

Agenda Item 8  
Overview & Scrutiny Committee  
13 November 2024

Title: Climate Change and Low Cost, Low Carbon Energy Reporting

Lead Officer: Dave Barber

Portfolio Holder: Ian Davison, Will Roberts, Lowell Williams

Wards of the District directly affected: All

<b>Approvals required</b>	<b>Date</b>	<b>Name</b>
<b>Portfolio Holder</b>	1/11/24	Lowell Williams
<b>Finance</b>	N/A	
<b>Legal Services</b>	N/A	
<b>Chief Executive</b>	1/11/24	Chris Elliott
<b>Director of Climate Change</b>		Author
<b>Head of Service(s)</b>	N/A	N/A
<b>Section 151 Officer</b>	N/A	Andrew Rollins
<b>Monitoring Officer</b>	1/11/24	Graham Leach
<b>Leadership Co-ordination Group</b>	N/A	N/A
<b>Final decision by this Committee or rec to another Cttee / Council?</b>	No – Scrutiny Report only	
<b>Contrary to Policy / Budget framework?</b>	No	
<b>Does this report contain exempt info/Confidential? If so, which paragraph(s)?</b>	No	
<b>Does this report relate to a key decision (referred to in the Cabinet Forward Plan)?</b>	No	
<b>Accessibility Checked?</b>	Yes	

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## 1. Summary: Why Overview & Scrutiny Committee asked for the report

- 1.1 At its meeting in July 2024, the Overview and Scrutiny Committee agreed, as part of its work programme, to receive a report on Climate Change data tracking (including carbon emissions) and how this can be provided and managed in the most efficient way. Further, there is another report on the agenda for this meeting relating to the annual reporting against the Corporate Strategy. In that context, this report, focuses on the data to support the Low Cost, Low Carbon Energy priority (Strategic Priority 2) along with updates on carbon emissions data .
- 1.2 To reflect the Corporate Strategy and the subsequent Cabinet decisions relating to the Low Cost, Carbon Energy Strategy, this report has two parts to it.
- 1.2.1 Part 1 provides an update on the Low Cost, Low Carbon (LCLC) Energy data agreed by Cabinet in July 2024 as part of the Low Cost, Low Carbon Energy Strategy. Part 1 of this report (paragraphs 2.1 to 2.13) provides an update on the latest position with regard to those measures, setting out:
- what data will be reported to align with Corporate Strategic Priority 2 and how frequently.
  - The role of the Low Cost, Low Carbon Programme Board and the plans for a LCLC Energy Dashboard
  - How members can review the latest data on an ongoing basis
- 1.2.2 Part 2 (paragraphs 3.1 to 3.8) provides an update relating to the three ambitions agreed as part of the Climate Change Action Programme, noting the biodiversity data will be report separately to Overview and Scrutiny in April 2025.

## 2 Part 1: Low Cost, Low Carbon Energy

- 2.1 Updates on the actions associated with Low Cost, Low Carbon (LCLC) Energy are included with the report on the Corporate Strategy, also on this agenda. This report focuses on plans for how data can support the progress on the Low Cost, Low Carbon Energy priority.
- 2.2 The Low Cost, Low Carbon Energy Strategy includes a series of 8 primary indicators to be used to track progress. The Strategy also includes a further set of 5 supporting secondary indicators.
- 2.3 The 8 primary indicators that were proposed are:

	'Low Cost'	'Low Carbon'
Public Buildings	Actual cost of energy used in the Council's public buildings	Actual total CO2 emissions from the Council's public buildings

Existing Council Housing	Predicted savings on energy bills for residents who have been supported by WDC through retrofit advice/implementation.	Predicted CO2 reductions from Council Housing as a result of WDC retrofit interventions
New housing developments led by the Council	Indicator to be developed potentially drawing on data from the newly adopted NZC DPD	Indicator to be developed potentially drawing on data from the newly adopted NZC DPD
Helping Others with Retrofit	Predicted savings on energy bills for residents who have been supported by WDC through retrofit advice/implementation.	Predicted total CO2 emission savings for residents who have been supported by WDC through retrofit advice/implementation.

2.4 The secondary indicators are:

- Percentage of electricity used in the Council’s public buildings generated from renewable electricity produced onsite.
- Percentage of Council homes reaching EPC C or above
- For new WDC homes, the average percentage reduction in pre-offset CO2 emissions compared with other houses built in the district (as measured through the calculations of residual carbon emissions required to comply with the Net Zero Carbon DPD)
- Number of retrofit measures implemented by WDC residents or businesses as a result of the Council’s retrofit support scheme
- Estimated overall District-wide carbon emissions from buildings as assessed through “Scatter” or similar data.

2.5 As the indicators are fully defined and the data becomes available, it will be collated and presented through a Dashboard which will enable managers, the Portfolioholder, the Programme Board and all WDC members to see the latest data. A draft dashboard was presented to and discussed at the Low Cost, Low Carbon Energy Programme Board on 23<sup>rd</sup> October 2024. Further work is now taking place to refine and populate the Dashboard. In time, this will be made available to all WDC members and will form the basis of ongoing reporting to Overview and Scrutiny Committee in relation to Strategic Priority 2.

2.6 The latest position in relation to the 13 indicators in Strategy is set out below:

Ref	Indicator Description	Data Sources	Is data Available Now? If not, date expected.	Is historical data available?	Frequency of reporting
1a	Public Buildings: Actual cost of energy used in the Council’s public buildings	WDC energy consumption and energy bills	Yes for 2023/24	Yes, since 2018/19	Annual

1b	Public Buildings: Actual total CO2 emissions from the Council's public buildings		Yes for 2023/24	Yes, since 2018/19	Annual
2a	Existing Council Housing: Predicted savings on energy bills for residents who have been supported by WDC through retrofit advice/implementation.	Proposed Energy intervention reports from WDC contractors involved with delivering retrofit grant schemes and/or WDC funded retrofit	No. From April 2025	No	Quarterly
2b	Existing Council Housing: Predicted CO2 reductions from Council Housing as a result of WDC retrofit interventions		No. From April 2025	No	Quarterly
3a	New WDC Housing Developments: Cost indicator to be developed potentially drawing on data from the newly adopted NZC DPD	NB: There have been no planning permissions granted for WDC developments since July 2024, so the current indicator result is zero.  Data definition and sources are still be developed. It is intended the data will be drawn from energy statements required to support planning applications, along with post construction building evaluation. This data will be compared with the estimated minimum energy/cost required to comply with the Net Zero Carbon DPD. For carbon data it is suggested this should look at comparative operational carbon per year over at least 10 years. For cost data, this should look at estimated comparative annual fuel costs for residents	No. From April 2025	No	Annual
3b	New WDC Housing Developments: Carbon indicator to be developed potentially drawing on data from the newly adopted NZC DPD		No. From April 2025	No	Annual
4a	Helping Others with Retrofit: Predicted savings on energy bills for residents who have been supported by WDC through retrofit advice/implementation.	Advice on how to measure this will be sought from the soft market testing being undertaken in November and December with potential lenders. Until that scheme has been designed, it is not known what data will be available. Subject to that advice, it is intended that data will be drawn from energy intervention reports involved with delivering retrofit grant schemes or future loan schemes.	Yes for green homes grants (collated by Jan 2025), but no for retrofit loan scheme as this is not yet established	Yes for green homes grants (collated by Jan 2025), but no for retrofit loan scheme as this is not yet established	Annual

4b	Helping Others with Retrofit: Predicted total CO2 emission savings for residents who have been supported by WDC through retrofit advice/implementation.		No. From start of retrofit loan scheme	No	Annual
5	Percentage of electricity used in the Council's public buildings generated from renewable electricity produced onsite.	Energy meters in locations where solar is provided.	Yes	Yes (albeit no renewable energy prior to opening of Castle Farm)	Annual
6	Percentage of Council homes reaching EPC C or above	Parity Portfolio Software	Yes (albeit accuracy of data needs to be refined through updated EPCs)	No	Annual
7	For new WDC homes, the average percentage reduction in pre-offset CO2 emissions compared with other houses built in the district (as measured through the calculations of residual carbon emissions required to comply with the Net Zero Carbon DPD)	Post construction building evaluation reports as measured against performance of other houses built in the District within the previous 12 months	No	No	Annual
8	Number of retrofit measures implemented by WDC residents or businesses as a result of the Council's retrofit support scheme	Data relating to residential properties collated through scheme designs to support retrofit grants. In the future may require surveys of those taking part of the retrofit scheme.  Currently no business-related scheme is operating. This will need to be defined separately should a scheme be developed.	Whilst the data is available for residential, it requires detailed analysis and collation. Commence Jan 2025	Whilst historical data is available for residential, it requires detailed analysis and collation. Commence Jan 2025	Annual
9	Estimated overall District-wide carbon emissions from buildings as assessed	Annual Scatter data collated nationally	Yes	Yes	Annual

	through "Scatter" or similar data.					
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2.7 The table below shows the most recent Low Cost, Low Carbon Energy data that is currently available.

Ref	Description	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
1a	Public Buildings (including leisure centres and contractor buildings): Actual cost of energy used in the Council's public buildings	£1,171,415	£1,240,725	£1,060,792	£1,097,544	£1,544,069	£2,523,921
1b	Public Buildings (including leisure centres and contractor buildings): Actual total CO2 emissions from the Council's public buildings	3736 tonnes CO2e	3737 tonnes CO2e	3045 tonnes CO2e	3021 tonnes CO2e	2814 tonnes CO2e	2889 tonnes CO2e
5	Percentage of electricity used in the Council's public buildings generated from renewable electricity produced onsite.	0%	0%	0%	0%	0%	N/A*
6	Percentage of Council homes reaching EPC C or above (Parity Portfolio data)	N/A	N/A	N/A	N/A	N/A	36.5% (2033 out of 5547)
9	Estimated overall District-wide carbon emissions from buildings as assessed through "Scatter" or similar data.	517,791 tonnes CO2e	447,388 tonnes CO2e	421,726 tonnes CO2e	Data is retrospective and not yet available for these years		

\* Castle Farm opened Dec 2023 with rooftop solar. However, faulty data recording technology meant the data for 23/24 was not recorded

2.8 The large increase in energy costs in 2022/23 and 2023/24 is as a result of a significant price increases which saw the electricity prices more than double and gas prices increase by over 70%, in addition to increased standing charges.

2.9 A significant part of the reductions in CO2 emissions from buildings is as a result of cleaner fuel within the national grid. For instance 100kwh of electricity in 2018/19 would have been responsible for 28 kilograms of CO2 emissions. In 2023/24 would be responsible for less than 21 kilograms of CO2 emissions.

- 2.10 The buildings energy data collated until now does not easily allow the impact of WDC's interventions to be seen. However, the new Low Cost, Low Carbon Energy Dashboard will allow the estimated impact of interventions to be seen and it is expected that it will be possible to follow this through in to energy usage and CO2 emissions data.
- 2.11 A Dashboard is being developed to present the Low Cost Low Carbon Energy Data in a way that enables progress or issues to be quickly identified and explored. Whilst this dashboard is under development, the Programme Board has provided guidance on how the Dashboard should look to enable the data to be managed at the Board meetings. For example, if the aim of reporting the cost of energy from WDC buildings is to aspire to a trend of cost reductions then the graph below would show that the trend for 2022/23 and 2023/24 is an adverse one. This would be flagged as an indicator of concern which in turn would enable the Board to drill down into the reasons for this. In this case, the reason is to do with national energy costs rather than WDC energy consumption, which has continued to decline



- 2.12 Once developed, the LCLC Energy Dashboard will be made available to all Councillors through Sharepoint (or similar).
- 2.13 It should be noted that collating data and reporting through a dashboard requires staff resource and skills. Capacity to this will be put in place within existing budgets.

### **3 Part 2: Climate Change Ambitions**

- 3.1 **Ambition 1:** WDC is net zero carbon by 2025/26 and that services provided

through contractors include carbon reduction targets to deliver net zero by 2030.

### 3.2 Organisational Carbon Emissions

Scope / Activity	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
	(base year)					
	Tonnes CO2e	Tonnes CO2e	Tonnes CO2e	Tonnes CO2e	Tonnes CO2e	Tonnes CO2e
<b>Scope 1 (emissions occurring in the District as a result of using fossil fuels “on site” e.g. gas, LPG)</b>						
Total (Scope 1)	1,309	1,297	1,249	1,186	1,101	1,228*
<b>Scope 2 (emissions occurring elsewhere as a result of WDC energy use – e.g electricity consumption)</b>						
Total (Scope 2)	1,261	1,280	874	910	874	862
<b>Scope 3 (emissions occurring as a result of contractor activities in providing WDC services)</b>						
Total (Scope 3)	2,724	3,616	2,410	2,627,	2,315	2,354**
<b>Total Gross Emissions (t)</b>	<b>5,294</b>	<b>6,193</b>	<b>4,533</b>	<b>4,275</b>	<b>4,291</b>	<b>4,444</b>

\* the significant increase in scope 1 emission is predominantly due to an error in the calculations relating to LPG usage and carbon emissions in previous years. If LPG is excluded from scope 1 emissions, the data shows consumption of gas has fallen by 8% between 2022/23 and 2023/24, with the resulting scope 1 carbon emissions also falling by 8%.

\*\*Transmission and Distribution losses (beyond WDC’s control) are responsible for the increase. If these are excluded, scope 3 emissions have fallen by around 1%.

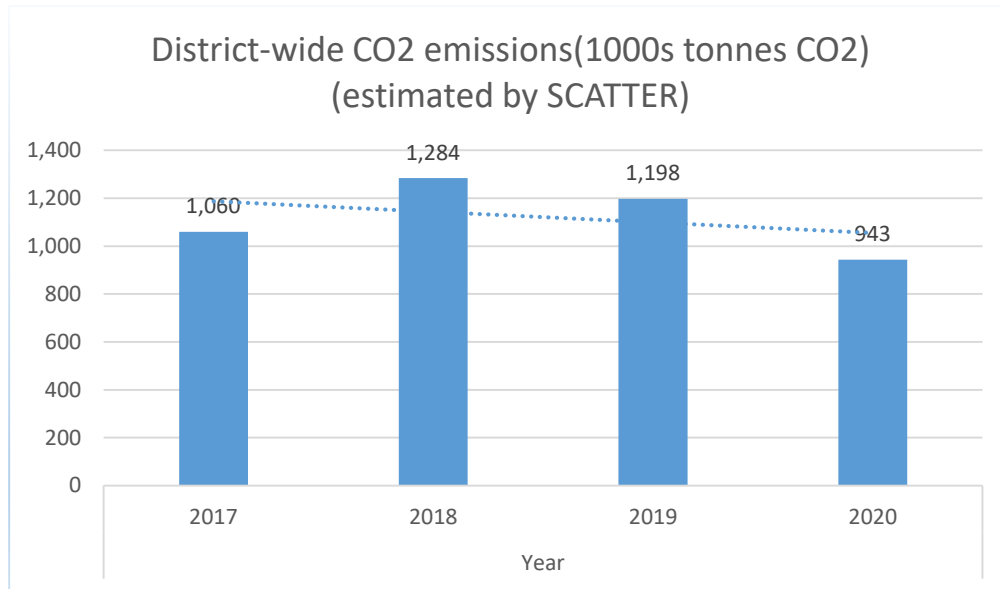
### 3.3 Key points to note:

- Emissions from WDC overall have decreased by 16% since the 2018/19 baseline.
- 2023/24 has seen a small increase in emissions since 2022/23. This is as a result of errors in previous LPG calculations and changes to estimates in transmission and distribution losses (see footnotes above)
- Unless there is a dramatic acceleration in the annual level of carbon reduction achieved over the next 2 years, the ambition to be net zero will be missed without carbon offsetting.
- An approach to carbon offsetting is being developed and will be adopted in 2025.
- Scope 3 emissions (contractors) account for more than half of all emissions and the emissions from Scope 3 transport (predominantly refuse collection vehicles) accounts for approximately a third of total emissions. Leisure centre emissions (645 tonnes per year) are also significant in scope 3 emissions

3.4 **Ambition 2:** reduce net carbon emissions from across the District by a minimum of 55% by 2030 (baseline 2018) and alongside this, plan how to further reduce carbon emissions to net zero by 2050

3.5 District-wide carbon emissions as estimated through Scatter data:





3.6 Whilst the data above shows significant progress (26.5% reduction against the 2018 baseline) towards the ambition of a 55% reduction, it should be noted that

- a) 2020 was impacted by Covid and is therefore unlikely to be consistent with previous or subsequent years. It is likely that the same will be true of 2021 once that data is published
- b) The 2020-based data is not likely to be significantly impacted by the declaration of WDC's climate emergency. The Council's actions cannot therefore be correlated in any way to the 2020 reduction
- c) When the 55% reduction ambition was established, this took account of changing national trends around factors such as cleaner electricity production.

3.7 **Ambition 3:** To enable our environment and communities to have adapted to the potential of at least 3 degrees rise in global temperatures by 2100.

3.8 No data is being collated specifically in relation to this ambition. This ambition is being managed through a risk-based approach. However, much of the data being collated for the Biodiversity Action Programme is also relevant to adaptation. This will be reported to Overview and Scrutiny in April 2025.

#### 4 The key risks and how they are being managed

4.1 Risks are managed through the Low Cost, Low Carbon Risk Register which is currently under review by the Programme Board. The highest scoring risks within the Draft Low Cost, Low Carbon Energy Risk Register are:

RISK TITLE	RISK DESCRIPTION	RISK EXPOSURE	RAW RISK RATING	RISK CONTROL MEASURES	EFFECTIVENESS OF CONTROL MEASURES	RISK CONTROL ACTIONEE(S)	CURRENT RISK RATING

			LIKELIHOOD	IMPACT	OVERALL RISK RATING				LIKELIHOOD	IMPACT	OVERALL RISK RATING
Costs exceeding available funds.	Cost of delivering low cost, low carbon energy and the potential that insufficient funding available to deliver the priorities	Financial , business disruption	4	4	16	The funding strategy will be utilised to establish applicable funding opportunities. The funding strategy needs to be developed. For the time being, the PB and officers understand broadly which pots of funding are being used on which projects.	Fully Effective	The Programme Board and officers supporting the Programme Board	3	4	12
Changing national priorities	Changing national priorities and funding	Unrealised opportunity	4	3	12	Include horizon scanning on Programme Board agendas to ensure we are aware as early as possible of any changes or opportunities.	Partially Effective	Officers supporting the Programme Board.	2	3	6
<b>Grant requirements</b>	Constraints associated with grant funds	Missed opportunity	3	4	12	Apply for grants that align with our aims; establish a pipeline of projects where regular grant schemes are in place	Full Effective	Officers supporting the Programme Board.	1	4	4

<b>Technology advances</b>	Changing technology and lack of examples and benchmarks from elsewhere to learn from	Missed opportunity/ineffective use of resources	4	3	<b>12</b>	As far as possible, learn from examples elsewhere and be prepared to experiment and learn from our own experiences.	Partially Effective	Programme Board and officers supporting the Programme Board	2	4	<b>8</b>
<b>Expertise</b>	Access to technical expertise in a fast-changing world	Financial , missed opportunity	4	4	<b>16</b>	Seek to recruit and retain internal expertise where we can, work with partners and use consultancies where other options are not available.	Partially Effective	Programme Board and officers supporting the Programme Board	2	4	<b>8</b>

4.2 Specifically in relation to collating and reporting data, the main risks concern:

a) The accuracy of some of the data for example:

- a. EPC data which is reliant on some out-of-date EPCs and will therefore need to be improved over time.
- b. Changing national formulas such as Transmission and Distribution data.
- c. Data complexities which make it difficult to ensure consistencies between different years.
- d. Staff leaving, again making it difficult to achieve consistency between years.
- e. Reliance on data from contractors.

b) Impacts that are beyond WDC's control such as the rate of decarbonisation of the electricity grid and energy prices.

c) Difficulties in defining indicators which enable meaningful and timely data to be made available:

- a. most of the data is annual, and in the case of Scatter data there is a 3 to 4 year time lag.
- b. Alternatives such as predicted savings from WDC interventions are complex to collate and are based on estimates rather than hard data.
- c. The Net Zero Carbon DPD is still relatively new. Although it has

potential to be a valuable mine of data, work is still being carried out to understand its full potential and therefore some indicators remain less well defined.

## **5 What is working well and what is not working so well**

### 5.1 Working well in our data collection

- Strong focus on the Corporate Strategy priorities in relation to Low Cost, Carbon Energy, supported by a Programme Board, clear portfolio holder responsibilities and dedicated officer team.
- Significant investment in decarbonisation of public buildings has been agreed and plans to roll this out are advanced.
- There is good data, including historical trends to support this.
- The climate change officer team now has good technical skills to back up the political and managerial commitment to decarbonisation of buildings.
- The Net Zero Carbon DPD is in place and provides further potential for improving our data in relation to building performance

### 5.2 What is not (yet) working so well in our data collection

- There needs to be more focus on the post construction impacts on energy in relation to new buildings and retrofit measures.
- As set out in the risks above, data collation and reporting requires much more development to enable progress to be tracked in a timely manner.
- For some data, the time lag is an issue which requires proxy measures to be put in place.

## **6 One Change to improve performance**

6.1 Improvements in defining Low Cost, Low Carbon Energy indicators and putting in place sound, consistent and effective data collection methods for all measures to support the programme

6.2 Linked to 6.1, the development of a Low Cost, Low Carbon Dashboard to enable effective tracking of progress.