

# Coventry City Council

## Annual Greenhouse Gas Report 2021/22

---

### 1. Introduction

Climate change is among the biggest challenges facing the world today. With extreme weather events and heatwaves becoming more common, the effects of climate change are felt all over the globe. Coventry City Council is a major employer and consumer of resources within the city. It operates from a varied portfolio of over 200 assets comprising of council offices, libraries, care homes, car parks and operates a fleet of around 494 vehicles. The Council recognised the importance of tackling climate change as far back as 2008, having been a founding signatory of the Global Covenant of Mayors for Climate and Energy. The Council acknowledges that we need to use our role as an influencer to set an example for others to follow, while mobilising all who live and work in the city to embrace the challenges that climate change and delivering a sustainable future presents us.

In 2012 a target was set to reduce Coventry City Council's Greenhouse Gas (GHG) emissions by 35% by the year 2020. This target was reached five years early in 2015 but Coventry City Council has continued to further reduce its carbon emissions. A new Climate Change strategy is currently under development. Within the strategy, a new emissions target will be set to reflect the leading role Coventry City Council must take in order to act with urgency and reduce the harmful effects of climate change. The new strategy will need to set out a path to decarbonising not just the council's emissions but all citywide emissions in order to mitigate the effects of climate change. As an interim target, we have signed up to the Euro Cities target to achieve a 55% reduction of 1990 levels by 2030, whilst we set a science-based target informed by research. The target set under the new Climate Change Strategy follows this commitment and hopes to achieve a 55% reduction in Carbon emissions compared to 1990 levels.

Coventry City Council can position itself as a leading zero carbon city in a global market. To do this, we must first understand the extent of our emissions and their impact. Coventry is currently working with Climate View to develop a series of transition goal indicators to track progress in working towards net zero carbon. This would enable the City Council to model the likely impacts of policies and interventions on the carbon levels for the target date. This has proved to be a very important yet complex and difficult task but is on its way to completion.

This report provides an annual overview of GHG emissions from Coventry City Council's estate and operations. GHG emissions have been calculated following guidance and conversion factors provided by BEIS (Department for Business, Energy and Industrial Strategy). This report presents GHG emissions (in CO<sub>2</sub>e) starting from 2008/09 (base year), to 2021/22. The structure of this report follows Government guidance.

## 2.0 Results

The following defines what is meant by Scopes 1, 2 & 3:

1. *All direct emissions from the activities of an organisation or under their control, e.g., fuel consumption on site such as natural gas and fleet fuel.*
2. *Indirect emissions from electricity purchased and used by the organisation.*
3. *All other indirect emissions from activities of the organisation, occurring from sources that they do not own or control.*

**Table 1: GHG emissions reported as tonnes of CO<sub>2</sub>e**

|   | 2021/22       | 2020/21        | 2019/20<br>(2020<br>methodology) | 2018/19       | 2017/18       | 2008/09<br>(Base<br>year) |
|---|---------------|----------------|----------------------------------|---------------|---------------|---------------------------|
| <b>Scope 1</b>                                  | <b>4,558</b>  | <b>4,849*</b>  | <b>4,098</b>                     | <b>4,717</b>  | <b>5,235</b>  | <b>8,343</b>              |
| Transport Fuel                                  | 3,042         | 3,200*         | 2,424                            | 2,554         | 3,020         | 4,050                     |
| Gas Oil   | 8             | 8*             | 48                               | 543           | 451           | 573                       |
| Natural Gas                                     | 1,459         | 1,596          | 1,587                            | 1,589         | 1,764         | 3,720                     |
| LPG   | 15            | 22             | 5                                | 33            | 0             | 0                         |
| Kerosene  | 34            | 22             | 34                               | N/A           | N/A           | N/A                       |
| <b>Scope 2</b>                                  | <b>4,451</b>  | <b>4,469</b>   | <b>5,805</b>                     | <b>5,995</b>  | <b>9,598</b>  | <b>17,452</b>             |
| Heating<br>(property)                           | 328           | 304            | 397                              | 152           | 197           | N/A                       |
| Electricity<br>(property)                       | 2022          | 1,789          | 2,441                            | 2,613         | 5,400         | 6,937                     |
| Electricity (street<br>lighting)                | 2101          | 2,375          | 2,967                            | 3,230         | 4,000         | 10,516                    |
| <b>Scope 3</b>                                  | <b>7,486</b>  | <b>7,173</b>   | <b>10,737</b>                    | <b>936</b>    | <b>1,364</b>  | <b>2,395</b>              |
| Electrical<br>transmission and<br>distribution  | 365           | 358            | 459                              | 498           | 879           | 1,340                     |
| District Heat<br>Losses                         | 23            | -              | -                                | 15            | 21            | -                         |
| Business travel                                 | 320           | 174            | 425                              | 423           | 464           | 1,055                     |
| Schools and<br>Other Council<br>Owned Buildings | 6,802         | 6,640          | 9,871                            | -             | -             | -                         |
| <b>Total gross<br/>emissions</b>                | <b>16,496</b> | <b>16,492*</b> | <b>20,640</b>                    | <b>11,648</b> | <b>16,197</b> | <b>28,190</b>             |
| Carbon offsets                                  |               |                | -                                | -             | -             | -                         |

|   |               |                |               |               |               |               |
|---|---------------|----------------|---------------|---------------|---------------|---------------|
| <b>Total annual net emissions</b>                           | <b>16,496</b> | <b>16,492*</b> | <b>20,640</b> | <b>11,648</b> | <b>16,197</b> | <b>28,190</b> |
| Intensity measurement (tonnes of CO <sub>2</sub> e per FTE) | 2.22          | 2.29*          | 2.50          | 2.80          | 3.99          | 4.51          |

\*Scope 1 emissions of 2020/21 have been revised upon review.

Figure 1: A graph showing changes in emissions from the 2008/9 baseline to 2021/22

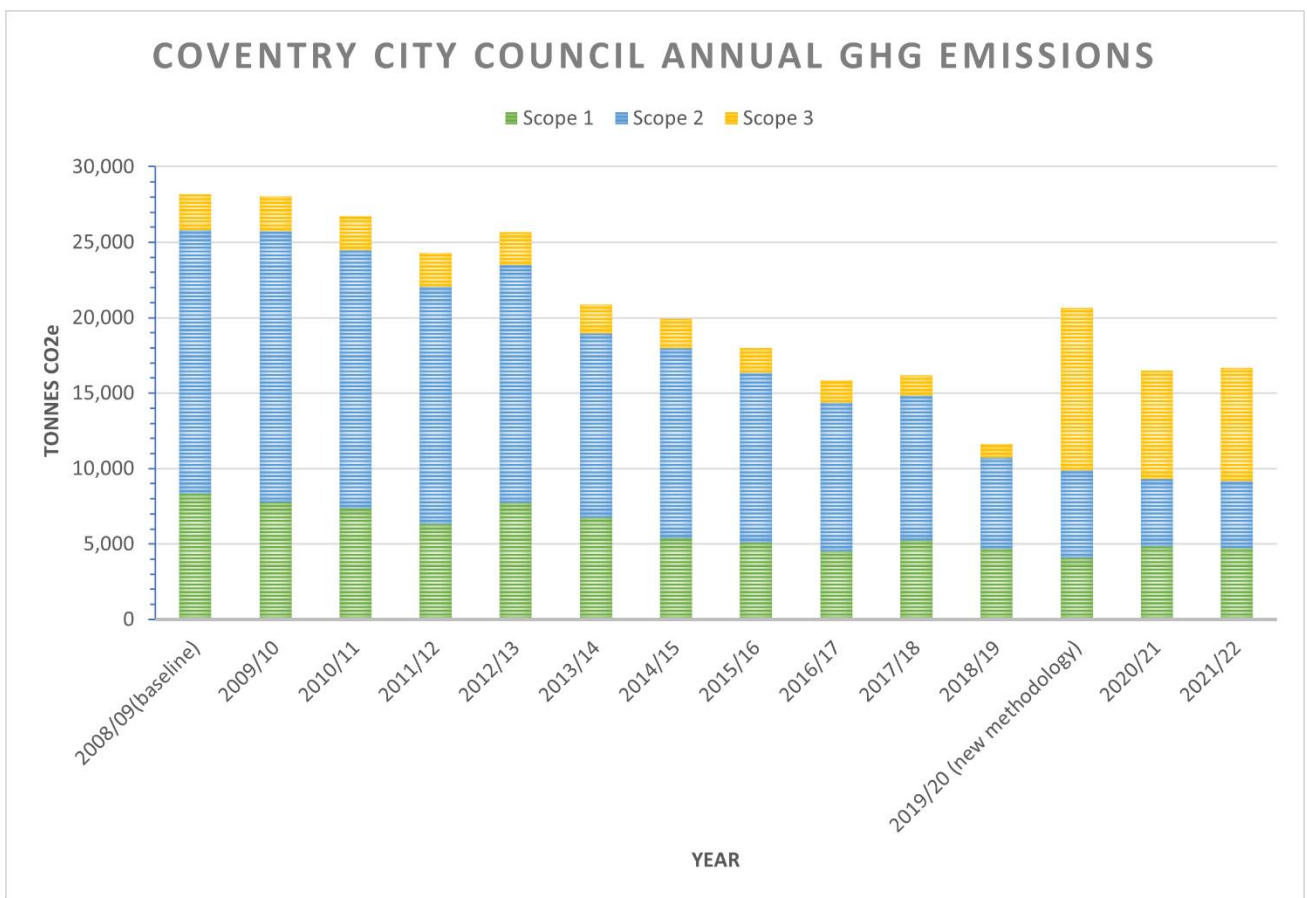
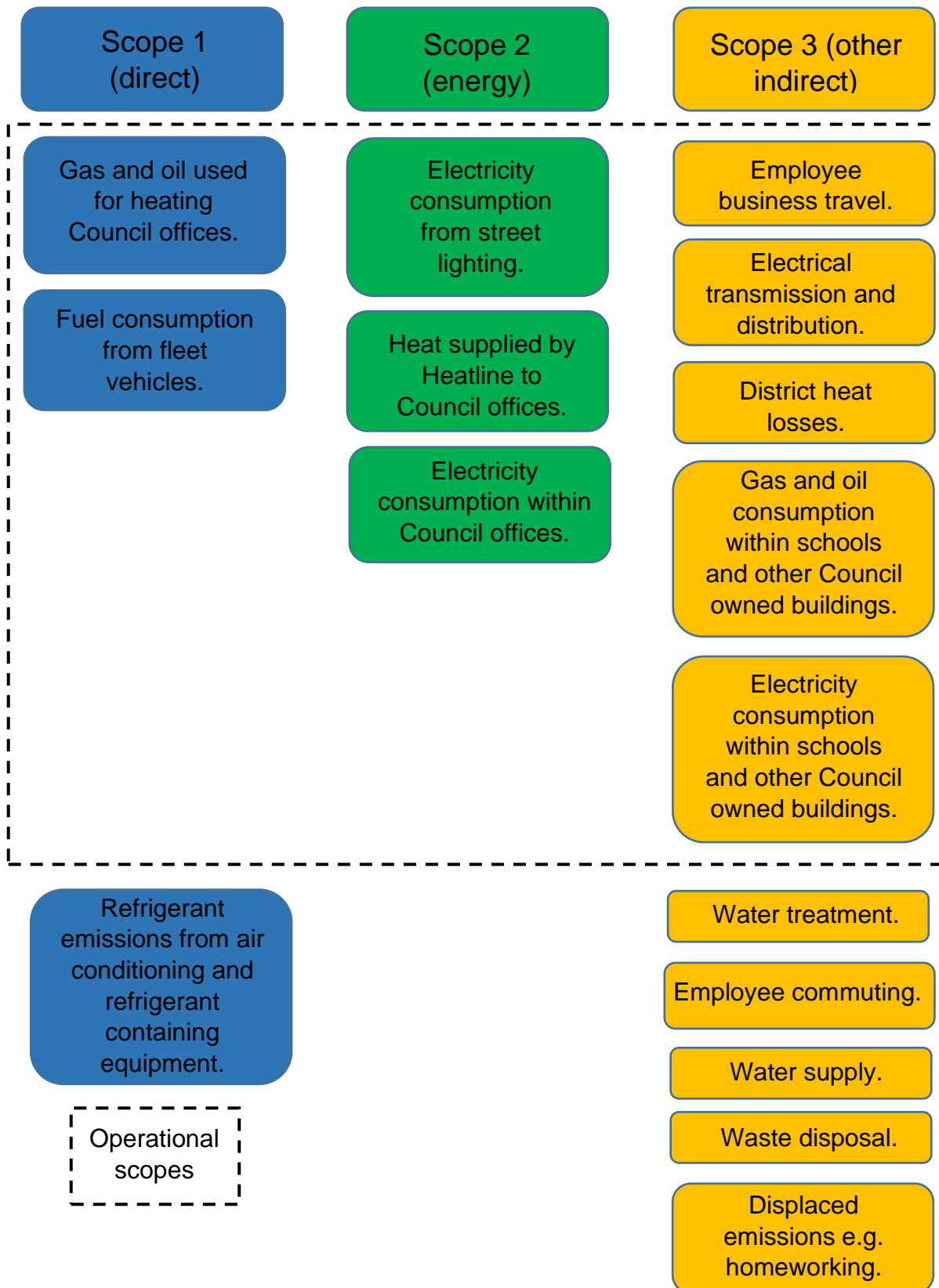


Figure 2: Coventry City Council's operational scopes



## **3.0 Supporting Information**

### **3.1 Organisation Information**

Coventry City Council is responsible for providing a wide range of services to people who live within the city, to people who visit the city and to businesses and other organisations based in Coventry. It currently serves a population of 379,387 (Coventry City Council mid-2020 estimate) and has approximately 4,064 full time equivalent (FTE) employees.

### **3.2 Reporting Period**

1<sup>st</sup> April 2021 to 31<sup>st</sup> March 2022.

### **3.3 Operational Scope**

We have measured our Scope 1 and Scope 2 emissions for all properties and vehicles that we fully own and control (Figure 2). We have reported some Scope 3 emissions, based on the availability of comprehensive and reliable data. The data included in this year's reporting is detailed above (Figure 2). Prior to 2019/20, only business travel and electrical transmissions and distribution was included in the scope 3 methodology.

In preparation for setting a new emissions target, Coventry City Council reevaluated the methodology used to calculate the carbon footprint of the Scope 3 emissions in 2020. This revision has extended Scope 3 emissions to include district heat losses, gas, oil and electricity consumption of schools and other Coventry City Council owned buildings, which is outlined in Figure 2. Coventry City Council will continue to develop a methodology to accurately record more Scope 3 data to include in following annual reports.

Despite expanding Scope 3 in 2019/20, Coventry City Council is investigating our ability to further expand Scope 3 again. However, this poses challenges as reliable and consistent data is required to accurately monitor changes in emissions on an annual basis.

## **4.0 Change in Emissions**

### **4.1. Scope 1 and 2 Emissions**

Emissions from Scope 1 and 2 in 2021/22 saw a 1.48% reduction compared to 2020/21 and 64% reduction from the 2008/09 baseline.

Fleet fuel consumption reduced by 4.92% from 2020/21. Diesel and gas oil decreased by 5.50% and 9.85% respectively. These can be attributed to a quieter gritting season as well as the fuel-crisis around October. Unleaded petrol, however, increased by around 50% compared to 2020/21. This is mainly because Streetpride services were not working normally during the pandemic, which would explain the lower usage in 2020/21. Compared to 2019/20, they show a smaller increase of 12%.

The fleet has been artificially inflated by the addition of around 70 electric vehicles. Some of these are being trialled by local SMEs as part of the Electric Fleet First project (2020-22), Others were immediately integrated into departments to replace ten-year-old diesels, and the rest will be doing so once the project concludes towards October 2022.

Scope 1 building emissions decreased by 1.77% between 2020/21 and 2021/22.

Gas oil consumption saw a fall of 3.58% in 2021/22 because of the removal of consumers like Whitley Depot Admin Block and the COVID-19 test centres at Moat Street Leisure Centre. The completion of Phase 1 PSDS retrofit scheme has seen a reduction of gas consumption in operational properties. Between April 2021 and March 2022, gas was fully removed from four sites. Gas was also partially removed from Central Library. The introduction of energy efficiency measures, including insulation, heating controls and solar PV, has resulted in further reductions in gas consumption across the 29 sites targeted by the Phase 1 PSDS scheme. It is expected that there will be further gas reductions in 2022-23 as the low carbon heating and energy efficiency measures are fully operational.

Scope 2 emissions only reduced by 0.42% in 2021/22. Heating and electricity in council buildings increased by 7.79% and 12.98% respectively which is partly attributable to recovery from the pandemic, as people go back to the office. The increase in electricity consumption is expected to continue as more sites install heat pumps but solar PV and battery storage is being used to offset the increased energy costs of electricity. There has been a 11.56% reduction in streetlighting consumption, a continuous positive impact of the dimmable controls. The long-term trend of electricity emissions reducing is also attributable to improvements in the production of electricity leading to electricity carbon factors falling by nearly 50% since first reporting in 2008. This is significant given that Coventry City Council relies heavily on electricity.

#### **4.2 Scope 3 Emissions**

Accurately recording emissions of a wider scope and comparing annual consumption allows strategies to be developed towards reducing areas with higher CO<sub>2</sub>e emission rates.

While the council has made significant progress on reducing emissions through mitigation actions, the greening of the national grid and organisational changes have also had significant impacts. Recent rationalisation of Council properties means that a number of properties that have previously been included in our emissions have been outsourced. Therefore, the Council's property portfolio has reduced.

The Wave was successfully connected to Heatline in August 2020. Heatline is a lower carbon alternative to traditional fuel heating systems, thus reducing Scope 3 building carbon emissions. Moving The Wave to Heatline saved approximately 99,692 kilograms of CO<sub>2</sub> equivalent emissions this period.

Scope 3 emissions increased by 4.36% in 2021/22 compared to last year. The most significant factor for this increase is business travel, which has risen by 83.57%. This is due to increased travel for meetings compared to last year, when lockdowns were in place.

#### **4.3 Intensity Measurement**

We have taken the approach of measuring the intensity of scope 1 and 2 emissions via tonnes of CO<sub>2</sub>e per full time equivalent (FTE) employee. Most recent figures show there are approximately 4,064 FTE employees in the core council, this is higher than in previous and is in part, responsible for the lower intensity, although the significant decrease in emissions is largely responsible.

## **5.0 Approach and Methodology**

Coventry City Council has followed DEFRA's Guidelines on how to measure and report greenhouse gas emissions. Emissions are reported in tonnes of CO<sub>2</sub>e. We have used the operational approach, meaning we have identified and reported on emissions from which the Council has full operating control under Scope 1 and 2. In previous years, the Council made the decision to exclude outsourced services due to the Council not being able to fully control energy consumption and lack of reliable data. However, in preparation for developing the new Climate Change strategy in 2020, Coventry City Council have extended Scope 3 to include outsourced services.

### **5.1 Limitations of Assessment**

It has been recognised that there are issues with the reporting of Scope 3. We are looking at the measures we can take to develop and improve accuracy going forward. This year, we have adopted an improved strategy to extend the Scope 3 boundaries.

Coventry City Council operates from a wide portfolio of offices and while the main offices have been included, there are some where Coventry City Council is not the main occupier and obtaining the data has been problematic. This report includes as much reliable data provided by schools and other occupiers of Coventry City Council owned buildings. It is anticipated that Scope 3 building emissions will continue to increase for the following years, as reliable procedures are implemented to collect more Scope 3 building energy consumption.

Collection of emissions data is complex and while significant progress has been made to improve the accuracy and reliability of the council's carbon footprint, there is still further improvements to be implemented. The result reported here is based on the best information available at the time.

## **6.0 Geographical Boundary**

All of Coventry City Council's activities and operations are carried out in the UK.

## **7.0 Base Year**

The base year for Coventry City Council's carbon footprint is 2008/09.

## **8.0 Targets**

We achieved our reduction target of 35% by 2020 in 2015/16. The new Climate Change Strategy has set the target for Coventry to achieve a 55% reduction in Carbon emissions by 2030 compared to 1990 levels which it signed up to last year as part of the Commitment of the Covenant of Mayors.

Coventry City Council's action dates back to being a signatory in 2008 for The Covenant of Mayors. We continue our work to a more sustainable future in the new Climate Change strategy which is currently under development. The new strategy will need to set out a path to decarbonising, not just the council's emissions, but all citywide emissions in order to mitigate the effects of climate change. In view of this, the council joined 58 cities from across Europe as part of the Eurocities initiative who have signed a letter to the President of the Council of the European Union in favour of an ambitious revision of the EU 2030 energy and climate targets to at least 55% by 2030, up to 65% with the right

support, compared to 1990 levels, alongside funding to be channelled to a green and just recovery in cities.

### **9.0 External Assurances**

We have not sought external assurances over our reported emissions.

### **10.0 Carbon Offsetting and Green Tariffs**

We have not purchased any carbon offsets, nor do we consume energy from green tariffs.

### **11.0 References:**

Coventry City Council (2020) Population and Demographics [online] available from <<https://www.coventry.gov.uk/facts-coventry/population-demographics>> [June 2022]

Department for Environment Food and Rural Affairs (DEFRA) (2021) Greenhouse Gas Reporting: Conversion Factors 2021 [online] available from <<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>> [June 2022]