



ENVIRONMENT, CLIMATE EMERGENCY AND TRANSPORT COMMITTEE

Monday 15 July 2024

REPORT TITLE:	CARBON BUDGET PERFORMANCE REPORT 2023-24
REPORT OF:	DIRECTOR OF REGENERATION AND PLACE

REPORT SUMMARY

This is the fourth annual Carbon Budget Performance Report and covers the 2023/24 financial year. It shows actual emissions compared against the 2023/24 Carbon Budget Target. This allows the Council to measure progress towards its target of carbon net zero by 2030 as included in the Environment and Climate Emergency Policy.

Annual Carbon Budget Targets and performance to date are shown in the table below. Emissions are shown as tonnes of carbon dioxide equivalent (CO₂e) which is the internationally recognised standard for reporting of Greenhouse Gas (GHG) emissions.

Financial Year	Annual Carbon Budget (tonnes CO₂e)	Actual Emissions (net tonnes CO₂e)
2019/20	13,656 (Baseline)	13,656
2020/21	10,349 (Mobilisation year)	9,424
2021/22	7,843	6,275
2022/23	5,944	5,661
2023/24	4,505	5,774
2024/25	3,414	
2025/26	2,587	
2026/27	1,961	
2027/28	1,486 (Re-baselining due)	

The Carbon Budget emissions limit for 2023/24 was 4,505 tonnes CO₂e. Net actual emissions were 5,774 tonnes CO₂e which is 1,269 tonnes CO₂e above the limit set for the year. The 2% increase on 2022/23 may be explained by technical adjustments to the conversion factors. Actions taken to date have reduced reportable emissions from the baseline and the total seems to have stabilised around the 2022/23 level.

The Carbon Budget sets a limit of 3,414 tonnes CO₂e for 2023/24 – a reduction of 2,360 tonnes CO₂e in comparison to 2023/24 performance. This reduction will only be achieved if fossil fuel use for heating is reduced significantly.

It has been acknowledged that a stage would be reached when the easier actions would be exhausted and that measures to tackle the remaining emissions would be more difficult to

implement. This is being addressed by attempting to take advantage of the support available from government to deliver emissions reduction projects at minimum cost to the Council.

The reduction in emissions over 2021/22 has been achieved because of green electricity purchase and reduced use of energy in Council assets from the baseline year. The reduction of emissions associated with use of fossil fuels is reiterated as a key issue that needs to be prioritised.

Actions to preserve current performance and achieve further reductions are described. Steps to include more emissions sources for the next re-baselining are noted and documented. Longer-term issues that will have to be addressed to meet the 2030 target are noted.

This matter affects all Wards within the Borough although it only applies to Council-owned Assets.

This is not a key decision.

RECOMMENDATION/S

The Environment, Climate Emergency and Transport Committee is recommended to note the Council's performance and progress towards its target of carbon net zero by 2030.

SUPPORTING INFORMATION

1.0 REASON/S FOR RECOMMENDATION/S

- 1.1 On 15 July 2019 Council Members declared an Environment and Climate Emergency that included an instruction to reinstate Carbon Budget reporting. An annual Performance Report (written after the end of the financial year) outlines actual performance against set targets and highlights practical strategies being used that aim to reduce emissions.

2.0 OTHER OPTIONS CONSIDERED

- 2.1 There is an instruction from Members to reinstate Carbon Budget reporting so no other options were considered. The report is annual because the impact of seasonal variation renders anything other than a 12-month interval impractical and potentially misleading.

3.0 BACKGROUND INFORMATION

- 3.1 Performance information has been gathered and compiled using the same approved methods that were used to develop the baseline. Continued use of the Local Partnerships calculation toolkit allows comparison over time. It should be noted that the tool shows gross emissions. Net emissions are calculated by subtracting permitted offsetting measures.

3.2 Measured Performance

- 3.2.1 The Carbon Budget emissions limit for 2023/24 was 4,505 tonnes CO₂e. Net actual emissions were 5,774 tonnes CO₂e which is 1,269 tonnes CO₂e above the limit set for the year. Carbon Budgets and performance to date are tabulated below.

Financial Year	Annual Carbon Budget (tonnes CO ₂ e)	Actual Emissions (net tonnes CO ₂ e)
2019/20	13,656 (Baseline)	13,656
2020/21	10,349 (Mobilisation year)	9,424
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2024/25	3,414	
2025/26	2,587	
2026/27	1,961	
2027/28	1,486 (Re-baselining due)	

- 3.2.2 At the request of the Environment, Climate Emergency & Transport Committee the information contained in the table above is presented as a graph included as Appendix 1.
- 3.2.3 It should be noted that the carbon budget only includes only those buildings within scope at the time of the baseline study in 2019. Additional buildings and emissions

sources are reported separately in item 3.6.3 and will be included when re-baselining takes place in 2027/28.

3.2.4 Reporting convention requires that emissions be classified according to their defined scope. The table below shows measured emissions for the 2019/20 baseline the previous year 2022/23 and 2023/24 as well as the year-on year percentage change. Historic annual emissions from the baseline to the current reporting year are included as Appendix 2.

Scope	Emissions Type	2019/20 Baseline Emissions (tonnes CO ₂ e)	2022/23 Actual Emissions (tonnes CO ₂ e)	2023/24 Actual Emissions (tonnes CO ₂ e)	Change from previous year
Scope 1	Heating	5,994.67	4,496.60	4,626.43	+ 2.9%
	Authority's Fleet	599.99	509.68	481.64	- 5.5%
Scope 2	Electricity	5,924.40	3,932.10	4,255.64	+ 8.2%
Scope 3	Staff Travel	482.03	226.24	244.27	+ 8.0%
	Transmission & Distribution Losses	502.97	359.70	368.18	+ 2.4%
	Water	151.94	68.34	53.60	-21.6%
Total Emissions (Gross)		13,656.00	9,592.66	10,029.76	+ 4.6%
Carbon Offsets		0	0	0	0
Green Tariffs		0	(3,932.10)	(4,255.64)	+ 8.2%
Total Emissions (Net)		13,656.00	5,660.56	5,774.14	+ 2.0%

3.2.4 The net calculated emissions show an increase of 2.0% against the previous year (2022/23) and a 57.7% reduction compared with the 2019/20 baseline.

3.2.5 Taking into account technical adjustments described in section 3.3 the 2% increase in emissions may be interpreted as 'flatlining' of performance. Actions taken to date have reduced reportable emissions from the baseline and the total seems to have stabilised around 2022/23 levels.

3.2.6 It has been acknowledged that a stage would be reached when the easier actions would be exhausted and that measures to tackle the remaining emissions would be more difficult to implement. This is being addressed by attempting to take advantage of the support available from government to deliver emissions reduction projects at minimum cost to the Council.

3.3 What has affected 2023/24 net emissions?

3.3.1 Changes to the annual conversion factors have added to reported emissions. If they had not changed reported emissions for 2023/24 would have been marginally lower than 2022/23.

3.3.2 Emissions associated with the production of electricity have increased by 7.1% and this is reflected in the 2023 conversion factors that are used to calculate emissions. These are technical adjustments that reflect a decrease in low carbon generation

assets supplying the national grid. This adds 275 tCO₂e to the gross scope 2 emissions reported but is not included in the net calculation because of green purchasing. Scope 3 emissions associated with electricity use are included in the net figures.

- 3.3.3 The 2023 conversion factor for natural gas rose by 0.2%. This has less of an impact on reported figures than electricity but has added 104.21 tCO₂e to reported scope 1 emissions.
- 3.3.4 Fleet transport emissions have reduced by 5.5% over the year which is a positive sign although the generally milder conditions may have affected diesel use for gritting over the winter period. It should be appreciated that reducing the use of fossil fuel in fleet vehicles will be slow because of the expense of purchasing alternatively powered vehicles and the availability of non-diesel alternatives.
- 3.3.5 Emissions associated with business mileage claims have risen by 8.8% although they remain well under the baseline figure. It is assumed that the year-on-year rise is driven by operational necessities.
- 3.3.6 Emissions associated with water have reduced by over 20%. This is most likely due to regular monitoring and the early identification and repair of leaks.

3.4 Summary of Council Actions in 2023/24

- 3.4.1 Following the development of the Environment and Climate Emergency Policy and the subsequent Environment & Climate Emergency Action Plan (ECEAP), the Environment and Climate Emergency Action Group was established to oversee the delivery of the ECEAP. The Group meets every two months. Progress against the ECEAP is reported separately.
- 3.4.2 The Council took the decision to purchase REGO (Renewable Energy Guarantee of Origin) backed green electricity for 2023/24. This was introduced as a temporary measure pending investigations into acquiring energy from renewable sources - potentially through Power Purchase Agreement if this proves financially beneficial and delivers net zero electricity. It must be acknowledged that the purchase of REGO backed electricity is not universally accepted but its use is included in the Guidance for Greenhouse Gas Reporting issued by Government as a method of reducing net emissions.
- 3.4.3 The Climate Emergency Team has piloted an efficiency drive in conjunction with colleagues in Leisure at six complexes: The Concourse, Europa Pools, Leasowe, The Oval, Bidston Sports & Activity Centre and Guinea Gap. The initiative has proved successful. Analysis of billing data shows a net emissions reduction 330.46 tCO₂e for the 6 sites over 2023/24. Despite this initiative scope 1 emissions have risen by 2.9%. The reasons for this rise are being investigated but may be affected with colder weather over the months of November 2023 and January 2024.
- 3.4.3 The Council applied for capital funding from the Public Sector Decarbonisation Scheme (PSDS) that could potentially reduce emissions by 1,842 tCO₂e by 2026/27 through the reduced use of gas and increased use of on-site renewables. The combined bid was led by the Liverpool City Region's North-West Net Zero Hub. It

was estimated that the value of the Wirral portion of the decarbonisation work was £14.76m of which £12.8m was expected in the form of PSDS grant support. The participant contribution of £1.96m was secured internally.

- 3.4.4 On 15 May 2024 the Council was informed that the North-West Net Zero Hub were in discussion with the PSDS Scheme administrators, Salix, to finalise the grant offer based on a substantial reduced amount of grant compared to the initial request. The programme has been approved on quality and deliverability but there is not enough funding to cover the grant request.
- 3.4.5 The North-West Net Zero Hub discussed the matter the Council on 20 May 2024 and provided indicative figures. The available grant for Wirral from the PSDS scheme has been reduced to around £900k which severely restricts what can be delivered in the current round. The Council is working to prioritise the individual projects to make optimal use of the reduced funding available and maximising the emissions reduction within these new constraints. Any projects that are not taken forward will be resubmitted in the next PSDS funding round that is expected to take place in Autumn 2024.
- 3.4.6 As reported for 2022/23 18 Wirral sites were put forward to the Liverpool City Region for inclusion in a Low Carbon Skills Fund (LCSF) application. The LCSF delivers Heat Decarbonisation Plans (HDP's) at no cost. HDP's are now necessary to bid for capital funding from PSDS. The highly competitive nature of the bidding process meant that the bid was not successful. The 18 sites were resubmitted as part of the North-West Net Zero Hub led April 2024 collaborative bid. The 18 sites selected will address combined scope 1 emissions of 624 tonnes CO₂e. A decision is expected in July 2024.
- 3.4.7 The 2024 LCSF collaborative bid also included 8 maintained schools. Although the decarbonisation of schools will not affect the Council's carbon budget it is estimated that the plans could potentially reduce emissions by 868t CO₂e. This would apply to the wider Borough target of achieving net zero by 2041.
- 3.4.8 Tree planting over the 2023/24 season provided a net gain of 16,164 trees. A suitable method of recording sequestration to take account of losses is being developed to meet the Woodland Trust Carbon Code and will be reported at a later stage.

3.5 Council Priorities for Emissions 2024/25

- 3.5.1 Detailed actions for the coming year are included in the Environment and Climate Emergency Action Plan (ECEAP) and cover the diversity of the Council's activities. Initiatives that will impact on emissions reported include:
- Progress plans to improve energy efficiency of the Council estate by building on lessons learnt from Leisure facilities initiative
 - Delivery of PSDS funded decarbonisation and continued development of a project pipeline through heat decarbonisation plans with support from the Liverpool City Region and North West Net Zero Hub.
 - Integrate heat decarbonisation plans with Asset delivery plans.
 - Finalise the fleet review and develop an outline business case to transition the fleet to low or zero emission vehicles.

- Adoption of the council Electric Vehicle Infrastructure Strategy and publication of a public facing report.

3.5.2 The Carbon Budget sets a limit of 3,414 tonnes CO₂e for 2023/24 – a reduction of 2,360 tonnes CO₂e in comparison to 2022/23 performance. This reduction will only be achieved if fossil fuel use for heating is reduced significantly.

3.6.3 The disposal of assets will reduce Council emissions although it must be acknowledged that these emissions are effectively transferred to the Borough and will need to be addressed by the new occupants in order that the Cool 2 Wirral net zero target is met before 2041.

3.6 Increased Reporting

3.6.1 One of the recommendations made by Local Partnerships was to add to the list of emissions being reported in cases where reliable reporting threads can be established for measures that may be converted to Carbon Dioxide equivalent (CO₂e). Most of these emissions will be 'scope 3' (sometimes called Other Indirect) which are incurred when the Council uses a product or a service but cannot directly influence the emissions associated with it.

3.6.2 Where reliable and coherent reporting is established, the annual performance report will record the annual emissions until they can be incorporated into the Carbon Budget when it is re-baselined. These processes are at a very early stage so it is not possible to provide detail. The following possibilities are being explored:

- Fugitive Emissions are Scope 1 emissions that the Council has not been able to report because of continuing resource constraints. If the necessary resource is made available, this reporting thread may be established.
- The Local Partnerships reporting template includes several new sections aimed at increasing Scope 3 reporting. These may be used if it is possible to obtain regular information in a consistent manner from suppliers and contractors. It may be necessary to consider estimation as the only practical way of including some emissions sources.
- The reporting of Scope 3 from the Council's purchase of goods and services remains a priority action for 2024/25. This is a complex area that could have legal implications.
- A suitable method of recording sequestration to take account of losses is being developed to meet the Woodland Trust Carbon Code and will be reported at a later stage.
- The reporting of emissions from refuse collection are being built into the new contract currently being negotiated. These will be reported as Scope 3 emissions once the re-baselining takes place.

3.6.3 The Council estate is constantly changing with disposals and acquisitions so in order to maintain consistency it is necessary to report on a fixed asset base. This means that the report will not represent total emissions across the estate. Major changes will require a 're-baselining' and this will take place in 2027/28 as planned.

3.6.4 Over 2023/24 the Council took ownership of its new office accommodation in October 2023, the Wirral Evolutions sites and transferred a number of energy supplies previously paid by tenants. These additions have been captured and the

combined 2023/24 emissions are tabulated below. Annual performance will be recorded in this section of subsequent Carbon Budget Performance reports and incorporated into the carbon budget when it is re-baselined in 2027/28

Emissions	2023/24 Emissions (tonnes CO2e)	2024/25 Emissions (tonnes CO2e)	2025/26 Emissions (tonnes CO2e)	2026/27 Emissions (tonnes CO2e)	2027/28 Emissions (tonnes CO2e)
Scope 1	216.17				
Scope 2	224.62				
Scope 3	33.06				
Gross	473.85				
Net	249.23				

3.6.5 The Government has now included factors for homeworking in the 2022 Government Greenhouse Gas Conversion Factors. Conversion factors for previous years are not available. The factors are based on guidance produced by the international consultancy Eco Act. The published conversion factors are:

Activity	Unit	2022 Total kg CO ₂ e per unit	2023 Total kg CO ₂ e per unit
Office Equipment	per FTE Working Hour	0.03168	0.03144
Heating	per FTE Working Hour	0.30907	0.30234

3.6.6 Once a robust reporting method to ensure consistency has been developed these Scope 3 emissions will be incorporated into the Carbon Budget when it is re-baselined in 2027/28.

3.6.7 It should be appreciated that whilst the Council is very willing to increase the Scope 3 emissions it reports, resource and cost considerations have to be balanced against the potential significance of the enhanced reporting.

3.7 Longer Term Issues

3.7.1 The Council has set an ambitious target of achieving carbon net zero by 2030 and whilst this is possible, it is necessary to initiate programmes to address some issues that will inevitably take some time to make an impact on emissions. These include but are not limited to:

- Reducing use of fossil fuels which can be achieved by improving the thermal performance of the Estate and by replacing fossil fuel fired systems with an alternative low carbon energy source. Heat pumps are an option in some cases but given that electricity is significantly more expensive than natural gas, ways to reduce the heat demanded need to be examined. Suitable actions are to be developed to take advantage of Public Sector Decarbonisation (PSDS) grant funding.
- Management of water will not have a major impact on emissions but undetected leaks and malfunctioning equipment will add significantly to costs.

- Council buildings are occupied and operated by people. It is vital that all staff are aware of and support the Council's aims regarding emissions – as well as the role they play as individuals. The Council has achieved bronze status from the Carbon Literacy Project and is providing more training opportunities to reach silver status.
- It may be necessary to develop an approach to carbon offsetting. It may be necessary to consider this option in cases where decarbonisation is not technically feasible or if it is unaffordable. It is understood that not all schemes available are credible and that a robust approach will be needed to ensure that best value is achieved.

4.0 FINANCIAL IMPLICATIONS

- 4.1 There are no direct financial implications associated with reporting of progress toward the corporate goal of achieving net zero emissions by 2030. The reduction of emissions will be achieved through the implementation of the Environment and Climate Emergency Action Plan (ECEAP) which is overseen by the Environment and Climate Emergency Action Group. There will be financial implications associated with delivery of the CEAP.
- 4.2 Bidding for Public Sector Decarbonisation (PSDS) grant funding to cover the cost of projects to reduce use of fossil fuels has been set as a priority in the Climate Emergency Action Plan. PSDS provides grant funding for public bodies to fund heat decarbonisation and energy efficiency measures. PSDS now requires applicants to contribute to costs.
- 4.3 The original PSDS bid submitted in November 2023 was expected to deliver decarbonisation work to the value of £14.76m of which £12.8m was expected in the form of PSDS grant support. The Council was informed that the PSDS could not provide that level of support on 15 May 2024 even though the submissions met critical quality and deliverability criteria.
- 4.4 Discussions with the North-West Net Zero Hub have indicated that Wirral's PSDS funding allocation is likely to be around £900k. The participant contribution of £1.96m that has been secured internally will be partially used to support a reduced decarbonisation initiative. Projects that are deferred will be resubmitted for the next round of PSDS funding applications expected in Autumn 2024.

5.0 LEGAL IMPLICATIONS

- 5.1 There are no direct legal implications arising from this report which reports annual emissions against the targets set in the Carbon Budget. This report assists the Council to meet its aim of achieving carbon net zero by 2030. The establishment of annual Carbon Budgets against which actual performance is compared and reported demonstrates that the Council is taking action to address the issues raised by the Environment and Climate Emergency Declaration of July 2019.
- 5.2 It should be noted that the adequacy and action of both national and local government is under scrutiny by environmental interest groups with the threat of future legal challenge. Several local authorities and government have been criticised

for not putting their climate emergency declarations into action and are the subject of scrutiny and challenge for not having taken sufficient action.

6.0 RESOURCE IMPLICATIONS: STAFFING, ICT AND ASSETS

- 6.1 The Carbon Budget Performance reports are delivered through existing staff resources using the existing energy management database to report energy and water consumption. Although there are no staffing implications arising directly from this report it should be noted that employees' efficient and effective use of energy is vital to reducing measured emissions.
- 6.2 There are no ICT implications arising directly from this report. However, it should be noted that IT systems and infrastructure contribute directly to emissions as they use energy.
- 6.3 This report quantifies the emissions associated with Council Assets. Energy and water use in Council assets accounted for over 71.5% of gross CO₂e emissions in 2023/24. Whilst the measurement of emissions does not have a direct impact on the operation of Council Assets, analysis of the source data allows cost-effective reduction actions to be identified and prioritised.

7.0 RELEVANT RISKS

- 7.1 The Council has made a series of public commitments to act on climate change including the declaration of an Environment and Climate Emergency in July 2019 that included an instruction to reinstate the Carbon Budget. A failure to demonstrate action and commitment to change would present a reputational risk. There are local authorities across the country who, having declared a climate emergency, are now under scrutiny for having apparently done little to turn their declarations into action.
- 7.2 The Council's corporate risk register has been updated to reflect the environment and climate emergency declaration and reflect the risk climate change presents to the Council and Wirral. The risks associated with the effective delivery of the Environment & Climate Emergency Policy have been identified and mitigated. The Environment and Climate Emergency Action Group will monitor these risks as part of their management of the Environment & Climate Emergency Action Plan.
- 7.3 There are no financial risks associated with bids for the Low Carbon Skills Funding grants through the Liverpool City Region as they are the responsible organisation. If the current combined bid for Low Carbon Skills Funding is unsuccessful it may be necessary to consider alternative funding to deliver heat decarbonisation plans that will be needed to achieve net zero.
- 7.4 Public Sector Decarbonisation Scheme funding for capital projects is complex and guidance is subject to change. Risks and mitigation will have to be considered at the detailed project planning stages and it is anticipated that Assets and the Corporate Property Board will lead implementation. There are risks associated with unanticipated changes government policies and guidance. The current combined bid is led by the North West Net Zero Hub who will take responsibility for delivery of the various schemes.

8.0 ENGAGEMENT/CONSULTATION

8.1 The Carbon Budget reporting process was developed in conjunction with recognised expert Local Partnerships. The Council worked with Local Partnerships on the carbon reduction trajectory which was assessed as ambitious but achievable. The performance report shows progress towards the Council's goal of achieving carbon net zero by 2030. It will be available for public scrutiny.

9.0 EQUALITY IMPLICATIONS

9.1 There are no equality implications arising directly from this report. Any equality assessments will be in line with the actions of the Environment and Climate Emergency Policy.

10.0 ENVIRONMENT AND CLIMATE IMPLICATIONS

10.1 Reporting of annual emissions against the year's Carbon Budget is an integral part of the Council's response to the Environment and Climate Emergency declaration. This provides a robust, reliable and consistent means of measuring progress towards the corporate 2030 Carbon Net Zero target.

11.0 COMMUNITY WEALTH IMPLICATIONS

11.1 The reporting of performance against the annual Carbon Budget targets enables the Council to meet its emissions targets which are its locally determined contribution to the Borough-wide goal of achieving net zero before 2041. Reducing emissions contributes directly to protecting the environment by minimising waste and energy consumption.

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APPENDICES

Appendix 1 – Slide (as requested by Committee)
Appendix 2 – Historic emissions from baseline to present

BACKGROUND PAPERS

Wirral Council Climate Emergency Action Plan 2020: Establishing a baseline, carbon budget, emissions reduction trajectory and priority areas for action', Local Partnerships 14/10/20

2023 Government Greenhouse Gas Conversion Factors for Company Reporting: Methodology Paper for Conversion factors, Department of Business Energy & Industrial Strategy, June 2023

TERMS OF REFERENCE

This report is being considered by the Environment, Climate Emergency & Transport Committee in accordance with Section 5.2 (a) of its Terms of Reference.

The Committee is charged by full Council to undertake responsibility for the Council's role and functions:-

(a) in co-ordinating the response to cross-cutting sustainability issues such as reducing carbon emissions, air quality issues, climate change response, improving resource efficiency and developing sustainable energy;

SUBJECT HISTORY (last 3 years)

Council Meeting	Date
Environment, Climate Emergency & Transport – Committee Meeting – Carbon Budgets: 2019/20 baseline to 2027/28 (Minute 9)	14 June 2021
Environment, Climate Emergency & Transport – Committee Meeting – Carbon Budget Performance 2020/21 (Minute 9)	14 June 2021
Environment, Climate Emergency & Transport – Committee Meeting – Carbon Budget Performance 2021/22 (Minute 10)	20 June 2022
Environment, Climate Emergency & Transport – Committee Meeting – Carbon Budget Performance 2022/23 (Minute 6)	19 June 2023