

**ENVIRONMENT, CLIMATE EMERGENCY AND TRANSPORT COMMITTEE****Monday 20 June 2021**

<b>Report Title:</b>	<b>CARBON BUDGET PERFORMANCE REPORT 2021/22</b>
<b>Report of:</b>	<b>DIRECTOR OF REGENERATION AND PLACE</b>

**REPORT SUMMARY**

This is the second annual Carbon Budget Performance Report and covers the 2021/22 financial year. It shows actual emissions compared against the 2021/22 Carbon Budget Target. This allows the Council to measure progress towards its target of carbon net zero by 2030 as stated in the Environment and Climate Emergency Policy.

Annual Carbon Budget targets and performance to date are shown in the table below.

<b>Financial Year</b>	<b>Annual Carbon Budget (tonnes CO<sub>2</sub>e)</b>	<b>Actual Emissions (net tonnes CO<sub>2</sub>e)</b>
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	
2023/24	4,505	
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 2021/22 was 7,843 tonnes CO<sub>2</sub>e. Net actual emissions were 6,275 tonnes CO<sub>2</sub>e which is 1,568 tonnes CO<sub>2</sub>e below the limit set for the year.

The reduction in emissions over 2021/22 have been achieved through green electricity purchase and reduced use of Council assets in the aftermath of the pandemic. Emissions associated with the use of electrical energy and water have also reduced in line with adjustments to Government conversion factors.

Actions to maintain current levels of performance and achieve further reductions are included in this report. Steps to include more emissions sources for the next re-baselining are noted and documented. Longer-term issues that will have to be taken into account 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**

The Environment, Climate Emergency and Transport Committee is recommended to note the Council's performance and progress made 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 produced on an annual basis owing to the need to take seasonal variations in energy use into account.

### 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 2021/22 was 7,843 tonnes CO<sub>2</sub>e. Net actual emissions were 6,275 tonnes CO<sub>2</sub>e which is 1,568 tonnes CO<sub>2</sub>e below the limit set for the year. Carbon Budgets and performance to date are set out in the table below.

Financial Year	Annual Carbon Budget (Target Emissions) (tonnes CO <sub>2</sub> e)	Actual Emissions (net tonnes CO <sub>2</sub> e)
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	
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- 3.2.2 Reporting conventions require that emissions be classified according to their defined scope. The table overleaf shows measured emissions for the 2019/20 baseline and 2021/22 along with percentage changes.

Scope	Emissions Type	2019/20 Baseline Emissions (tonnes CO <sub>2</sub> e)	2021/22 Actual Emissions (tonnes CO <sub>2</sub> e)	Percentage change from baseline
Scope 1	Heating	5,994.67	5,222.63	-12.9%
	Authority's Fleet	599.99	469.77	-21.7%
Scope 2	Electricity	5,924.40	4,347.52	-26.6%
Scope 3	Staff Travel	482.03	146.73	-69.6%
	Transmission & Distribution Losses	502.97	384.81	-23.5%
	Water	151.94	50.53	-66.7%
<b>Total Emissions (Gross)</b>		<b>13,656.00</b>	<b>10,621.99</b>	<b>-22.2%</b>
Carbon Offsets		0	0	
Green Tariffs		0	(4,347.52)	+100%
<b>Total Emissions (Net)</b>		<b>13,656.00</b>	<b>6,274.47</b>	<b>-54.1%</b>

3.2.3 The net calculated emissions show a reduction of 54% against the 2019/20 baseline. Whilst this is encouraging it must be recognised that recent years have been highly unusual in terms of energy use patterns. It is acknowledged that a more permanent arrangement for green electricity supply will be needed - as will significant reductions in fossil fuel use if future emissions targets are to be met.

### 3.3 What has affected 2021/22 net emissions?

3.3.1 The Covid-19 pandemic has continued to affect energy use in 2021/22. Some Council facilities have been closed and these closures have reduced energy use in those buildings. The long-term impact of the pandemic on working practices remains unclear and it is difficult to comment on future developments.

3.3.2 It was anticipated that energy and water use would rise as more Council buildings re-open. The requirement for increased ventilation rates inevitably increases heat loss and raises energy use for heating. This has been countered by reducing heating levels wherever possible. Assets not currently in use are closely monitored to ensure that energy and water use are just sufficient to prevent degradation of the building fabric.

3.3.3 It must be acknowledged that with many officers continuing to work from home for much of 2021/22 and with the permanent closure of some Council offices some emissions will be displaced to individual homes. In time this will be reflected in national statistics and will be significant for the Borough and the Wirral Cool 2 aim of reaching carbon net zero by 2041. It is expected that new office facilities in Birkenhead will be ready in 2023/24 but it is possible that some home working will become a permanent feature of peoples' working habits. A robust method of estimating the associated Scope 3 emissions will have to be devised.

3.3.4 Emissions associated with the production of electricity and water have reduced and this is reflected in the annual conversion factors that are used to calculate emissions. These are technical adjustments that reflect an increase in low carbon generation assets and a re-assessment of the environmental impact of the water industry.

### **3.4 Summary of Council Actions in 2021/22**

- 3.4.1 Following the development of the Climate Emergency Action Plan (CEAP) and the related Environment & Climate Emergency Policy the Climate Emergency Action Group was set up to oversee the delivery of the CEAP. The Group meets every two months. Progress against the CEAP is reported separately.
- 3.4.2 The Council took the decision to purchase Renewable Energy Guarantee of Origin (REGO) backed green electricity for 2020/21. This was introduced as a temporary measure pending negotiations to acquire energy from renewable sources - potentially through a Power Purchase Agreement. It should be recognised that the purchase of REGO backed electricity is not universally accepted as a means of emissions reduction but is included in the Guidance for Greenhouse Gas Reporting issued by Government as a method for reducing net emissions.
- 3.4.3 A number of Council buildings have been closed on either a temporary or permanent basis. Control settings have been adjusted to ensure minimal energy use needed to ensure the buildings' integrity.
- 3.4.4 The disposal of assets such as the main Treasury Building further reduces 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.
- 3.4.5 There has been engagement with colleagues in the initial phases of new design projects to encourage the incorporation of energy efficiency measures that will significantly improve the performance of the building. The need to quantify environmental benefits to justify additional expenditure has been set as a precondition.
- 3.4.6 Tree planting over the 2021/22 season exceeded the target of 21,000 whips and saplings. A suitable method of recording sequestration to take account of stock losses is being developed in conjunction with Forest Research and will be reported at a later stage.

### **3.5 Council Actions for 2022/23**

- 3.5.1 Detailed actions for the coming year are set out in the CEAP and cover the range of the Council's activities.
- 3.5.2 Initiatives that will impact on emissions include:
- Purchase of 'green' electricity from 1 April 2022 will continue to reduce emissions as an interim measure. Actual reduction will depend on the amount of electricity purchased by the Council.
  - The tree planting target for the 2022/23 season is another 21,000 whips and saplings. New reporting arrangements will establish a baseline for the Borough.
  - The significant and unprecedented energy price rises create a real incentive to reduce energy use, costs and emissions.
  - The Public Sector Decarbonisation Scheme (PSDS) grant fund creates an opportunity to bid for grant funding through Salix Finance. Salix Finance provides Government funding to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills. In the initial phases it has been difficult to comply with timescales as there was no pipeline

of developed proposals. The Council is working on the development of a pipeline of proposals in consultation with colleagues from the Combined Authority. The intention is to highlight these developments as an opportunity for positive action with senior managers with the aim of developing a targeted action plan.

- Green fleet and electric vehicle strategies are being developed. Ultimately this will reduce emissions as the use of petrol and diesel is displaced over time.

### **3.6 Increasing 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 (CO<sub>2</sub>e). 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 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 a greater level of detail. At this time the following possibilities are being explored:

- Fugitive Emissions are Scope 1 emissions that the Council has not been able to report owing to continuing resource constraints. If the necessary resource is made available, this reporting thread may be included in the future.
- Green fleet and electric vehicle strategies are being developed. Over time this will reduce emissions as the use of petrol and diesel is displaced.
- The Local Partnerships 2021/22 reporting template includes several new sections aimed at increasing Scope 3 reporting. These may be used if it is possible to obtain updated information in a consistent manner from suppliers and contractors. It may be necessary to use estimated figures as the only practical way of including some emissions sources.
- The reporting of Scope 3 missing from the Council's purchase of goods and services is identified as a priority action for 2022/23. This is a complex area that could have legal implications moving forward.
- A suitable method of recording sequestration from tree planting to include a baseline and take account of losses is being developed in conjunction with Forest Research. This will be reported at a later stage.

3.6.3 It should be appreciated that whilst the Council is very willing to increase the emissions it reports, resource and cost considerations must be balanced against the relevance 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, initiating new programmes to address the issues will inevitably take time to make a positive impact on emissions. These programmes include:

- 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 should be developed which take advantage of 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 and should be addressed.
- Council buildings are occupied and operated by people. It is vital that all staff are aware of and support the Council's aims regarding reducing emissions – and 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.

#### **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 carbon emissions by 2030. The reduction of emissions will be achieved through the implementation of the Climate Emergency Action Plan (CEAP) which will be overseen by the Environment and Climate Emergency Action Group. There will be financial implications associated with the delivery of the CEAP. The Climate Emergency Team has been allocated funding of £250k split 50/50 Revenue and Capital. Capital funding of £900k is allocated within the Assets budget.

4.2 Bidding for Public Sector Decarbonisation Scheme (PSDS) grant funding to cover the costs 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 sector bodies to fund heat decarbonisation and energy efficiency measures. The scheme will provide £1.425 billion over the financial years 2022/23 to 2024/25, with £475 million to be spent in each financial year.

#### **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 have been criticised for not putting their climate emergency declarations into action and are the subject of scrutiny and challenge for not having taken 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 IT 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 68.7% of gross CO<sub>2</sub>e emissions in 2021/22. 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 include the environment and climate emergency declaration and reflect of 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.

## **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. This 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.

## **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**

None

## **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

## **SUBJECT HISTORY (last 3 years)**

<b>Council Meeting</b>	<b>Date</b>
<b>Council – Extraordinary Meeting – Declaration of Environment and Climate Emergency (Minute 21)</b>	<b>15 July 2019</b>
<b>Environment, Climate Emergency &amp; Transport – Committee Meeting – Carbon Budgets: 2019/20 baseline to 2027/28 (Minute 9)</b>	<b>14 June 2021</b>
<b>Environment, Climate Emergency &amp; Transport – Committee Meeting – Carbon Budget Performance 2020/21 (Minute 9)</b>	<b>14 June 2021</b>