Via the
				Waterside Innovation Hub (action A4) there will be sufficient solar-generated
				electricity to power a full electric fleet where practicable.
В3	Review Council-operated data centre	Ongoing	Phil Murkin	Intention is to move from two Swindon based data centres into one in Swindon
	provision and options for reducing the			and one in the cloud. Completed a proof of concept to run our secondary data
	energy footprint			centre in a cloud computing platform (Microsoft Azure). The project involves
				closing the Council's current Swindon-based secondary data centre and work in
				hybrid model placing our most data intensive servers in our Azure cloud platform.
				This will also offer the resiliency of running services in our own cloud in the event
				of a major outage. The carbon saving for this will be calculated as the model
				takes shape and we know what servers will be where. The Council is working with
				Microsoft to be able to measure the benefits this new set up will provide.
В4	Develop prioritised programme of	Ongoing	Rob Richards	Links to estates rationalisation work (action A7), to develop prioritised list of
	work to maximise energy efficiency			Council-owned and used buildings for taking action to maximise energy efficiency
	and decarbonise heat of Council			as well as for decarbonising heat. Implementation of changes once identified
	buildings			would be dependent on securing external funding. Heat surveys of c.30 Council
				buildings completed in 2021, funded through successful bid to Phase 2 of the Government's Public Sector Low Carbon Skills Fund.
B5	Develop Council staff travel plan	Ongoing	Jon Harris	
ВЭ	Develop Council stall travel plan	Oligoling	JUII Hallis	Involves revisiting staff travel arrangements in light of changed working patterns post-pandemic, hybrid working and also enhancing wellbeing and health benefits,
				connectivity, teamworking, and collaboration between staff.
B6	Use electric or hybrid vehicles where	Ongoing	Brian Pinchbeck	All hire requests for local use are being fulfilled with electric vehicles.
50	possible for short term staff hired use	Ciigoilig	Dian inclined	All thre requests for local use are being fulfilled with electric vehicles.
B7	Adopt electric bin lifts for refuse	Ongoing	Brian Pinchbeck	Following a trial, four new waste vehicles with electric bin lifts are being delivered
	vehicles	0.1801118	D. Idii i iliciideek	in spring 2023. Council is on the waiting list to trial a full electric waste vehicle.
B8	Investigate Council use of battery	Ongoing	Brian Pinchbeck	Investigating how battery powered tools (e.g. hedge trimmers, strimmers) could
	powered tools	808	2	meet operational requirements.
	P	1	l	

Scope 3 emissions: actions to reduce GHG emissions

This section focuses indirect emissions that the Council does not directly control, but has some responsibility and influence over. Examples of Scope 3 emissions includes those generated from the energy use of our tenants living in around 10,300 social housing properties, from wider supply chains, emissions from the use of our services, contracted out services and investments.

Actions that reduce the Council's Scope 3 (as well as Scope 1 and 2) emissions also contribute to reducing the overall Borough's GHG emissions.

Actions in progress to reduce Scope 3 emissions that contribute directly to our target of becoming a net zero organisation by 2030

No.	Action	Status	Officer sponsor	Commentary
C1	Adopt sustainable construction polices through the Local Plan review	Ongoing	Richard Bell	Ensure that Local Plan policies are as stringent as they are permitted to be in moving as closely as we are able to net zero emissions in building design and construction. Local Plan scheduled for next round of public consultation in winter 2023.
C2	Through Local Plan review: require new developments to provide high biodiversity quality areas within the Borough as part of their proposals/ developments	Ongoing	Richard Bell	As of January 2023, the Local Plan currently under revision before further public consultation takes place. The draft Local Plan includes policies for biodiversity protection and enhancement, the protection, provision and maintenance of open space and community forest. Two strategic planning applications have been consented in the New Eastern Villages housing development which include provisions for these proposals.
СЗ	Through Local Plan review: ensure transport-related environmental impact of new development is quantified through: a) Local Plan review at policy and 20 year horizon b) Scrutiny of initial planning applications on an ongoing basis	Ongoing	Jon Harris & Stephen Hay	Being implemented through the planning process. Strengthen Local Plan policy provisions to ensure the transport-related environmental impact of new development is properly assessed and understood. Apply carbon modelling as part of land use scenario testing. There is a requirement for all major development proposals to be accompanied by robust sustainable travel plans. Improving the Transport Requirements for New Developments guidance to ensure that carbon impacts are properly covered in transport assessments. Improvement to site travel plans to cover the carbon issue and use of travel plan surveys to capture key metrics. This covers construction phases and freight/logistics as well as the movement of people.
C4	Deliver external wall insulation programme targeted at social housing	Ongoing	Mike Ash	Installation of insulation in social homes to increase the Energy Performance Certificate rating to C, with installations in 50 properties in 2023/24.

Actions in progress to reduce Scope 3 emissions that contribute directly to our target of becoming a net zero organisation by 2030 – continued

No.	Action	Status	Officer sponsor	Commentary
C5	Build new net zero houses through the Council's housing development company	Ongoing	Mike Ash	Delivered as part of a wider commitment to deliver a series of net zero homes as part of new and existing housing developments delivered by the Council's housing development company. The next two schemes at Clays Close, Stratton
	,			and Lechlade Road, Highworth are in the planning and development stages.
C6	Install electric vehicle charging infrastructure provision for new housing development at Wichelstowe	Ongoing	Rob Richards	An initial 12 active charging sockets installed in shared and visitor parking bays. Further charging infrastructure will be added to meet the needs of future phases of housing development at Wichelstowe.
C7	Install on-street electric vehicle charging points	Complete	Jon Harris	Eleven double-headed on-street electric vehicle charging points, totalling 22 bays, installed in Swindon across eight locations in the Central and Eastcott wards following resident input. Mostly funded by the Office for Zero Emission Vehicles, with a contribution from the Council.
C8	Update procurement process to ensure suppliers minimise the use of single-use plastics across all Council operations	Complete	James Short	All standard Council tender templates now to include a contract obligation to minimise the use of single use plastics and encourage elimination of these within the supply chain. The Government has since confirmed a ban in England from October 2023 on the sale of some single-use plastic items.
C 9	Update template for the Procurement Gateway process for high value projects to consider sustainability	Complete	James Short	Template for procurement templates for high value projects above specified thresholds requires commissions to consider the contribution to the objectives of this Action Plan.

Actions in progress to reduce Scope 3 emissions that contribute directly to our target of becoming a net zero organisation by 2030 – continued

No.	Action	Status	Officer sponsor	Commentary
C10	Learn and apply best practice from	Ongoing	Lorna Mitchell	Review the environmental performance of Abbey Farm ET Primary School in
	sustainable school construction to			Blunsdon, Swindon, that opened in September 2022 as Swindon's first net zero in
	future Council-built schools			operation school built by the Dept for Education.
C11	Develop school design to be energy	Ongoing	Lorna Mitchell	Design of South Marston CE Primary School extension to incorporate 'A' Energy
	rated 'A' for maintained school			Performance Certificate rating. The costs of the extension are being met from
	extensions or refurbishments			£3.15 million Section 106 funding allocated by the Council to provide additional
				school places.
C12	Find alternative use for buildings	Ongoing	Lorna Mitchell	Minimising the environmental impact of needing to build new school facilities,
	surplus to requirements of Council			through reviewing vacant property that could be suitable for alternative
	maintained schools			education provision.

Enabling actions to support future delivery of actions to reduce Scope 3 emissions

No.	Action	Status	Officer sponsor	Commentary
D1	Audit of Council's social housing stock to re-baseline energy efficiency performance	Ongoing	Mike Ash	An up to date energy efficiency rating of 40% of the Council's c.10,300 social homes has been completed. By summer 2023, extrapolating this sample across similar property types will provide a clear view of the Standard Assessment Procedure (SAP) rating of the housing stock to inform prioritising future energy efficiency improvements. This is being overseen by a Energy and Innovation lead partly funded from a grant obtained via South West Net Zero Hub hosted in the West of England Combined Authority.
D2	Look to secure external funding to improve energy efficiency of Council's social housing stock	Ongoing	Mike Ash	As of February 2023: funding bid submitted to Wave 2.1 of the Social Housing Decarbonisation Fund to compliment the capital programme plan improvements to 50 properties in Park South.
D3	Present preferred low emissions option in consideration of new Council building projects	Ongoing	Mike Ash	Energy Performance Certificate rating 'B' now standard. Pilot schemes underway targeting rating A' rating using first low carbon heat source, air source heat pumps. Continuing to develop future schemes with the potential of obtaining a standard of zero carbon in operation. First 47 social houses at new Queen's Drive development include solar panels, mechanical ventilation heat recovery and triple glazing, with build of a further 102 homes underway.
D4	Implement Highways Infrastructure Asset Management Carbon Management Plan	Ongoing	Syed Shah	The Highways Infrastructure Asset Management Carbon Management Plan was agreed by Cabinet in Feb 2022. It sets out the work required to understand how to manage and maintain highway infrastructure to minimise the impact on the environment and to determine how the Council may offset any unavoidable carbon costs that remain.

Swindon Borough – supporting residents and organisations to transition to net zero by 2050

Our role is to help increase and accelerate the existing efforts of Swindon residents and organisations to take action to reduce their emissions. Our effort and finite resources working locally will be targeted, complementing the evolving UK policy and regulatory landscape that will realistically do much of the heavy lifting in moving society to more sustainable lifestyles, behaviour and choices. For example, the UK Government has committed to end the sale of new petrol and diesel cars in the UK by 2030, with all vehicles being required to have a significant zero emissions capability (for example plug-in and full hybrids) from 2030 and be 100% zero emissions from 2035²⁰.

This section firstly looks at current actions being led by the Council to support the whole of Swindon Borough to move towards achieving net zero emissions by 2050, before looking at enabling actions to support residents and organisations in their efforts to reduce emissions.

Actions in progress to support the reduction of wider Borough emissions

No.	Action	Status	Officer sponsor	Commentary
E1	Harness solar energy through	Ongoing	Brian Pinchbeck	A 12MW/24MWh battery is due to be energised in May 2023, connected to the
	Waterside Innovation Hub:			local electricity network. The battery's power output will be equivalent to
	install 12MW/24MWh battery on a			supplying 3,000 local homes for two hours, using electricity generated at the
	brownfield site near the Household			Barnfield solar farm. This is the first project of its kind to be part-funded by the
	Waste Recycling Centre			European Regional Development Fund (ERDF) in the UK.
E2	New tree planting in Great Western	Ongoing	Dave Dewart	Around 51,500 new trees (42.6 hectares) planted since 2020. Fifteen hectares of
	Community Forest and other areas			planting at Pentylands Country Park, Moredon Playing Fields, Coleshill and
				Brimstone Farm, with funding from the Government's Trees for Climate grant. A
				further 21 hectares of new woodland, together with street tree and smaller
				community tree planting schemes, were planted in 2020/21 across 18 sites in the
				Community Forest area. In partnership with Wiltshire Council, Swindon has
				received c.£300,000 of Government funding to plant 111 hectares of new trees in
				2023/24 and 222 hectares in the 2024/25.

²⁰ UK Government Net Zero Strategy October 2021:

Actions in progress to support the reduction of wider Borough emissions – continued

No.	Action	Status	Officer sponsor	Commentary
E3	Expansion of Wiltshire Wildlife Trust	Ongoing	Dave Dewart	Extending the scope of the Forest Meadows programme led by Wiltshire Wildlife
	partnership for large scale habitat			Trust and funded from biodiversity offsetting monies received from the Council.
	creation projects			To date the programme has included the creation of new woodland, scrub and
				grassland at Mouldon Hill, woodland creation and river restoration at Rivermead
				Flood Storage area, and support for community projects throughout Swindon,
				including Shaftesbury Lakes, Raybrook Meadow, The Prinnels, Foundation Park
				and Penhill Haven. Biodiversity net gain now is being secured on nearly all major
				projects through negotiation by the Council's ecologist. Offsetting credits can be
				bought by developers as a last resort when onsite and local offsite provision of
			_	habitat cannot deliver the net gain required.
E4	Launch Solar Together Wiltshire solar	Ongoing	Sam Mowbray	In partnership with Wiltshire Council, this group-purchasing scheme launched in
	panel group-buying scheme			May 2022 provided Swindon homeowners with access to competitively priced,
				high quality roof-mounted solar panels as well as optional battery storage,
		0 1.	D : I NA'I	electric vehicle charging point and retrofit battery storage.
E5	Deliver home energy efficiency	Complete	David Miles	Total of £4 million of Government-funded targeted home energy efficiency
	improvements through phase 2 of the			improvements for lower income households and homes with an Energy
	Local Authority Delivery scheme			Performance Rating of D-G. Total of 728 measures including solar panels and
				insulation installed in 669 homes between August 2021 and September 2022, generating an estimated greenhouse gas savings of 8,000 tonnes. 410 properties
				in Swindon have been improved to an Energy Performance Rating of C or above.
				The overall total include solar panels and a small number of home energy
				efficiency installed in 106 social homes between August 2021 and September
				2022, improving their Energy Performance Certificate rating from E to C. The
				Council funded a third of the works per property, with the remainder funded
				through the Government's Local Authority Delivery scheme.
E6	Installation of online booking system	Complete	Phil Murkin	An online pre-booking system was introduced in May 2020 and from August 221,
	and automated barrier at Household			residents are emailed a QR code when they book an appointment, which allows
	Waste Recycling Centre reducing CO2			them to check-in themselves when they arrive on site for their appointment.
	emissions from engine idling			Ending the queues of waiting vehicles has reduced emissions from engine idling.
E7	Provide free energy saving advice and	Ongoing	David Miles	The latest figures show the service received 1,069 enquiries from 629 households
	support to residents through the			between April and December 2022, helping them to achieve energy bills savings
	Warm & Safe Wiltshire Advice Service			of £126,062 for this period.

Enabling actions to support future reduction of wider Borough emissions

No.	Action	Status	Officer sponsor	Commentary
E8	Rollout Borough-wide food waste collection service	Ongoing	Rob Brown	Borough-wide rollout of food waste collections from Autumn 2023 to 90,000 additional households as part of a move to multi stream recycling. Projected to save an estimated 8,800 tonnes of greenhouse gas per year based on removing 8,000 tonnes of food waste from the residual waste stream (10-15%). Food will be treated using a method called anaerobic digestion which produces renewable energy (biogas) and agricultural soil improver.
E9	Deliver 'Be the change' climate change communications campaign in Swindon to raise the profile of the net zero agenda, engaging residents and organisations	Ongoing	David Miles	Ongoing campaign showcase the actions being taken by local residents and organisations in response to climate change. Also signposting information, tools and resources to help residents reduce their emissions footprint: www.swindon.gov.uk/bethechange
E10	Develop and deliver of projects in the Local Cycling and Walking Infrastructure Plan	Ongoing	Philip Martlew	Local Cycling and Walking Infrastructure Plan in place. Delivery of projects dependent on future allocations from the Government's Active Travel fund.
E11	Develop and delivery of new public charging infrastructure set out in the Electric Vehicle Strategy	Ongoing	Philip Martlew	Electric Vehicle Strategy in place. Delivery of further infrastructure outlined in the strategy is dependent on securing external funding. Swindon's Parking Standards for New Development is being used to secure additional electric vehicle charging points for new homes.
E12	Look to secure external funding for further on-street and other electric vehicle charging infrastructure	Ongoing	Jon Harris	Planned bid to the Government's On-Street Residential Chargepoint Scheme in March 2023. Soft market testing to find preferred electric vehicle partner(s).
E13	Develop Local Logistics Partnership to look at ways to reduce HGV and other freight/service vehicle emissions	Ongoing	Jon Harris	There are over 120 logistics companies alone based in the Swindon area, plus other manufacturing, warehousing and other allied sectors generating considerable freight flows. To include the production of a shared collaborative Local Logistics Strategy and move forward recommendations from the England's Economic Heartland's Freight Study.

Enabling actions to support future reduction of wider Borough emissions – continued

No.	Action	Status	Officer sponsor	Commentary
E14	Residential/workplace and event travel plans	Ongoing	Jon Harris	Assessment of travel plan provision already in place and how to measure carbon impact of trips saved. Linked to Section 106 requirements and Supplementary Planning Document in place with further look at emission reductions.
E15	School/Education Travel plans	Ongoing	Jon Harris	Development of further tools and partnership working with other sustainable transport promoters (e.g. PLATFORM schools project) to reduce carbon through sustainable travel choices.
E16	Support for car sharing	Ongoing	Jon Harris	Repackaging of car sharing as a measure to support environmental responsibility to combat loneliness and social isolation. Review of carshare offer within Swindon and linkage to new development.
E17	Develop cycle hire schemes for last mile and leisure connectivity - manual cycles and e-bikes	Ongoing	Jon Harris	Scoping and soft market testing in 2023 to look at commercial interest for cycle hire providers to enter Swindon market.
E18	Develop access guide for walking and mobility in central Swindon	Ongoing	Jon Harris	Involves partnership working with TransWilts Community Rail Partnership. Mapping designs to be considered as part of the town centre waymarking plans and also support to pedestrians and cyclists during major works (Fleming Way). Also to signpost key facilities.
E19	Explore opportunities to use Smart Transport Solutions – intelligent transport	Ongoing	Jon Harris	Consideration of how we utilise urban traffic control/traffic signals to optimise traffic flow/reduce emissions.
E20	Refresh and strategic review Swindon Station Travel Plan	Ongoing	Jon Harris	Refresh and strategic review of Swindon's station travel plan working in close partnership with rail and other stakeholders starting in February 2023.

Enabling actions to support future reduction of wider Borough emissions – continued

No.	Action	Status	Officer sponsor	Commentary
E21	Greening bus and community	Ongoing	Jon Harris	Review options for commercial bus, coach and community transport sector/s to
	transport fleet			move to enhanced technology bus fleet.
E22	Develop and implement a new taxi	Ongoing	Kate Bishop	Dependent on securing the charging infrastructure to progress this work.
	licence policy to encourage and			
	incentivise existing Hackney and			
	Private Hire Taxi Vehicles to purchase			
	Low Emissions alternatives			
E23	Identify green skills gaps as part of	Ongoing	Sally Burnett	From January 2023, a six monthly review linked to the SWLEP Skills Action Plan
	the Swindon and Wiltshire Local			will review the green skills and jobs in our economy and significant developments
	Enterprise Partnership Skills Plan			outside Swindon and Wiltshire.