

REPORT TO STRATEGIC SCRUTINY COMMITTEE

Date of Meeting: 14 March 2024

Report of: Director for Net Zero Exeter & City Management

Title: Working Towards Net Zero - Exeter City Council's Corporate Carbon Reduction Plan

Is this a Key Decision?

No

Is this an Executive or Council Function?

No

1. What is the report about?

- 1.1 This report is the six monthly update on the work of the Net Zero Team, and commitment to Net Zero carbon reduction by 2030 for the City Council.
- 1.2 An update of the Corporate Carbon Reduction Plan (February 2022 v4.0), following a six monthly review of all measures (Achieving Net Zero Report 2022) across each sector of the Council's Carbon Footprint.
- 1.3 A report of the City Council's Annual Carbon Footprint Report and Greenhouse Gas Inventory results for 2022/23.

2. Recommendations:

- 2.1 That members acknowledge progress made and challenges to achieving measures set out in the Corporate Carbon Reduction Plan.
- 2.2 Members note the results of the most recent carbon footprint report (2022/23), which shows a small overall decline of 4% on the previous year.

3. Reasons for the recommendation:

- 3.1 Members have an understanding of the level and range of work being carried out to deliver the Corporate Carbon Reduction Plan to support City Council services, risks and challenges faced, together with resources needed to deliver Net Zero by 2030.
- 3.2 The organisational Greenhouse Gas inventory for 2022/23 follows the production of the previous inventory for 2021/22 and Carbon Footprint Baseline Report 2020/21, both produced by the Centre for Energy and the Environment, from the University of Exeter. The 2020/21 footprint report provided a detailed evaluation of the City Council's emissions across seven sectors including carbon reduction measures, projections and offsetting options to deliver net zero, as set out in the Carbon Reduction Plan.

4. What are the resource implications including non-financial resources

- 4.1 Exeter City Council declared a Climate Emergency in 2019 and as part of this declaration, the City Council set a target to achieve net zero Green House Gas emissions for its own corporate activities by 2030. The target year is 20 years in advance of the national net zero target of 20250, required under the Climate Change Act and reported on in the Sixth Carbon Budget.
- 4.2 Achieving net zero, whether nationally, locally or organisationally, requires broad action across all emission scopes and across every City Council service. Reducing City Council carbon emissions will be very challenging in such a tight time frame and with the resources currently available at our disposal.
- 4.3 Additional resources will be required to enable the Net Zero Team to continue to drive forward the required organisation change and the investment needed to deliver activity across services to support one of the main City Council's Strategic priorities. One-off financial and non-financial resources currently in place were detailed in a report to Executive July 2022, which will need to be addressed next financial year if temporary roles are to be extended or made permanent.
- 4.4 To deliver Net Zero by 2030 will require an increase in financial investment and operational capacity, both internally and from government at a national level. Significant external investment will be required to support the City Council to achieve net zero by 2030. Furthermore, capacity (financial and non-financial) to deliver the measures set out across services in the Corporate Carbon Reduction Plan should be addressed with some urgency to ensure investment is planned.
- 4.5 £1million was committed from earmarked reserves for net zero activity, of which £800,000 was allocated for City Council Activity and £200,000 for City Wide activity. £155,513 remains from City Wide Net Zero and has been committed to appointing a temporary Programme Manager, which was reported to Executive January 2024.
- 4.6 £661,043 has been spent from the £800,000 City Council net zero budget. The table below highlights previous, current and future spend.

	2021/22	2022/23	2023/24	2024/25	2025/26
Staffing 2 temp staff	£0	£75,995	£84,106	£88,451	£91,989 est
SWEEG	£31,610	£19,663	£20,031	£20,031	£20,031
Carbon Literacy		£2,936	£2,977		
Public Transport		£162	£661		
Solar PV		£42,083	£71,870		
Green Accord		£14,880	£1,676		

Feasibility Studies / Research		£8,300	£58,822		
Membership / subscriptions		£1,495	£1,666		
Staff Training	£175	£460	£0		
Conferences & Events		£0	£738		
Mobile Phone		£0	£47		
Devon Climate Emergency		£140			
Other		£48			
TOTAL	£31,785	£166,162	£242,594	£108,482	£112,020

5. What are the legal aspects?

- 5.1 Section 1 of the Climate Change Act 2008 states that '[i]t is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline. The target was originally 80% and was increased to 100% by the Climate Change Act 2008 (2050 Target Amendment) Order 2019.
- 5.2 Exeter City Council has declared a climate emergency and set the target of achieving net zero by 2030.

6. Corporate Carbon Reduction Plan Update

- 6.1 The Corporate Carbon Reduction Plan demonstrates progress made and our commitment to reducing the City Council's Carbon Footprint. The Carbon Reduction Plan is a summary of current and proposed measures taken and is reviewed with service leads across the City Council on a six monthly basis, to provide for an authority wide commitment to Net Zero. The Carbon Reduction Plan is a 'live' document and is reviewed with all relevant service leads on a six monthly basis to monitor progress, and evaluate actions needed to deliver net zero. Listed below are a few of the key updates from the Corporate Carbon Reduction Plan, with a full breakdown of activity within Appendix A.
- 6.2 The results of the most recent carbon footprint report (2022/23), are broken down and the percentage of the overall Carbon Footprint for each sector inserted into the Reduction Plan update. This allows each service to understand carbon emissions attributed to their function and service area. This is highlighted in Section 9 of the report.
- 6.3 Emissions from City Council owned non domestic buildings (commercial property) are now included within our annual reporting and accounts for 42% of our carbon footprint. Opportunities are constantly sought for financing decarbonisation and energy efficiency measures of our commercial property building stock, with a decarbonisation plan being developed. The Net Zero team were successful in obtaining a £6.4M Public Sector Decarbonisation Scheme (PSDS) grant last year to deliver heat

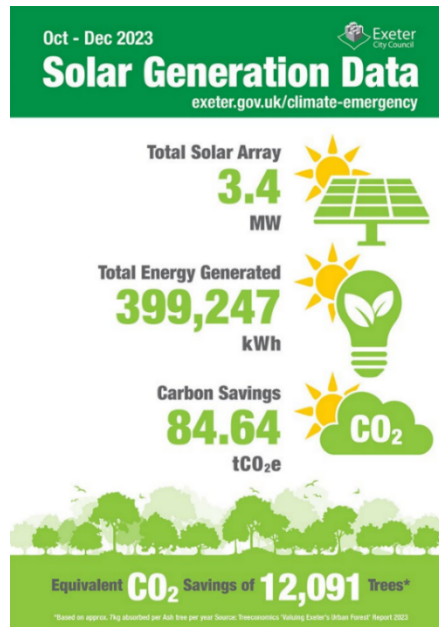
decarbonisation projects for both the Royal Albert Memorial Museum (RAMM) and the Riverside Leisure Centre. These City Council sites, are two of the highest consumers of energy and once the decarbonisation works have been completed, associated carbon emissions savings will be significant. The project includes a new air source heat pump system at RAMM, as well as replacing existing gas fired boilers that are at the end of their life. The Riverside Leisure Centre project replaces an end of life boiler and heating plant with air source heat pumps, there will also be an integrated heat recovery system and an upgrade to its central roof to improve thermal efficiency and to accommodate the roof mounted air source heat pumps. Full feasibility and detailed designs will be made available before the end of year one of the two year project.

- 6.4 RAMM also secured additional funding of £498,000. This grant from the Museum Estate & Development Fund (MEND) is matched by an existing capital programme budget, which will provide vital funds to address the maintenance backlog at RAMM, which will include installation of a permanent access system to the roof, upgrading of the roof, including insulation of 5 roofs and an additional 21 kW PV array. The MEND project is due to complete in June 2024. To support this work, a full decarbonisation plan for RAMM is being developed.
- 6.5 Decarbonisation reports have been produced for Northbrook Swimming Pool, ISCA Centre, the Riverside Leisure Centre and the historic Guildhall. A report for RAMM is due this summer.
- 6.6 The City Council's Green Accord Scheme has been re-launched after a full and comprehensive review. Green Accord is an environmental accreditation scheme for businesses to evidence carbon reduction within their business. It is also a supply chain tool for organisations to ensure their suppliers operate sustainable business practices and are working towards net zero. The scheme was softly relaunched last year and will be used to secure improved supplier engagement for high spend City Council services, and will soon be rolled out to all Housing suppliers. The Net Zero Team are in discussions with a number of South West organisations to promote Green Accord to the business community across the region. Furthermore, the scheme has received endorsement from the Government's new UK Business Climate Hub.
- 6.7 The Net Zero Team have delivered Carbon Literacy training to 196 members of staff, including members of the Strategic Management Board, Organisational Management Board, Councillors and officers from across the organisation. 90 Councillors and staff are certified as being Carbon Literate, which secures Carbon Literate Organisational Bronze Status for the City Council. The team have a programme of additional training courses planned for 2024 and are researching options in how Green Accord can support future work in supporting businesses and community groups from across Exeter.
- 6.8 Housing services are continuing the retrofit programme across the City Council's social housing stock, financed through the Housing Revenue Account and Government funding. A delivery timescale is currently being developed. Government grant of £1.49M has been secured from the Social Housing Decarbonisation Fund for 2023 through to 2025. The funding award represents 43% of the estimated retrofit costs, with a further £1.998m co-funded contribution from the Council, representing 57% and a total expenditure of £3.493M. over a 2year project period. Year 1 programme has been completed with 773 properties to be retrofitted by March 2024, and it is hoped this will increase to 929 properties by March 2025. All part of a fabric first strategy.

- 6.9 The City Council has become a full member of the South West Energy and Environment Group (SWEEG). SWEEG is a collaborative research partnership of South West public organisations and provides the City Council access to detailed technical work by academics from the University of Exeter's Centre for Energy and Environment. Studies include the Water Lane Smart Grid and Storage Project and A Case for Electrification of Fleet. In addition, SWEEG has supported City Development in developing emerging policies for the Exeter Plan. Through our membership, SWEEG have been commissioned to provide a revised Carbon Footprint report and associated study to establish the full financial cost to achieve Net Zero for the City Council by 2030.
- 6.10 The City Council is currently working with Devon County Council and other Devon District Councils to secure Local Electric Vehicle Infrastructure (LEVI) funding. The fund from government will be allocated to Tier 1 authorities (DCC), to support the expansion of on-street residential electric vehicle (EV) charging infrastructure across the County. The City Council will seek funding to install new EV charging facilities in City Council owned car parks (off-street) in line with our City EV strategy, to be reported to Executive later this year for adoption.
- 6.11 The pioneering Water Lane Smart Grid and Storage Project completed last year, has received national recognition, securing a RTPI, APSE and EDIE commendation. More recently, the scheme has been shortlisted by REGEN for a Clean Energy Scheme Award. The ERDF part funded project includes a ground mounted 1.2 MW Solar Farm at Water Lane, co-located with energy storage technology (2MWh battery store). A connecting private wire provides a renewable energy supply to the City Council's Operations Depot at Exton Road to support the installation and roll-out of EV charging infrastructure for the electrification of our operational fleet. The project also includes a 120kw solar PV array on the Riverside Sports Hall roof and battery storage. Battery storage has been installed at both the Matford Centre and John Lewis Car Park to optimise power generation from existing PV. The City Council currently lease 3 eRCV's and has a further two vehicles on trial. The case for full fleet electrification is a compelling one, and would remove all fleet carbon emissions, but this ambition is hampered by the increased cost of leasing electric vehicles.
- 6.12 The City Council is researching revenue funding opportunities through the new South West Net Zero Hub Local Net Zero Fund (£1m Fund). The fund has been created to support South West Local Authorities to deliver on net zero. Grants can be used to investigate opportunities, unlock barriers and get stalled projects moving.
- 6.13 The Net Zero team continue to support the Devon Climate Emergency in attending and contributing to the Tactical Group, Resource Group and Climate Impact Group meetings. The Devon Carbon Plan has recently turned a corner, with delivery now being a focus.
- 6.14 A solar survey has been completed, as well as structural surveys and DNO feasibility to bring together a business case to install solar PV on a number of roofs owned by the City Council. This will support the decarbonisation of City Council owned buildings, to provide energy independence and to reduce energy bills.
- 6.15 The Net Zero Team have supported the Service Lead for Active & Healthy People in reviewing the City Council's Green Travel Policy, as employees returning back into the office has increased post-pandemic. The team will be researching options of reducing re-introducing EV pool vehicles, as business has increased post-pandemic. Once the

Policy has been adopted, implementation of the revised Policy will transfer to the Net Zero team.

- 6.16 The Net Zero Ambassadors have been operational for two years. Due to some of the Ambassadors leaving the organisation for new opportunities elsewhere, we have reviewed the Ambassadors to provide them with more focus and a direct opportunity to reduce carbon emissions within their own service.
- 6.17 The team are developing a new Environmental Plan for the City Council, which is required for contracts we bid for, but too also provide some consistency across the organisation. The Environmental Plan will be brought to committee for sign off.
- 6.18 The team are working with 1Energy to determine the financial and carbon impact of the City Council connecting to the newly announced District Heat Network. Separate work is also ongoing to assist 1Energy to support the skills agenda and to procure goods and services locally, to ensure the project has significant positive impacts within the city.
- 6.19 The Net Zero team will be reviewing the “*Carbon Footprint (Environmental) Implications*” section of the committee report template, to understand how this section can be completed consistency, similar to completing an EQIA for carbon. Discussion with the LGA and Net Zero Go <https://www.netzerogo.org.uk/s/> will be held over the summer, to learn best practice from Local Authorities across the UK.
- 6.20 Planning are working with Strata to purchase software to manage and report on Biodiversity Net Gain across the city from the start of the planning process, all the way through to monitoring of a site for 30 years. The first report is due 2026.
- 6.21 The last 3 years has seen broad operational work to enhance the sequestration potential of City Council owned public space. Since 2021 we have planted 3 new woodlands over approximately 2 hectares of land, New Haven Fields, Monkerton Ridgeline, and Lancelot Road. This has seen an additional 3,512 trees planted. These newly planted trees will start reducing carbon in earnest from year 6 and will reach full carbon potential between the ages of 16 and 25 at which point, based current carbon figures, their carbon storage potential could exceed 9,000 tonnes a year.
- 6.22 In addition, work continues at Northbrook where 950 whips and 50 standards have been planted, extending the potential annual sequestration levels further. Less considered, but nonetheless valuable, is the sequestration value provided by the meadow grass programme city wide. Whilst currently less measurable, studies indicate that a change in intensive grass management could see carbon soil retention worldwide increase in excess of 2.3 billion tonnes through reduced compaction and reduced carbon release. Whilst more work needs to be done to fully understand the sequestration potential of Exeter Meadow areas, the sequestration value they offer is not in question.
- 6.23 The team are working with the City Council's Communications team in informing members of the public in how much solar is generated from our 3.4mw solar estate. The image below show how much solar was generated in Oct – Dec 2023, the information will be updated every 3 months.



6.24 Strata have their own carbon reduction plan and produce their own annual footprint. This is calculated and then split between the Local Authorities they serve. The City Council's share of this is reported in our GHG inventory. Strata is committed to reducing their carbon footprint to net zero and have made progress, primarily through reductions associated with the two datacentres, and reductions in staff travel largely. Recent hardware and cooling equipment upgrades in the datacentres have reduced electrical consumption meaning less power is used, which has a positive effect on the City Council's carbon emissions.

6.25 The 2024/25 Strata Business Plan has a focus on 'Reduce Carbon Footprint', with a number of objectives for this area:

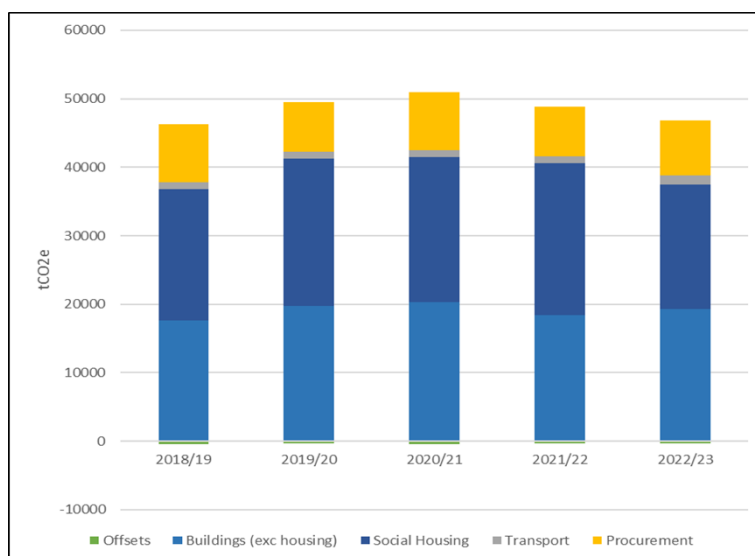
- Introduce a Sustainable procurement policy.
- Ensure when purchasing new hardware that consideration is given to environmental factors such as power consumption, service life, and recycle or reusability when the equipment becomes redundant.
- A green travel plan can be used to identify and promote ways to encourage a range of sustainable, or less environmentally damaging transport modes, usually with the emphasis being on reducing single user private car travel. A plan addresses all transport issues within an organisation including staff travel into their place of work, staff travel on business, and clients visiting the organisation's premises.
- Strata have committed to evaluate staff membership of an electrical leasing salary sacrifice scheme, with a view to implementing if viable.
- Actively monitor the resource utilisation in the datacentres. As systems and servers move towards the cloud, and Global Desktop numbers reduce, the energy usage within the Strata datacentres will reduce. This will enable Strata to leverage the multi-billion-dollar investment companies such as Microsoft and Amazon have made in carbon reduction.
- Strata is aware of several schemes available to them to reuse, harvest components, or recycle redundant equipment.

- Explore options for offsetting carbon emissions. This could be achieved using a charitable partner to plant trees locally, and potentially be funded through disposal of redundant hardware or donations.

7. Carbon Footprint report for 2022/23

- 7.1 The City Council began monitoring its carbon footprint in line with the Devon CO₂ Baseline Commission, set up in 2020 (baseline year). The progress report updates the City Council's carbon footprint, highlighting any changes from the baseline and previous year's inventory. The latest report is included in Appendix B.
- 7.2 Emissions for 2022/23 were 46,495 tCO₂e, which represents a reduction of 1,959 tCO₂e (4%) on the previous year. For the first year, non-domestic buildings that are leased out have been included, with previous years carbon reports being adjusted.
- 7.3 **Non-Domestic Buildings 41% of our footprint (38% in 2021/22)** This section now includes 'leased out' non domestic buildings. Overall, emissions from non-domestic buildings increased in 22/23 by 891 tCO₂e. This masks a whole range of factors some of which increased emissions, and others that decreased them. The electricity emission factor decreased compared to 21/22 which contributed to a general reduction. This was more than offset by increased emissions from leisure centres (Riverside increasing activity compared to 21/22, St Sidwells Point coming online, both of these more than offsetting Pyramids closing). In addition, there was an increase in 1,278 tCO₂e from 'construction and maintenance' as identified from spend records.
- 7.4 **Social Housing 39% of our footprint (46% in 2021/22)** Emissions in this category significantly reduced. This was mainly due to a reduction of 3,330 tCO₂e from 'construction and maintenance' as identified from spend records. Operational emissions remained similar to previous years, as the underlying housing stock has remained similar, with the decrease due to the lower electricity emission factor.
- 7.5 **Transport 3% of our footprint (2% in 2021/22)** Emissions increased by around 16% in this category, however it remains a comparatively small part of our overall carbon footprint. The main source of emissions were from refuse collection vehicles, though there was a 13% reduction in emissions from these, which was influenced by the new electric refuse vehicles in the fleet.
- 7.6 **Procurement 17% of our footprint (15% in 2021/22)** Emissions from this category increased by 12%, driven by an increase in spend across the City Council coming out of the Covid pandemic. For the City Council spend data was available covering 80,033 transactions with 8,432 unique suppliers.
- 7.7 **Offsets -1% of our footprint (unchanged form 2021/22):** Whilst generation remained similar to the previous year, the amount of carbon offset by PV panels fell by 8% over the year as the wider national electricity grid decarbonises. As the grid decarbonises, PV has the potential to offset less fossil-based generation.

7.8 The tables below illustrate Green House Gas emissions by main operational category, as opposed to carbon scope, which better identifies outputs from City Council activities, and the difference in emissions since the baseline year of 2018/19.



Category	2018/19	2019/20	2020/21	2021/22	2022/23	tCO2e difference from 2021/22	% difference from 2021/22	% of 2022/23 Carbon Footprint
Offsets	-468	-333	-423	-365	-334	31	-9.3	-1%
Buildings (exc housing)	17,593	19,695	20,285	18,397	19,288	891	4.6	42%
Social Housing	19,192	21,594	21,183	22,147	18,187	-3,960	-21.8	39%
Transport	1,009	1,013	994	1,094	1,276	182	14.3	3%
Procurement	8,430	7,213	8,445	7,181	8,079	898	11.1	17%
TOTAL	45,756	49,182	50,484	48,454	46,496	-1,958	-4.2	

8. How does the decision contribute to the Council’s Corporate Plan?

8.1 This report and the work of the Net Zero team links directly to the Exeter Vision and a number of strategic priorities. Projects will need to be delivered in partnership with all City Council services to be supported and secure investment and reduce emissions.

Exeter Vision	Innovative & Analytical City	The team has developed a range of data sets to monitor City Council carbon emissions
	Healthy & Inclusive	Ensure City Council owned homes are energy efficient
	The Most active city in the UK	Projects developed to support active travel for employees
	Liveable & connected	Commercial and residential properties are energy efficient and built to the best possible standard
	A leading sustainable city	The City Council is a role model for other organisations in Exeter

Corporate Plan	Value for money services	Carbon reducing actions will be commercially viable and will reduce service delivery costs Solar projects to reduce energy and to provide an income to the City Council. Net Zero projects reduce energy consumption and help to reduce service delivery costs
	Prosperous Local Economy	City Council are supporting the new Innovation Hub, led by the University of Exeter
	Net Zero Carbon City	Net Zero team focuses on reducing City Council carbon emissions to deliver Net Zero by 2030.
	Housing & Building Great Neighbourhoods & Communities	Working with Building Greater Exeter, Liveable Exeter, and other developers in developing sustainable and accessible neighbourhoods and new homes, using sustainable constructions methods
	Healthy & Active City	Working in partnership with Live & Move in developing sustainable travel options and low traffic neighbourhoods for staff active travel. Supporting Leisure to become cost neutral through better energy management and procurement Review of the City Council Green Travel
	Thriving Culture & Heritage	Decarbonisation of City Council owned cultural and heritage facilities

9. What risks are there and how can they be reduced?

- 9.1 The development of the City Council's carbon footprint report, supporting Corporate Carbon Reduction Plan and Net Zero Risk Register will inform the work programme of the Net Zero team and that of other services for the foreseeable future. The Corporate Carbon Reduction Plan is presented to Strategic Scrutiny every six months for ongoing monitoring and evaluation.
- 9.2 Ownership, understanding and a lack of some emissions data is constantly reviewed and addressed by the Net Zero Team, with initiatives undertaken such as the Net Zero Ambassadors and Carbon Literacy Training Programme, as listed in the Corporate Carbon Reduction Plan.

9.3 The financial cost to deliver net zero within the City Council will be significant. This report provides detailed carbon reduction projections, and measures that can be taken to deliver those projections. The team is unable to provide accurate financial costs for the measures needed at present, this will require investment plans and accurate cost proposals. The Net Zero team are working with SWEEG to determine the full cost of achieving net zero by 2030 for the City Council. As soon as the report is completed, it will be presented to Strategic Scrutiny on the resources required to achieve net zero by 2030.

10. Equality Act 2010 (The Act):

10.1 In delivering the action plan, the Net Zero team will take into account the potential impact of actions in relation to age, disability, race/ethnicity (includes Gypsies and Travellers), sex and gender, gender identity, religion and belief, sexual orientation, pregnant women and new and breastfeeding mothers, marriage and civil partnership status in coming to a decision. A separate EQIA is developed for each project.

11. Carbon Footprint (Environmental) Implications:

11.1 The City Council declared a Climate Emergency in 2019 and as part of this commitment, it aims to achieve net zero emissions for its corporate activities by 2030. The Corporate Carbon Reduction Plan provides a clear roadmap of actions to reduce City Council GHG emissions.

11.2 Strategic decisions made, either have a positive or negative effect on City Council carbon emissions. Additional work needs to be undertaken prior to decisions being made, to determine the impact on City Council carbon emissions.

11.3 The Net Zero Risk Register considers the carbon reduction measures required to achieve net zero and measures needed to address the impact of extreme weather events to reduce financial risk and protect City Council services. This is reported to Audit & Governance every six months.

12. Are there any other options?

12.1 There is the option of not committing existing or additional financial and non-financial resources in working towards Net Zero within the City Council. This would result in a lack of co-ordination, strategic direction and delivery in reducing our carbon emissions and to realise the City Council's Net Zero 2030 target. On a regular basis, the Net Zero team are sourcing and applying for external funding to support the delivery of the City Council's Corporate Carbon Reduction Plan, working with services to identify capacity and match funding within the City Council.

Author: Net Zero Project Manager

Local Government (Access to Information) Act 1972 (as amended)

Background papers used in compiling this report:-

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