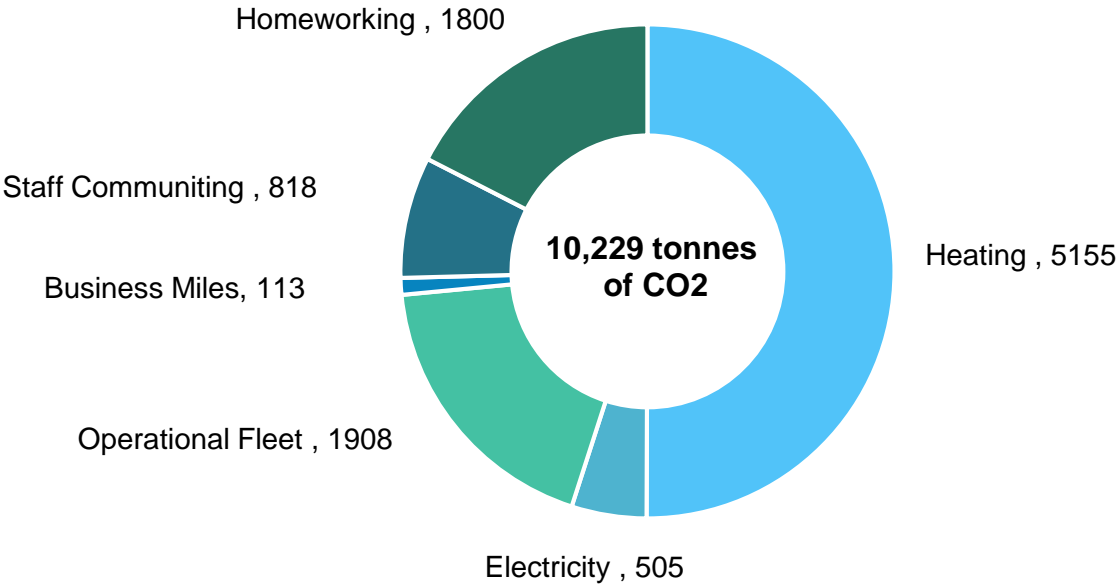


**Appendix 2 – Wolverhampton Council’s Carbon Footprint**

**APPENDIX 2A. City of Wolverhampton Council 2020/21 Carbon Emissions**



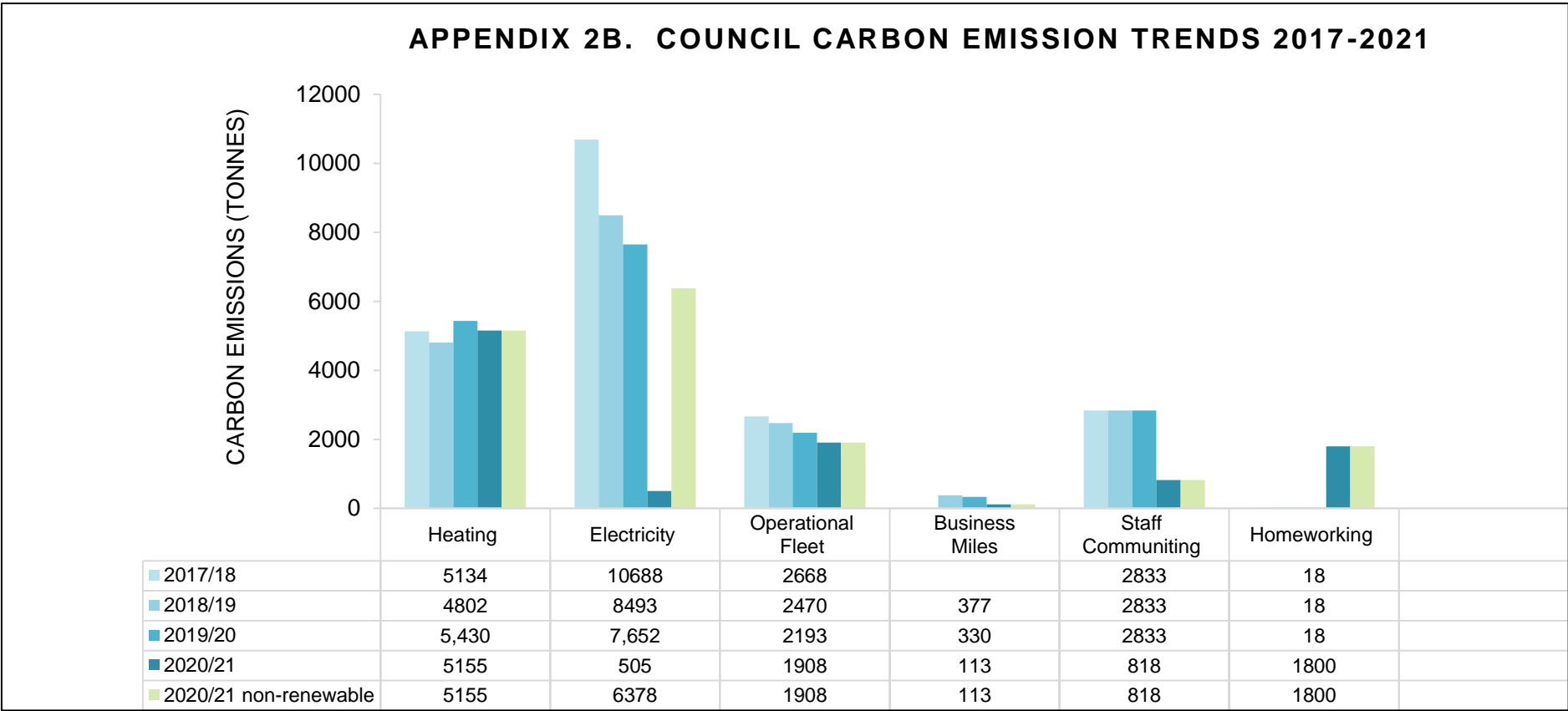
**Appendix 2a.** Outlines the Council’s carbon emissions for the tax year 2020/21.

Of the Council’s direct emissions from energy usage (heating, electricity, and vehicle fuel) Heating of council buildings is now the highest contributor to the Council’s emissions.

The Operational fleet is 2<sup>nd</sup> highest contributor, and the 3<sup>rd</sup> highest contributor is electricity following the switch to a renewable electricity provider.

The council’s indirect carbon emissions (Staff commuting, business miles, and agile working) have also been included. Due to COVID, Homeworking was a largest emitter, followed by Staff Commuting and then business mileage.

Total calculable Emissions from the council for 2020/21 equalled 10,922 tonnes of Carbon Dioxide equivalent.



**Appendix 2b** Details the trend in carbon emissions across the Council’s Corporate activities between 2017 and 2021.

Heating emissions remain static over the 4 years as there has been no changes to the carbon intensity of grid supplied natural gas.

On the other hand, the carbon intensity of electricity has decreased over-time in line with decarbonisation of the UK’s energy mix as we move away from fossil fuels towards renewable energy.

In 2019, the council switched its energy supplier to one which provided renewable electricity. The provider is backed by the Renewable Energy Guarantees of Origin (REGO). This saw a reduction of the council's "consumption-based" emissions of around 7000 tonnes for the Council. Prior to this, the electricity used in buildings and street lighting was the greatest contributor to the Council's carbon footprint.

The Lime coloured bar demonstrates what the Council's emissions would be without a renewable energy provider. It must also be noted, that even though the Council uses a renewable energy provider, it doesn't completely absolve the Council of accountability over its energy consumption. This is because the emissions savings have already been accounted for in the UK "location based" emissions profile. When reporting our carbon savings internally it is acceptable to report reduced emissions, but when reporting externally, the Council must report these alongside the location-based emissions to avoid double counting.

Operational fleet has experienced gradual decreases in carbon intensity over, this is predominantly due to increasing biofuel mix within diesel and also an increase in the number of cleaner hired vehicles within the fleet. During COVID however further efficiencies have been witnessed due to changes in service provision, such as passenger transport. Once "normal" life resumes, emissions will be expected to increase slightly.

The Council's business mileage claims have also decreased along with the associated emissions. With a reduction in general travel and staff travel throughout the pandemic, and a reliance on home-working, business mileage emissions have decreased by 50%, and staff commuting emissions have reduced by 72%.

However, much of these savings have been offset by an assumed increase in domestic emissions due to the agile-working arrangements. 80% of staff have been working from home over the past year using their own heating and electricity to conduct council business for large portions of the day. The associated emissions have been calculated at approximately 1800 tonnes.

Staff commuting, and homeworking emissions were calculated by apportioning the emissions calculated from the 2020 life in lockdown survey, to the number of people who had to work from home.

Home working emissions were calculated by using the following assumptions that:

1. Household energy consumption was equal to the national average
2. The household occupancy was equal to the national average of 2.4
3. That average working hours were equivalent to full time hours

As such there is a large margin of error within the calculations but offers a useful insight. Further data is required to produce more robust calculations.

Data for staff business mileage is missing for year 2017/18 and staff commuting emissions have been assumed to be static over time.

The Councils carbon emissions from other indirect sources such as what we consume and waste as an organisation, plus all of the external public contracts we let, are omitted from the calculations. This is due to the complexity and difficulty in quantifying the embedded carbon of contracts from the supply chain.