

Coventry City Council

Annual Greenhouse Gas Report 2020/21

1. INTRODUCTION

- 1.1. Coventry City Council is a major employer and consumer of resources within the city. With a varied portfolio of over 200 assets comprising of council offices, libraries, care homes, car parks and a fleet of around 494 vehicles. Recognising that climate change is the most pressing environmental challenge facing us today, Coventry City Council was a founding signatory to the Covenant of Mayors for Climate and Energy in 2008. The Council acknowledges we have a major role to play in not only setting an example for others to follow, but mobilising all who live and work in the city to embrace the challenges that climate change and delivering a sustainable future presents us.
- 1.2. In 2012, a target was set to reduce Coventry City Council's Greenhouse Gas (GHG) emissions by 35% by 2020. The council achieved this target by 2015 and has further reduced its emissions since. 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 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. 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 develop a science-based target informed by research projects, such as the innovative Regional Energy Systems Operator ([RESO](#)). The target set under the new strategy will meet the West Midlands target of net zero economy by 2041 ahead of the national target of 2050.
- 1.3. Coventry City Council has the opportunity to 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 acquire this information, develop indicators, and track progress. This would enable the City Council to model the impacts of policies and interventions on carbon levels. This is proving to be a very important yet complex and difficult task.
- 1.4. 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 CO₂e) starting from 2008/09 (base year), to 2020/21. The structure of this report follows Government guidance.

2. 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 CO₂e

	2020/21	2019/20 (New scope 3 methodology)	2018/19	2017/18	2008/09 (Base year)
Scope 1	4,689	4,098	4,717	5,235	8,343
Transport Fuel	3,039	2,424	2,554	3,020	4,050
Gas Oil	38	48	543	451	573
Natural Gas	1,596	1,587	1,589	1,764	3,720
LPG	22	5	33	0	0
Kerosene	22	34	N/A	N/A	N/A
Scope 2	4,469	5,805	5,995	9,598	17,452
Heating (property)	304	397	152	197	N/A
Electricity (property)	1,789	2,441	2,613	5,400	6,937
Electricity (street lighting)	2,375	2,967	3,230	4,000	10,516
Scope 3	7,173	10,737	936	1,364	2,395
Electrical transmission and distribution	358	459	498	879	1,340
District Heat Losses	-	-	15	21	-
Business travel	174	425	423	464	1,055
Schools and Other Council Owned Buildings	6,640	9,871	-	-	-
Total gross emissions	16,332	20,640	11,648	16,197	28,190
Carbon offsets		-	-	-	-
Total annual net emissions	16,332	20,640	11,648	16,197	28,190
Intensity measurement (tonnes of CO ₂ e per FTE)	2.25	2.50	2.80	3.99	4.51

Figure 1: Changes in emissions from the 2008/9 baseline to 2019/20

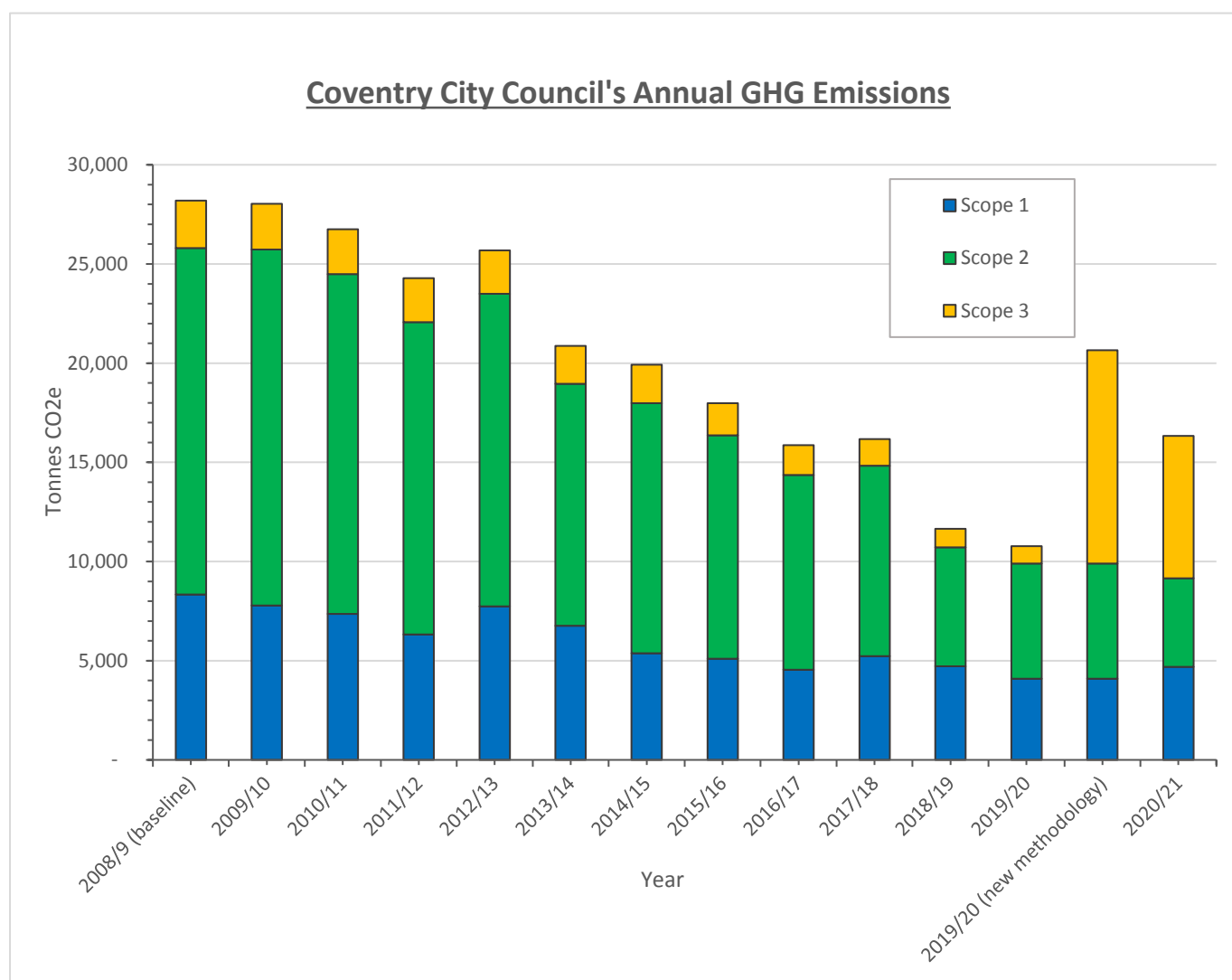
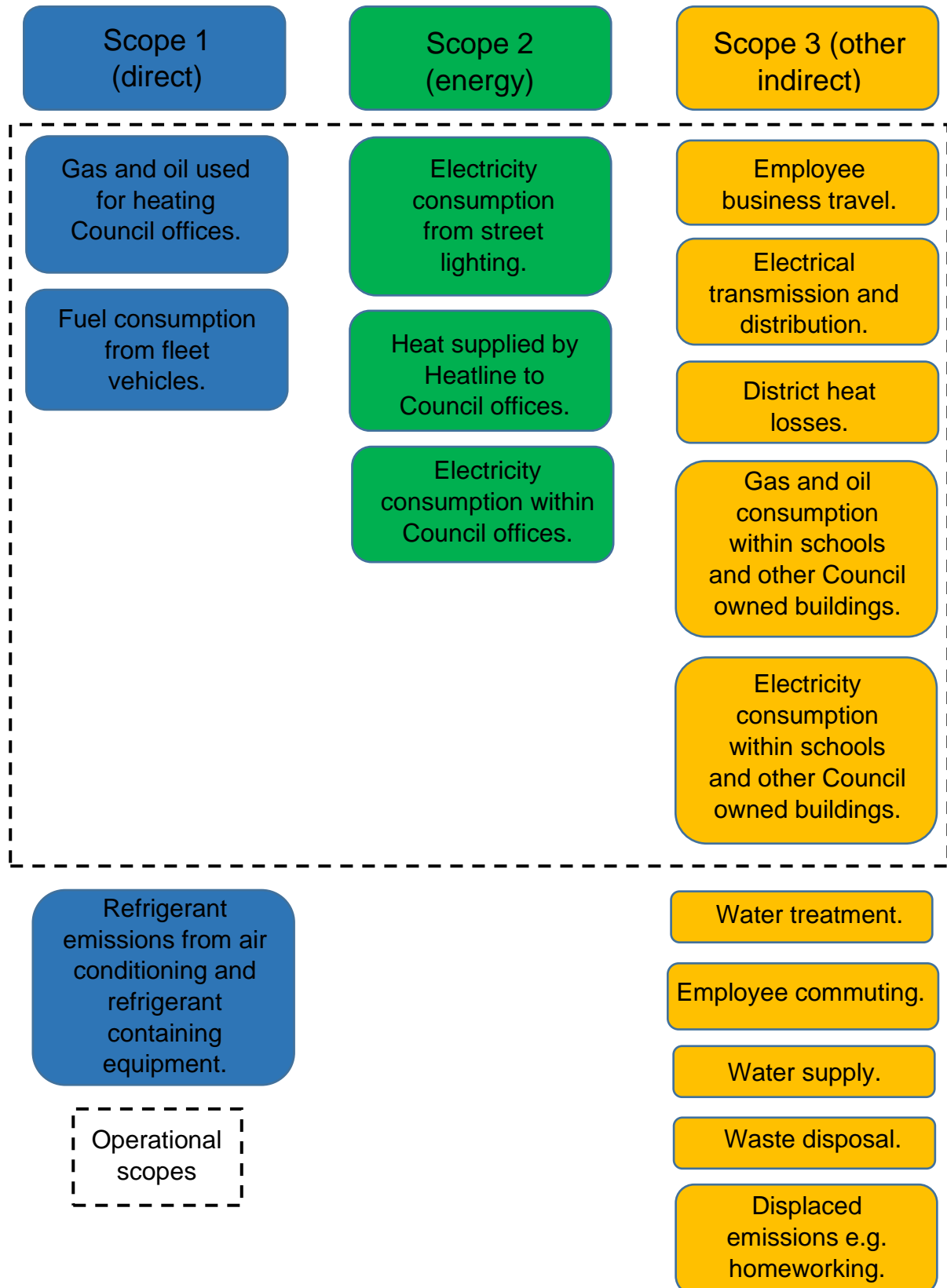


Figure 2: Coventry City Council's operational scopes



3. 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 366,785 (Coventry City Council 2018) and has approximately 4,064 full time equivalent (FTE) employees.

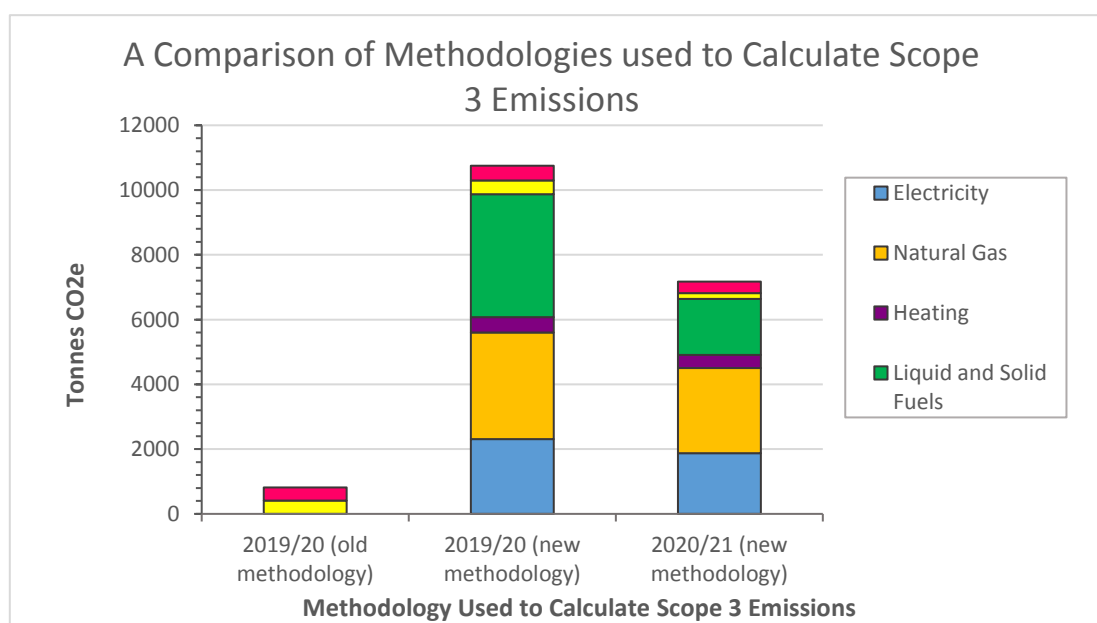
3.2 Reporting Period

1st April 2020 to 31st March 2021.

3.3 Operational Scope

- 3.3.1 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.
- 3.3.2 As mentioned above, in preparation for setting a new emissions target, Coventry City Council has reevaluated the methodology used to calculate Scope 3 emissions. This report has extended Scope 3 emissions to include district heat losses, as well gas, oil and electricity consumption of schools and other Coventry City Council owned buildings, which is outlined in Figure 2. Coventry City Council continues improve its methodology to accurately record and include more Scope 3 data in following annual reports. This poses challenges as reliable data must be collected to provide comparable data that can accurately monitor annual changes in emissions.

Figure 3: Comparison of Scope 3 emissions. The new methodology for calculating scope 3 emissions includes business travel; electricity, natural gas, heating, liquid and solid fuels from Council owned buildings, including schools; electrical transmission and distributions. Prior to 2019/20 just business travel and electrical T&D was included



4. CHANGE IN EMISSIONS

4.1. Scope 1 and 2 Emissions

- 4.1.1 Although Coventry City Council achieved its target of a 35% reduction in GHG emissions by 2020, six years ahead of target, we have continued to reduce our emissions further. Emissions from Scopes 1 and 2 in 2020/21 have decreased 8% since 2019/20 and 64% from the 2008/09 baseline.
- 4.1.2 Fleet fuel consumption increased by 25% from 2019/20. The increase has resulted from vehicles being added to the fleet to provide COVID-19 support services and to increase economic opportunities. Passenger transport created 28 additional routes for home-to-school transport and all pool cars, and additional spot hired vehicles were used to distribute medical supplies to vulnerable people in isolation. Waste significantly expanded the bulk bin vehicles and skips vehicles to manage increased demand, as well as starting a new recycling contract. The addition of these factors caused an increase in Scope 1 emissions.
- 4.1.3 Overall Scope 1 building emissions have only decreased by 1% from 2020/21 to 2019/20, a slowing of the reduction seen in previous years. However, this is attributable to improved reporting of LPG, causing LPG fuel consumption to appear (308%) higher than in previous years. Gas oil, natural gas and kerosene all saw drastic decreases in consumption in 2020/21.
- 4.1.4 Scope 2 emissions reduced by 23% in 2020/21. This reduction is partly caused by the impact of COVID-19 which has resulted in reduction of electricity consumption in some Council offices. There has also been reduced streetlighting consumption, as a result of increased extent of dimmable controls in operation across the city, which will now be a permanent change. 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

- 4.2.1 As mentioned above, the most significant change in CO₂e emissions is due to a change in Scope 3 boundaries. Scope 3 emissions, using 2019/20 methodology, appears to have significantly increased greenhouse gas emissions in 19/20. This is however a result of extending Scope 3. Figure 3 demonstrates the breakdown of CO₂ emissions included in Scope 3 using the methodology used in 2019/20, 2020/21 and what was used previously.
- 4.2.2 Accurately recording emissions of a wider scope and comparing annual consumption allows strategies to be developed towards reducing areas with higher CO₂e emission rates. Using the same methodology as 2018/19, Scope 3 emissions have reduced. 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 several properties that were previously included in our emissions have been outsourced. Therefore, the Council's property portfolio has reduced.
- 4.2.3 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 347,120 kilograms of CO₂ equivalent emissions per year.

4.3 Intensity Measurement

We have taken the approach of measuring the intensity of Scope 1 and 2 emissions via tonnes of CO₂e 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 years and is in part, responsible for the lower intensity, although the significant decrease in emissions is largely responsible.

5. 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 CO₂e. 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 inability to fully control energy consumption and the 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

- 5.1.1 It has been recognised that there are limitations with the reporting of Scope 3 data. We are looking at the measures we can take to develop and improve accuracy going forward. Over the past couple of years, we have adopted an improved strategy to extend the Scope 3 boundaries., which will am to continue.
- 5.1.2 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.
- 5.1.3 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. GEOGRAPHICAL BOUNDARY

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

7. BASE YEAR

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

8. TARGETS

We achieved our reduction target of 35% by 2020 in 2015/16. A new target is being developed under the revision of the Council's new Climate Change Strategy. It should be noted that Coventry City Council's action dates back to being a signatory in 2008 for The Covenant of Mayors. We continue our work for a more sustainable future in the new Climate Change strategy which is currently under development. This is in mind of the WMCA having set a target of carbon neutrality for the region by 2041, as part of the new strategy for the West Midlands. In view of this, the council recently 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, or 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. EXTERNAL ASSURANCES

We have not sought external assurances over our reported emissions.

10. CARBON OFFSETTING AND GREEN TARIFFS

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

11. REFERENCES

Coventry City Council (2018) *Coventry's Population Estimate* [online] Available from <https://www.coventry.gov.uk/downloads/file/27490/coventrys_population_estimate_2018> [August 2021]

Department for Environment Food and Rural Affairs (DEFRA) (2020) *Greenhouse Gas Reporting: Conversion Factors 2021* [online] Available from <<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>> [August 2021]