

## Exeter City Council Corporate Net Zero Carbon Reduction Plan 2022 - 2030

Exeter City Council declared a Climate Emergency in 2019 and as part of this commitment it aims to achieve Net Zero GHG emissions for its own corporate activities by 2030.

The core measures set out in this Carbon Reduction Plan are needed to drive forward and deliver a broad range of actions across all services to deliver Net Zero. The greatest challenge to the Council is the financial resource and capacity needed to reach Net Zero in a timeframe as tight as 2030. A one off budget of £800,000 has been provided to support the Net Zero team, which has enabled two temporary posts to be recruited for 4 years, and a revenue budget to support service delivery of the Carbon Reduction Plan.

The Carbon Reduction Plan is supported by the 'Exeter City Council Corporate Carbon Footprint' report produced by the Centre for Energy and the Environment at the University of Exeter, which sets out opportunities, actions, and targets required to reduce carbon emissions across all Council operations, and links to the Net Zero Risk Register completed June 2022.

The Carbon Reduction Plan is a living active document to be reviewed every 6 months to update on progress made, as well as legislative, financial, technical and operational changes. The plan is clearly laid out and includes an assessment of potential measures to reduce carbon emissions in each Council service ranging from the straightforward to far more challenging. The aim is to lead by example and to reduce emissions across all Council sectors, services and operations, with the aim of being Net Zero by 2030.

The success of the Carbon Reduction Plan will need support politically and financially to ensure every Council service and employee can lead by example and demonstrate the broad and sometimes extreme actions to reduce carbon emissions, whilst delivering a service to the residents of Exeter.

### Document Framework

The seven sectors in the Carbon Reduction Plan (below) are those assessed in the Corporate Carbon Footprint report, with an additional Overall Organisational Change section. The footprint was completed following an appraisal of central government policy, input from discussions with ECC service leads and other officers in relevant departments, and consultation with key ECC documents and data sources.

Measures identified for each sector include possible actions attributed to services with an update on progress made, priority, lead and resource. It is noted this further work is needed to identify investment and accurate GHG savings.

1. Non-domestic buildings
2. Council-owned housing
3. Transport
4. Procurement
5. F gases and waste
6. Renewable energy
7. Land use change – afforestation
8. Overall organisational Change

### Governance and Monitoring

Delivery of the Action Plan will involve:

1. A rolling programme of projects, funded by invest to save opportunities, borrowing, the Net Zero budget, and available grant funding.
2. Progress to be monitored and reported on a six monthly basis to Strategic Scrutiny Committee, including an annual report of the Council's GHG Carbon Emissions to measure and monitor progress.
3. Monitoring and updating of the Net Zero Risk Register will be reported to the Audit and Governance Committee every six months, as well as Strategic Scrutiny Committee.

**Exeter City Council Corporate Net Zero Carbon Reduction Plan  
2022 - 2030**

Sector	Area of Focus	Potential Measures	Identified GHG reduction tCO2e	Lead	Resource needed	September 2022 Update
Council Non-domestic buildings <i>(4% of 2020/21 footprint)</i>	Change in assets (speculative)	Longer term rolling plan to address retained assets and fabric first approach measures to reduce consumption beyond 2025	tbc	SMB /City Surveyor/Net Zero Lead	Y	<ul style="list-style-type: none"> <li>Decarbonisation survey undertaken to establish available PSDS funding to establish corporate properties that qualify for retrofit, insulation and decarbonisation of heat</li> <li>Currently only two properties qualify, highlighting critical lack of funding needed to deliver actions required</li> <li>BMS upgrade and Energy Management Information system installed to better identify projects and measure improvements</li> <li>Guildhall Shopping Centre acquired in May 2022. Net Zero discussions with the Centre Operator have begun</li> <li>ASHP survey undertaken for two key leisure sites</li> <li>Heat Network Zoning Pilot being undertaken on City wide basis – potential if successful to feed high use sites</li> <li>Roof replacement underway to provide for solar array at Riverside Leisure Centre</li> <li>Investigate opportunities to expand renewable energy production, solar thermal, wind, hydrogen and heat pumps</li> <li>Full Membership to SWEEG in 2022 will allow studies to investigate energy efficiency assets and carry out feasibility studies</li> <li>Water Lane Smart Grid and Storage project underway which includes testing of battery storage at three sites where solar energy is generated</li> </ul>
		Consider GHG impacts in conjunction with potential development, construction of new facilities, sale of buildings, or change of asset to ensure lifetime emissions are accounted for, such as sale/repurpose of Civic Centre.	-473	SMB/City Surveyor	Y	
		Take GHG emissions into account alongside cost and commercial considerations when making key decisions to renovate and retain exiting sites. Refurbishing existing assets results in lower environmental impact		City Surveyor/Net Zero Lead/SMB	Y	
	Efficiency and demand reduction	Improve space heating, hot water heating systems to decarbonise heat	-572	Corporate Property/Net Zero Team/Service Leads	Y	
		Full energy efficiency and demand reduction investment grade audit at RAMM	tbc	Corporate Property/Net Zero Team/ RAMMService Lead	Y	
		Improvement opportunities at RAMM include sector based changes to temperature and humidity controls of temporary exhibitions, and other permanent galleries to reduce consumption	tbc	Corporate Property/Net Zero Team/ RAMMService Lead	Y	
		Replacement of Air Handling Units	tbc	Corporate Property/Net Zero Team/ RAMM Service Lead	Y	
		Improvements to Leisure Centres (Riverside ISCA, Exeter Arena) e.g. fabric improvements, ventilation upgrades, lighting replacement, swimming pool efficiency	tbc	Leisure Service Lead/Net Zero Team	Y	
		Improvements to Corn Exchange e.g. fabric improvements, ventilation upgrades, lighting replacement	tbc	Corporate Property/Net Zero Team/Service Lead	Y	
		Improvements to all remaining buildings with a 20% energy efficiency improvement by 2030	tbc	Corporate Property/Net Zero Team/Service Leads	Y	
	Decarbonising heat	Installation of heat pumps, district heating, direct electric heating or hydrogen heating (if feasible) in public buildings to decarbonise heat, including those requiring replacement at Riverside, RAMM, ISCA and Arena Centre. Where heat pumps are installed, ensure that low and zero GWP refrigerants are used.	-584	Corporate Property/Net Zero Team/Service Leads	Y	
	Water	Review water saving opportunities	-	Net Zero Team/Service Leads	Y	
	Renewable energy	Inclusion of PV on any suitable outstanding roofs across ECC's non-domestic estate – see Renewable Energy Sector below.	-82	Net Zero Team/City Surveyor	Y	
Investigate potential for further energy storage		Tbc	Net Zero Team/City Surveyor	Y		
Council-owned housing <i>(33% of 2020/21 footprint)</i>	New Passivhaus dwellings	Build 1,000 new Passivhaus dwellings at proposed rate of 500 before 2025, and a further 500 up to 2030 to A++ target standard	+861	Assistant Director Housing/Exeter City Living	part	<ul style="list-style-type: none"> <li>Green Homes Grant – Local Authority Delivery of £1.6m secured and delivered in 2021/22</li> <li>426 properties retrofitted as part of a ‘fabric first’ strategy – with the inclusion of PV installation and smart heating controls</li> <li>Delivery target date being assessed on the basis of current delivery and resource/funding availability.</li> </ul>
	Loft and cavity wall insulation	Install loft and cavity wall insulation top-up where required in existing homes pre 2025	-139	Assistant Director Housing	Y	
	Improvements in energy efficiency	Promoting energy efficiency and use of low energy appliances by promotion of /access to good quality guidance	-363	Assistant Director Housing	Y	

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	Further deployment of solar photovoltaic panels	Installation of PV to half of suitable existing and new homes by 2025	-334	Assistant Director Housing	Y	<ul style="list-style-type: none"> <li>Review of mechanical and electrical strategy underway</li> <li>Analysis of non-traditional properties being completed – structural condition now known to be sound and design plans are being prepared to maximise building fabric thermal efficiency</li> <li>New rented Council housing currently continues to be delivered to Passivhaus standard – a 53 bed extra care scheme was completed in 2022</li> <li>The current new-build target is for 500 Council homes over a 10 year period – commenced in 2020</li> </ul>
	Solid wall insulation	Install solid wall insulation in 500 appropriate homes	-244	Assistant Director Housing	Y	
	Replacing fuel fuelled heating with ASHPs	Install ASHP in 3,510 homes not already heated electrically ensuring that low and zero GWP refrigerants are used.	-9,871	Assistant Director Housing	Y	
	Deep retrofit and other energy saving	Install combination of smart technologies, heat recovery, thermal and electrical storage where a property type is able to achieve Passivhaus/EnerPhit standards of 15kWh/m <sup>2</sup> however Government grant funding now requires 90 kWh/m <sup>2</sup> /year	-1,520	Assistant Director Housing	Y	
	Final deployment of solar photovoltaic panels	Install PV on all remaining suitable homes by 2030	-203	Assistant Director Housing	Y	
Transport <i>(2% of 2020/21 footprint)</i>	ECC Fleet	Migrating the fleet to low and Zero Emission Vehicles, including solutions for specialist waste and public and green space vehicles and equipment by 2030	-746	Fleet Management/Net Zero team	Y	<ul style="list-style-type: none"> <li>Continue Fleet and Equipment Electrification Plan</li> <li>Driver Training undertaken</li> <li>3No. Electric Refuse Collection Vehicles (ERCVs) in operation</li> <li>Solar Farm at Water Lane co-located with energy storage technology with PW will provide renewable energy and support charging infrastructure to the Council's Operations Depot at Exton Road and electrification of the all operational fleet</li> <li>Review of Green Travel Policy underway</li> <li>Application for LEVI funding to provide City Charging submitted June 2022</li> </ul>
		Minimise number of and mileage of journeys / better route planning for bin collections / waste bin collection rounds	tbc	Cleansing Services Lead /Fleet Management	enabling	
		Drive efficiently e.g. through Telematics (especially important with electric vehicles)	tbc	Cleansing Services Lead /Fleet Management	part	
		Better reporting - each department using vehicles to measure and report mileage and give feedback to staff, set targets for reduction and incentivise to use most efficient vehicle	tbc	All Services/Net Zero team	N	
	Other direct transport	Zero Red diesel strategy for specialist vehicles and equipment for Public and Green Spaces team e.g. tractors, mowers, sweepers, tele-handlers and other portable equipment	tbc	Cleansing Services Lead /Fleet Services/ Parks &Open Spaces Lead	Y	
		Electrification of 25% of public and green spaces specialist equipment between 2025 and 2030 and removing red diesel	-18	Fleet Services/ Parks &Open Spaces Lead	Y	
	Indirect transport	Policy on business travel and grey fleet miles to ensure all business travel to be using public transport, active travel or electric vehicles	-127	OMB	N	
		Mandating use of low and zero carbon travel alternatives and green travel incentives	tbc	OMB	N	
		Further expansion of EV Charging Network across Council owned assets	tbc	Net Zero Team/Fleet Services/ Parking Services	part	
Procurement <i>(62% of 2020/21 footprint)</i>	Improve data capture	Improve Data Capture, with minimum corresponding sector spend recorded in procurement records	tbc	Procurement Lead/Net Zero Team	part	<ul style="list-style-type: none"> <li>New eProcurement software to be amended to allow for better recording of Scope 3 emission data</li> <li>Green Accord relaunch in Autumn 2022 providing an accreditation scheme allowing businesses to evidence carbon reduction and suppliers to use businesses with proven sustainable business practices and net zero targets</li> <li>Discussions ongoing with partnering organisations to introduce improved supplier carbon accounting data and obligate suppliers to provide contract specific emissions data, and use in contract selection process</li> </ul>
		Make it a requirement that all suppliers for new contracts exceeding £50k should state associated GHG emissions with that contract for each financial year, or as a minimum suppliers should provide the corresponding sector for spec to minimise the effort and error associated with manual allocation, and this info be recorded in procurement records.	tbc	SMB/Procurement Lead/Net Zero Team	N	
	Consider the need for new buildings	On consideration of the hierarchy for buildings and maximise use of existing assets: build nothing, build less, build clever, build efficiently	tbc	SMB / City Surveyor/Net Zero Lead	N	
		Implement a Sustainable Procurement Policy which specifically includes a minimum A and A++ (LETI) for all City Council new development projects	tbc	Procurement Lead /Net Zero Team/City Surveyor/Exeter City Living	Y	

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	Follow circular economy principles	Decisions must be taken with good quality data i.e. from suppliers. Take GHG emissions into account alongside cost and quality considerations when awarding new contracts and all key decisions on capital projects. Weight contract award weighting for climate change in procurement processes where relevant and proportionate	tbc	Procurement Lead/City Surveyor/Net Zero Team/SMB	N	
		Ensure all new homes have LETI embodied carbon rating of A and other construction has equivalent, target increased to A++ by 2030	tbc	Assistant Director Housing /Exeter City Living /SMB	Y	
F gases and waste <i>(0.04% of 2020/21 footprint)</i>	Quantify ECC's own waste volumes	Produce an annual ECC waste report that includes total tonnes/annum, breakdown into categories by weight, final destination of waste reported. This will form a base year against which targets can be set	tbc	Net Zero Team/Recycling Lead	part	<ul style="list-style-type: none"> <li>Net Zero Ambassador for Waste will help enforce waste prevention and recycling in the work place</li> </ul>
	Reduce waste going to landfill	Use a contractor that guarantees no waste going to landfill	tbc	Service Leads/Net Zero Team	N	
		Adopt a no-printing policy. Ensure all documents distributed are electronic	tbc	OMB/Net Zero team	N	
Quantify ECC's full inventory of F-gas	Create inventory of refrigeration, air conditioning and heat pump equipment and for each item, record the refrigerant type, the charge capacity and the time in use during the reporting period to plan a reduction programme	tbc	Corporate Property/Building managers/ Net Zero Team	part		
Renewable energy <i>(-0.80% of 2020/21 footprint)</i>	Non-domestic PV	Identify and make business case / seek funding for further non-domestic PV opportunities across ECC estate e.g. Guildhall, ISCA, Arena, ECFC, Corn Exchange, RAMM, University fields, Water Lane II, Bus Station, St Sidwell's Point	-461	City Surveyor/Service Leads/Net Zero Team	Y	<ul style="list-style-type: none"> <li>Ground mounted 1,200 kWp array at Water Lane co-located with energy storage technology and a connection providing a renewable energy supply to the Council's Operations Depot at Exton Road to support the electrification of the Council's fleet. Including Solar PV on the Riverside Sports hall roof and battery store, Matford Centre and John Lewis CP underway. To complete in Dec 2022</li> <li>Review of Solar opportunities and new Invest to Save proposal for generation to reduce rising energy costs and PPA potential to reduce carbon emissions through self-supply to be completed</li> </ul>
	Domestic PV	Install roof mounted PV on 2,386 existing homes and similar proportion of new build Council homes	-376	City Surveyor/Housing lead/Net Zero Team	Y	
Land use change – afforestation <i>(0% of 2020/21 footprint) offsetting potential</i>	Planting broadleaf and conifers	Planting broadleaf and conifers evenly throughout the Valley Parks and greenspace woodland (409ha) between 2022 - 2030 identifies potential to cover 25% of the area.	-829	SMB/Public & Green Spaces Lead	Y	<ul style="list-style-type: none"> <li>Within ECC Exeter P&amp;G Spaces to move from 24% to 30% canopy cover (tree line cover), target for 2030. Working with Greater Devon Network partners to increase canopy cover further across remaining private open spaces.</li> <li>Study to be undertaken to evaluate offsetting opportunities</li> </ul>
		Explore options for offset funding and opportunities within Exeter, utilising Council owned assets	tbc	Public & Green Spaces Lead /Net Zero Lead/SMB	Y	
Overall Organisational Change	Improve understanding of Net Zero actions and Climate Change	Implement 'Carbon Literacy' training to all Councillors, Net Zero Ambassadors, SMB, OMB and other relevant officers	tbc	Net Zero Team	part	<ul style="list-style-type: none"> <li>Quarterly meetings between Net Zero Ambassadors and Net Zero team underway</li> <li>4 members of Net Zero team and 1 Councillor have undertaken Carbon Literacy training</li> <li>2 members of Net Zero team have undertaken training to become Carbon Literacy trainers in July 2022. Councillors, Net Zero Ambassadors, SMB, OMB, and other relevant officers and teams all included in in-house Carbon Literacy Roll Out Programme</li> <li>Footprint Report, Action Plan and all Net Zero progress to be uploaded to internal intranet page and internet page to highlight Council's work</li> <li>Active Members of the Devon Emergency Response Group and endorsement of the Devon Climate Plan</li> </ul>
		Develop communications programme to highlight within the Council and externally, achievements and projects delivered in working towards Net Zero 2030	-	Net Zero Team	N	
		Review City Council policies to determine their negative and positive impact on reducing Council carbon emissions	-	Net Zero Team/Service Leads	N	
		Improve staff capacity to allow delivery of Net Zero across all ECC Services (sectors)	-	All services/SMB	Y	

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		Continue to work with partners locally and nationally to deliver Net Zero	-	All services/SMB/Net Zero team	N	