**Open Report on behalf of Andy Gutherson, Executive Director - Place**

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| Report to: | **Environment and Economy Scrutiny Committee** |
| Date: | **24 October 2023** |
| Subject: | **Lincolnshire County Council Carbon Report 2022-2023 (Greenhouse Gas Emissions Report 2022-23)** |

**Summary:**

The County Council has set a target to reach net zero carbon dioxide emissions for its own operations by 2050. This objective aligns with the national net zero target date, which was reconfirmed by the Prime Minister in his speech on environmental policy on 20th September 2023.

Previous updates on greenhouse gas emissions from the County Council have tended to be a short statement on the number of tonnes of carbon dioxide generated in the previous financial year. This report aims to provide additional detail on the sources of greenhouse gas emissions that the Council generates and provides context on whether the emission levels are rising or falling and the reasons for these changes.

The report sets out emissions from each fuel type and source. Actions are included on how the reporting can be improved for future years by improving data quality and covering more indirect sources of emissions.

It is intended that there will be an annual Lincolnshire County Council Greenhouse Gas Emissions Report, which will be published each October.

**Actions Required:**

That the Environment and Economy Scrutiny Committee: -

(1) notes the work that has been done to quantify the carbon dioxide emissions across the County Council's operations; and

(2) supports the work that is underway to reduce these emissions.

## 1. Background

### 1.1 Report Context

The full Lincolnshire County Council: Greenhouse Gas Emissions Report 2022/23 is provided as an appendix to this report.

The County Council has been producing an annual measure of its greenhouse gas emissions for around fifteen years. However, these reports have tended to be short updates that give a numerical value of equivalent tonnes of carbon dioxide emitted from the activities of the Council.

This new report is intended to provide a much higher level of detail on the Council's greenhouse gas emissions. The report sets out the sources of greenhouse gas emissions and provides the background data. For each emission source context is provided on the latest figures and the activities that are producing changes in the data.

It is intended that this report will be updated annually and will become a key part of demonstrating that the County Council is meeting the commitments that it had made to reduce its carbon dioxide emissions.

The report shows that the Council has good data on its direct greenhouse gas emissions – i.e., from the use of fuel to heat buildings, fuel for vehicles and the use of electricity. These are classed as Scope 1 and 2 emissions. However, the available data on indirect emissions (Scope 3) is not as comprehensive. Therefore, the report includes a set of actions that will be undertaken to improve data on Scope 3 emissions for future versions of the report. Scope 3 emissions include those from waste management, procurement, construction, and highways.

### 1.2 Overall Greenhouse Gas Emissions

The County Council has made good progress in reducing its greenhouse gas emissions over the last decade. During the period from 2016/17 to 2022/23 emissions from Scope 1 and 2 sources have fallen by 51.4%. The bulk of this reduction is from falls in emissions from the use of electricity – the electricity grid has decarbonised, and the County Council has invested in energy efficiency schemes such as LED streetlighting. Emissions from the other sources have shown smaller falls and some of these reductions may just be changes due to the coronavirus pandemic.

The Council has energy consumption data going back to the 1990s and since 1990 emissions have fallen by 71.9%. This reduction is due to the Council reducing the size of its estate, investments in energy efficiency and the decarbonisation of the electricity grid.

However, it should be clearly noted that there are significant challenges in reaching the net zero target.

### 1.3 Challenges to Reach Net Zero

Significant reductions in annual greenhouse gas emissions have been achieved – but there are still significant residual emissions that need to be reduced to get close to net zero.

The main challenges are:

- Quick win energy saving projects have largely been completed.
- Carbon saving projects could increase building running costs – at least in the short term.
- Getting older buildings to net zero will require significant capital investment.
- Indirect emissions will introduce a volatility into the data.

The Council has operated a Revolving Green Fund for the last fifteen years. The programme was started with investment from the Council and Salix Finance. Savings from energy efficiency projects are reinvested in new energy efficiency projects. To date the initial investment of £500k has delivered over £3.5 million worth of energy efficiency projects. As a result, a lot of "quick win" energy efficiency projects have already been undertaken.

To date the carbon reduction projects that the Council has undertaken have also had the benefit of reducing running costs. For example, the project to change the streetlights to LED has significantly reduced greenhouse gas emissions – but has also cut running and maintenance costs for the lamps. However, future projects such as swapping gas boilers for heat pumps could lead to reduced carbon dioxide emissions, but higher running costs.

The Council has a large number of older buildings which are difficult to make energy efficient. Many of our schools have at least parts that are from the Victorian era, and it will be a challenge to make these buildings energy efficient and net zero carbon. Recently the Council received funding from the Public Sector Decarbonisation Scheme to produce a Heat Decarbonisation Plan and the work to produce this is being managed in partnership with colleagues from the Corporate Property Team and will look at the costs of decarbonising the top twenty energy using buildings at the Council.

As we get greater clarity on Scope 3 indirect emissions it is likely that there will be increased volatility in the data. Therefore, the context that this report provides will be important to describe why this is happening. A large part of the Scope 3 emissions will be linked to the construction of new buildings and highways projects. Therefore, the emissions levels will rise in years when major construction projects are underway. To get a better understanding of Highways related greenhouse gas emissions the Council is working with ADEPT and the Future Highways Research Group to produce a carbon footprint for the Highways Service.

## 2. Conclusion

The Council has made good initial progress in reducing its carbon footprint, but the next steps to reach net zero will be a significant challenge. The annual Greenhouse Gas Report will be an important part of demonstrating that the Council is doing its bit to reduce carbon emissions over the coming years.

## 3. Consultation

### a) Risks and Impact Analysis

N/A

## 4. Appendices

| These are listed below and attached at the back of the report | |
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| Appendix A | Lincolnshire County Council: Greenhouse Gas Emissions Report 2022/23 |

## 5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Dan Clayton, Sustainability Manager, who can be contacted on 07825 607157 or by e-mail at Dan.Clayton@lincolnshire.gov.uk