#### ABERDEEN CITY COUNCIL

COMMITTEE	Council
DATE	6 March 2024
EXEMPT	No
CONFIDENTIAL	No
REPORT TITLE	Council Carbon Budget 2024/25
REPORT NUMBER	COM/24/059
DIRECTOR	Gale Beattie
CHIEF OFFICER	David Dunne
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TERMS OF REFERENCE	2

## 1. PURPOSE OF REPORT

1.1 This report seeks approval for the Council Carbon Budget for the financial year 2024/25, to support the Council Climate Change Plan 2021-25.

## 2. RECOMMENDATIONS

That Council:-

- 2.1 Note the Carbon Budget forecast targets to be achieved up to 2029/30;
- 2.2 Agrees to set the Council's target of maximum carbon emissions for 2024/25 at 24,113 tonnes of carbon dioxide equivalent (tCO2e);
- 2.3 Instruct the Chief Officer Strategic Place Planning following consultation with Chief Officer Data and Insights, to establish a Council Carbon Data Forum, to review and mature the Council's approach to carbon data;
- 2.4 Instruct the Chief Officer Strategic Place Planning, following consultation with the Chief Officer Capital, to develop methodologies for estimating and assessing carbon impacts; and report on the processes in the annual Climate Change Report to Net Zero, Environment and Transport Committee.

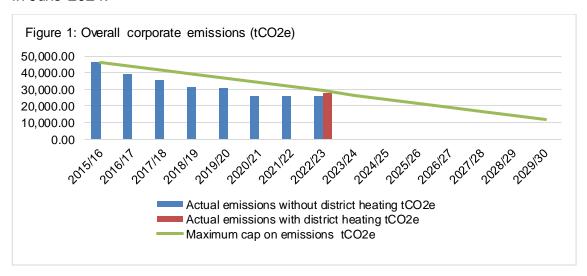
#### 3. CURRENT SITUATION

## **Background**

- 3.1 Section 44 of the Climate Change (Scotland) Act 2009 requires the Council, in exercising its functions, to act in the best way calculated to contribute to the delivery of Scottish Government emission reduction targets. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 specifies 2045 as the net-zero emissions target year, with an interim target of at least 75% lower than the baseline by 2030.
- 3.2 Under the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 the Council must include narrative in annual

Climate Change Reports on how it will align its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets.

- 3.3 Setting strategic direction, targets and action, the Council approved a Council Climate Change Plan in March 2021 for Council assets and operations; worked collaboratively to set city wide climate targets and goals through a Net Zero Aberdeen Routemap and Aberdeen Adapts: Climate Adaptation Framework in March 2022; and declared a Climate and Nature Emergency in March 2023.
- 3.4 The Carbon Budget supports delivery of the Council Climate Change Plan 2021-25 and sets the maximum tonnes of carbon dioxide equivalent (tCO2e) that the Council can emit in a given period, to keep on track with emission reduction targets. It indicates an emission reduction pathway informed by historic emissions data, annual emission factors, estimated carbon savings from known projects and considers factors that may place pressure on the carbon budget, where information is available.
- 3.5 The Carbon Budget is reviewed annually to inform planning and decision making around areas where the level and pace of action and investment needs adjusted to sustain carbon savings. At the budget setting meeting in March 2023, the Council Carbon Budget was approved alongside the annual financial budget for the first time.
- 3.6 Carbon emissions are calculated using UK Government annual Greenhouse Gas (GHG) reporting conversion factors, applied to data, including utility and fuel consumption. GHG reporting conversion factors for 2024 will be published in June 2024.



#### Emissions are classed as:

- Scope 1: direct emissions i.e. from use of gas heating, diesel in fleet.
- Scope 2: emissions from electricity and purchased heat and steam.
- Scope 3: indirect emissions, from activities related to external processes.

Council scope 1 & 2 emissions must be reported and relevant scope 3 emissions should be reported. Data maturity varies for different categories of scope 3 which covers upstream and downstream emissions ranging from staff business travel to supply chain. Where there is consistent data and reliable methodology, a number of scope 3 emissions are already captured by the Council (as detailed in 3.13), further guidance on scope 3 methodology and reporting is anticipated from Scottish Government.

- 3.7 Overall emissions have remained under the maximum cap on emissions to date (Figure 1). Key carbon savings achieved are from delivery of a range of actions, with more significant savings from the LED street lighting programme (now complete) and connections to district heating; alongside decarbonisation of the UK electricity grid.
- 3.8 Factors that have put pressure on accounted emissions have included temporary changes to waste management, additions estate profiles/ operating hours, required changes to methodology and increases in GHG conversion factors, such as those for electricity in 2023.

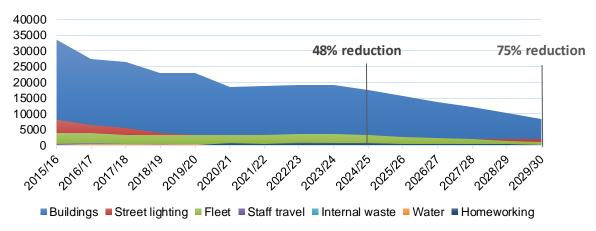
# Carbon Budget 2024-25

- 3.9 To keep on track with Council net zero targets, including the interim target of at least a 48% reduction in tCO2e by 2025 and a 75% reduction by 2030 against a 2015/16 baseline, the maximum limit on emissions for the financial year 2024/25 is 24,113 tonnes CO2e (*Table 1*). This requires a balanced budget across emission sources including energy and water use in Council buildings, Council fleet, street lighting, internal waste and staff travel.
- 3.10 The 2024/25 carbon budget and provisional carbon budget forecast up to 2029/30 is shown in *Table 1* and *Figure 2* and supports interim targets.

Table 1: Council Carbon Budget - maximum cap on emissions

	Baseline	Actual	Maximum	Forecast	Forecast	Forecast	Forecast	Forecast
Year	2015/16	2022/23	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Unit	tCO2e	tCO2e	tCO2e	tCO2e	tCO2e	tCO2e	tCO2e	tCO2e
Buildings energy	33,545	19,198	17,444	15,632	13,821	12,009	10, 197	8,386
Fleet	3,775	3,704	3,185	2,736	2,288	1,840	1,391	943
Street lighting	8,150	2,607	2,432	2,315	2,196	2,078	1,961	1,840
Staff travel	469	277	245	219	193	168	142	117
Internal waste	213	856	108	97	86	75	64	53
Water	218	63	62	60	58	57	56	55
Homeworking	-	799	639	549	463	374	286	198
Total	46,371	27,504	24,113	21,609	19,105	16,601	14,097	11,592

Figure 2: Emissions trajectory to 2030 (tCO2e)



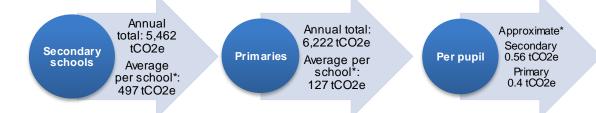
- 3.11 The cumulative carbon budget for the period (2021/22 2029/ 2030) is 194,059 tCO2e. Actual emissions 2021-23 totalled 53,663 tCO2e, which is 27% of the available budget. Accounted emissions indicate we have remained under the maximum cap on emissions, this has included with the addition of district heating data for 2022/23. The carbon budget forecast to 2029/30 indicates significant carbon savings are required to meet targets.
- 3.12 Energy use in buildings accounts for 70% of Council emissions and within that figure, the school estate is the main source of emissions at 64% (Figures 3-5).

Figure 3: emission sources tCO2e

Figure 4: building (energy) emission sources tCO2e



Figure 5: 2022/23 actual emission totals and average school estimates



\*tCO2e does not reflect shared use of premises

3.13 It takes time to develop the enabling plans and infrastructure; as well as complete projects before they can start to deliver carbon savings. During that time there will be a cumulative impact from emissions. As emission savings

from grid decarbonisation slow; and as quick win carbon measures are achieved, reductions will become increasingly challenging. Key considerations for reducing scope 1 & 2 emissions are shown below:

		% emissions	Key source	Carbon savings	Pressures
1.	Buildings	70%	Gas/ electricity (87%)	Renewable energy District heating Energy efficiency Optimising estate Fabric improvements	Additions to estate/ operating hours Project delays Cold weather
	A Local Heat and Energy Efficiency Strategy (LHEES) is in development. The will help inform the scale up of viable models for decarbonising heat are medium to longer term carbon and investment decisions. Wider plans including those for assets and the school estate can support reduced emissions.				carbonising heat and Wider plans including
2.	Fleet (vehicle assets/plant)	13%	Diesel (95%)	Electric, hydrogen, dual fuel fleet Route planning	Market availability Service increases Lack of infrastructure
	Electric, hydrogen and hybrid vehicles are being phased into the fleet. At this time fleet has an adjusted forecast to meet the emissions trajectory.				
3.	Street lighting	10%	Electricity	LED lighting Use of technology	Additional street lights ie new development
	The LED street lighting programme, alongside grid decarbonisation, has made a significant contribution to overall emission reductions to date and the delivery of a balanced carbon budget. This programme is now complete.				

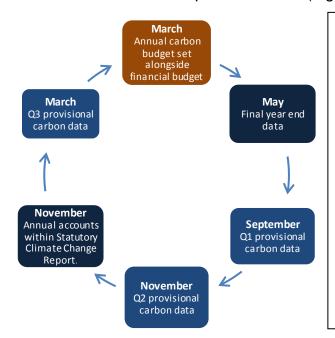
A smaller percentage of emissions are from the sources below, which are classed as scope 3 emissions:

- Staff business travel: represents around 1% of overall emissions; of that 1%, 68% of emissions are from grey fleet. Any emission savings achievable from initiatives, such as current reviews of the Staff Travel Plan and Policy and uptake of active travel options are yet to be quantified.
- Water: smaller savings can be achieved through water efficient appliances and repair actions. Water leaks would be a carbon pressure.
- Internal waste: management through the energy from waste plant will bring emissions back down to around 1% of the corporate footprint (based on reported data). Subsequent, emission savings would be from reduce, reuse, recycling and circular economy measures.

## Monitoring and reporting cycle

- 3.14 From 2023/24, carbon data has been monitored on a quarterly basis. As agreed at Council (Budget) on 1 March 2023, provisional quarterly carbon budget updates are included as part of Performance Reports to the Net Zero, Environment and Transport (NZET) Committee.
- 3.15 To meet statutory requirements, Council emissions are reported annually to Scottish Government. The most recent return was approved at Net Zero,

Environment and Transport Committee, in November 2023 and covered emissions data for the period 2022/23 (*Figure 1*).



# Carbon budget process

- Carbon budget and medium term forecast set annually (Council).
- Provisional\* quarterly carbon updates – (NZET committee).
- Year end carbon data completed and located centrally.
- Annual carbon returns reported NZET committee, part of the Climate Change Report submitted to Scottish Government.

\*Some quarterly data may be based on estimates due to billing timelines or is not available on a quarterly basis.

3.16 Local Authority carbon accounting remains an area of development and a continuous improvement approach will be taken to mature processes. This includes refining methodologies for estimating, measuring and quantifying the carbon impact of projects and proposals to; support monitoring, strengthen forecasts and inform the level of action required in revisions to climate plans.

# Policy change/ influences

- 3.17 A number of external policy factors are emerging and any impacts from these on the approach and required scope for carbon management in the medium to longer term are still to be determined, these include:
  - Recommendations from an Environmental Standards Scotland investigation to Scottish Government support to local authorities in their duty to contribute to the delivery of climate change targets.
  - Scottish Government development of new statutory guidance for application of public sector climate duties, due for publication by March 2025.
  - Outputs from the Climate Intelligence Service, being established in Scotland to provide local authority support on emissions.

## Responsibilities

3.18 To support emissions management, indicative allocation of emissions at Cluster level will be taken forward in 2024/25. This will take on board alignment with the Council organisational structure review, be based on scope of influence within the Cluster on emission sources and will be done in dialogue with relevant officer groups, as indicated below.

- Emissions Group Owners: these are data holders, with responsibility for relevant infrastructure, policy, procedures.
- Group users: such as fleet operators, building managers.
- Managers: by increasing awareness of ways to support emissions reductions for their Cluster, in line with People Manager indicators under job families.

		Baseline	Actual	Maximum	Emission Group Owner	Group User	Managers	% reduction
	Year	2015/16	2022/23	2024/25				
	Unit	tCO2e	tCO2e	tCO2e				
2	Buildings energy	33,545	19,198	17,444	Corporate Landlord	Education 64% Other Clusters 36%	tbc	9%
Scope 1 & 2	Fleet	3,775	3,704	3,185	Operations*	Operations 95% Other Clusters 5%	tbc	14%
Sco	Street lighting	8,150	2,607	2,432	Operations*	Operations*	tbc	7%
	Staff travel	469	277	245	Finance	All Clusters	tbc	11%
e 3	Internal waste	213	856	108	Operations*	All Clusters	tbc	87%
Scope	Water	218	63	60	Corporate Landlord	All Clusters	tbc	4%
	Homeworking	-	799	639	P&OD**	All Clusters	tbc	20%
	Total	46,371	27,504	24,113				

<sup>\*</sup>Operations & Protective Services

3.19 To help build maturity and strengthen processes in carbon budgeting and identify areas of improvement in internal carbon accounting and reporting practices it is proposed a Council Carbon Data Forum is established. The carbon budget will be refined to reflect any required changes to methodology or guidance, improvements to scenario modelling and carbon quantification that may arise from external factors.

## 4. FINANCIAL IMPLICATIONS

- 4.1 There are no direct financial implications arising from the recommendations of this report.
- 4.2 The carbon budget is not a direct analysis of the carbon impact of financial spend. Initial work has taken place in 2023/24 to improve understanding of the carbon impact of Council spend. However, Scottish Government is working on an improvement plan to encourage increasing, measuring, monitoring and reporting of scope 3 emissions pending new statutory guidance. Information on this and any proposals around methodology are yet to emerge.
- 4.3 Scottish Government guidance for the public sector states given the global climate emergency, public bodies must play a key role to achieve net zero emissions, by aligning investments and programmes. As the Council's carbon budget process matures, narrative on how the Council is aligning spend, use of

<sup>\*\*</sup>People & Organisational Development

resources and emission reduction will be strengthened in the annual Climate Change Report.

## 5. LEGAL IMPLICATIONS

- 5.1 There are no direct legal implications arising from the recommendations of this report.
- 5.2 The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 introduced additional annual reporting requirements including a requirement that, where applicable, public bodies must report on their progress in delivering their emissions reduction targets.
- 5.3 The Council, along with other public sector organisations, has a statutory duty under the Climate Change (Scotland) Act 2009 to act in the best way calculated to contribute to the delivery of the 2009 Act's emission reduction targets. These targets include net-zero emissions by 2045. The Council also has a statutory duty under the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Order 2015 to prepare a report on compliance with its climate change duties each year and to send the report to the Scottish Ministers.

#### 6. ENVIRONMENTAL IMPLICATIONS

6.1 The information included in this report on the carbon budget and forecast position are to support the delivery of emission targets and a reduction in carbon emissions. As well as increase accountability and progress with monitoring activity against approved commitments set under the Council Climate Change Plan.

## 7. RISK

7.1 The assessment of risk contained within the table below is considered to be consistent with the Council's Risk Appetite Statement.

Category	Risks	Primary Controls/Control Actions to achieve Target Risk Level	*Target Risk Level (L, M or H)  *taking into account controls/control actions	*Does Target Risk Level Match Appetite Set?
Strategic	Failure to	Setting annual carbon	M	Yes
Risk	track,	budget.		
	forecast	Data improvements.		
	carbon	Climate change		
	emissions.	embedded into decision		
	Risk to	making.		

	Council net			
	zero targets.			
Compliance	Risks to compliance with climate	Implementation of the carbon budget to support target setting,	L	Yes
	change duties.	data improvements and monitoring.		
Operational	Failure to deliver carbon savings. Inefficient data capture.	Up to date emission factors are used. Improvements to data collation.	M	Yes
Financial	Lack of investment to deliver carbon savings.	Guidance to officers. Refining carbon budget processes.	M	Yes
Reputational	Failure to meet Council net zero commitments	Quarterly updates to Net Zero, Environment & Transport Committee. Annual Climate Change return to Scottish Government.	M	Yes
Environment / Climate	Failure to reduce carbon. Non delivery of carbon savings.	Monitoring of carbon data. Annual carbon budget setting. Guidance to officers.	M	Yes

# 8. OUTCOMES

COUNC	IL DELIVERY PLAN 2022-2023
	Impact of Report
Aberdeen City Council	The proposals within this report support the delivery
Policy Statement	of the following aspects of the policy statement:-
	Commit to providing an annual carbon budget
Working in Partnership for	alongside the council's annual budget and providing
<u>Aberdeen</u>	CO2 emission statements as part of the Annual
	Accounts of the Council.
Aberdeen City Lo	ocal Outcome Improvement Plan 2016-26
Prosperous Place Stretch	The proposals within this report support the delivery
Outcomes	of LOIP Stretch Outcome 13. Addressing climate
	change by reducing Aberdeen's carbon emissions
	by at least 61% by 2026 and adapting to the
	impacts of our changing climate

Regional and City	The proposals within this report support Council
Strategies	plans and strategies including the Council Climate
_	Change Plan, the Estates and Assets Strategy, the
	Fleet Replacement Programme.

## 9. IMPACT ASSESSMENTS

Assessment	Outcome
Integrated Impact Assessment	New Integrated Impact Assessment has been completed
Data Protection Impact Assessment	Not required.
Other	Not required.

## 10. BACKGROUND PAPERS

- 10.1 City Growth & Resources, 28 October 2020, Climate Change Report 2019/20 COM.20.152 Appendix 4 Options for Carbon Budgeting
- 10.2 Council, 3 March 2021, Council Climate Change Plan 2021-25 COM.21.047
- 10.3 Council, 28 February 2022, Climate Change: Citywide Strategy & Council Carbon Budget COM.22.054 Appendix 5 Council Carbon Budget
- 10.4 Council, 1 March 2023, General Fund Revenue Budget and Capital Programme RES.23.085 Appendix 14 Carbon Budget
- 10.5 Net Zero, Environment and Transport Committee, 31 October 2023, Climate Change Report 2022/23 COM/23/329

#### 11. APPENDICES

11.1 Appendix 1 - Carbon emissions (tCO2e), school estate 2022/23

## 12. REPORT AUTHOR CONTACT DETAILS

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