**Organisational Carbon Emissions Summary Report March 2023**

**Stratford District Council**

**1. Aims and Purpose**

This report has been developed to outline Stratford District Council's carbon emissions data and is structured in line with Defra's 'Guidance on how to measure and report your greenhouse gas emissions' document.

**2. Types of Emissions - Scopes**

There are three types of emissions, referred to as Scopes 1, 2 and 3 - these categorise emissions into three different types as follows.

***Scope 1*** - Direct emissions. These emissions relate to activities that are owned or controlled by the organisation and involve the release of emissions straight into the atmosphere. Examples include combustion emissions from gas boilers in council buildings and emissions from council owned vehicles.

***Scope 2*** - Energy indirect emissions. These emissions are associated with the consumption of purchased electricity, heat, steam and cooling. These emissions arise as a consequence of the organisation's activities but are not owned or controlled by them as they are released at power stations where the electricity is generated.

***Scope 3*** - Other indirect emissions. These are emissions that are a consequence of the organisation's actions that occur at sources that are not directly owned or controlled. Examples for the council include outsourced activities, business travel by staff using their own vehicles at work and also outsourced activities.

**3. Reporting Period**

The reporting period is for the financial years 2018-19, 2019-20, 2020-21 and 2021-22. The carbon footprint baseline year is currently 2018/19. Updates for 2022-23 will be collated during the summer of 2023.

4. Measuring and Reporting Approach

A number of gases contribute to climate change and six main greenhouse gases (GHGs) are covered in the Kyoto Protocol: carbon dioxide (CO2), methane (CH4), hydrofluorocarbons (HFCs), nitrous oxide (N2O), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6) 19. Different activities emit different gases; for example, burning fossil fuels releases carbon dioxide, methane and nitrous oxide into the atmosphere. It is standard practice to report GHGs in tonnes of CO2 equivalents (CO2e). In order to achieve this, conversion factors are used that are located on the GOV website and are produced by Defra on an annual basis.

Conversion factors help organisations convert their activities into equivalent carbon emissions. The conversion factors change annually taking into account a number of influences including fuel mix, consumption from UK power generation along with imports and exports in relation to gas and electricity. It is best practice to use the conversion factors from the calendar year in which the greatest portion of your data falls, therefore for 2020-21 reporting year, the 2021 conversion factors have been used.

The emissions are calculated as follows: Activity Data x Emission Factor = Carbon dioxide equivalent ($CO_2e$)

**5. Organisational Boundary**

All areas of the council's operations have been considered.

**6. Operational Scopes**

The Scope 1 emissions include the gas emissions from the council's buildings, council owned vehicles and all business lease vehicles such vans and pool cars. Fugitive emissions relating to air conditioning and refrigeration units have been excluded because it has been considered too complex to calculate at the current time.

The Scope 2 emissions are those associated with the mains electricity consumption from the council's buildings.

The Scope 3 emissions include the gas and electricity consumption from outsourced activities, the business mileage from private and leaseholder vehicle use. Rail, bus and air travel where appropriate would usually be included but were not available at the time of reporting. Buildings that are managed by outsourced contracts are also included where the contractor is responsible for bill payments. Data on refuse and recycling trucks, road sweepers, grounds maintenance mowers and vans used by for the Neighbourhood Services contract are also included.

## 7. Carbon Emissions Data

### *Figure 1 – Stratford District Council Top Level Data Summary*

| SDC Carbon Emissions Summary Table | | | | |
|---|---|---|---|---|
| **Scope / Activity** | **2018/19 (base year)** | **2019/20** | **2020/21** | **2021/22** |
| | Kg CO2e | Kg CO2e | Kg CO2e | |
| **Scope 1** | | | | |
| Gas | 144,908 | 162,023 | 178,624 | 200,785 |
| Lease Vehicles | 17,855 | 17,938 | 19,423 | 15,219 |
| Total (Scope 1) | **162,762** | **179,961** | **198,047** | **216,004** |
| **Scope 2** | | | | |
| Electricity | 796,831 | 380,730 | 311,915 | 271,524 |
| Total (Scope 2) | **796,831** | **380,730** | **311,915** | **271,524** |
| **Scope 3** | | | | |
| Water | 0 | 0 | 0 | 0 |
| T&D Losses | 67,918 | 32,323 | 26,825 | 17,029 |
| Neighbourhood Services Transport (waste, grounds and cleansing) | 1,444,055 | 1,901,095 | 1,588,772 | 1,569,207 |
| Neighbourhood Services Buildings (waste contract) | 34,184 | 29,957 | 49,210 | 55,100 |
| Business travel from greyfleet (staff own vehicles) | 50,191 | 50,191 | 25,019 | 32,569 |
| Leisure Centres | 1,291,605 | 1,176,812 | 691,666 | 1,131,813 |
| Total (Scope 3) | **2,887,954** | **3,190,378** | **2,381,492** | **2,805,718** |
| **Total Gross Emissions (kg)** | **3,847,548** | **3,751,069** | **2,891,453** | **3,293,246** |
| **Total Gross Emissions (t)** | **3,848** | **3,751** | **2,891** | **3,293** |

From the summary data in *Figure 1* for Startford District Council, the Scope 3 emissions account for the majority of all emissions and the emissions from Scope 3 and leisure centres are the two single largest sources of organisational emissions. Emissions overall have increased from 2020/21 which was not wholly representative because of the Covid lockdown restricted some council operations (such as Leisure Centres). The table does demonstrate, however, that emissions for 2021/22 are still lower than 2019/20 and 2018/19 which were largely before the covid pandemic.

***Figure 2 – Warwick District Council Carbon Emissions 2021/22 KGC02e***

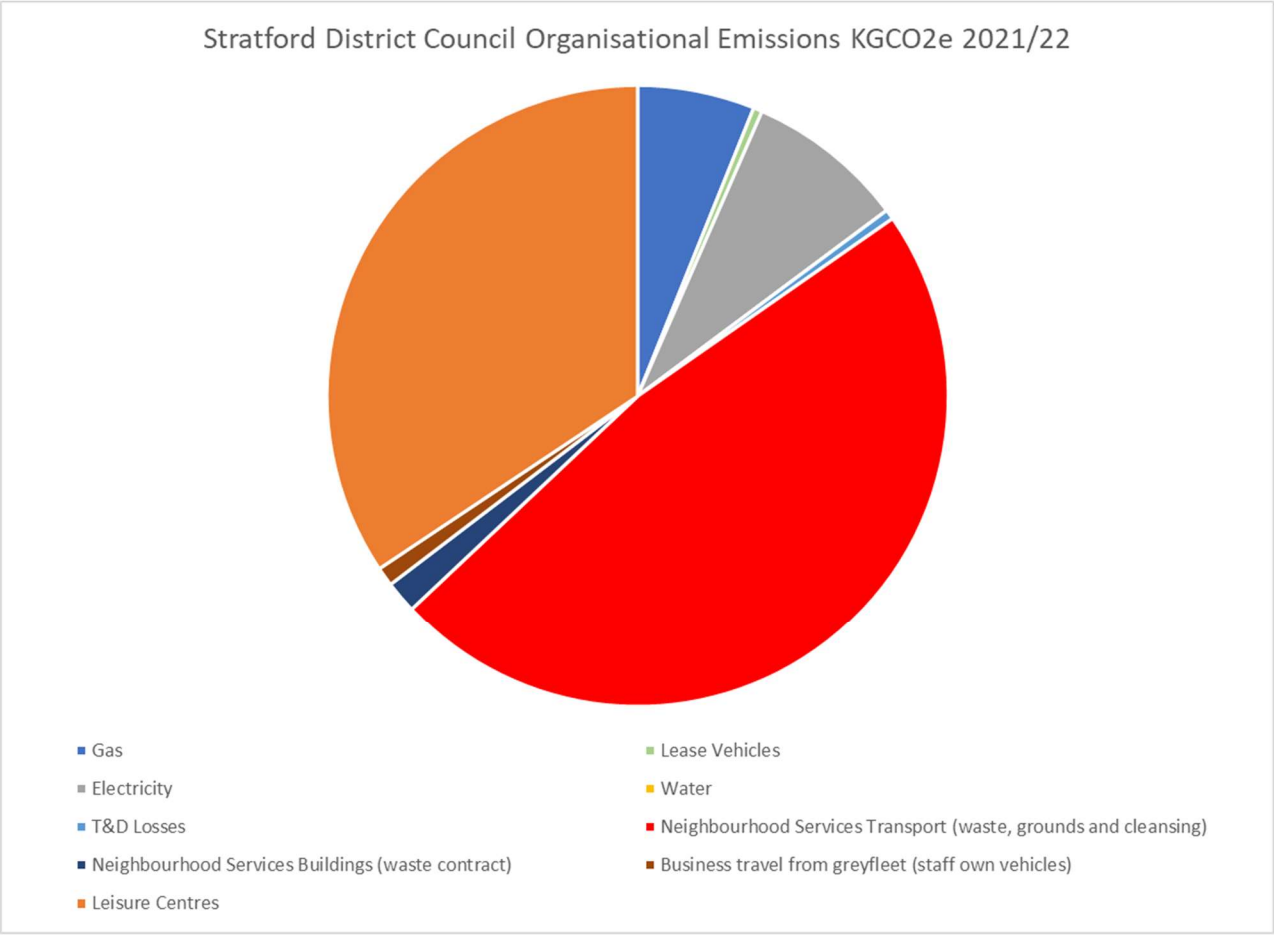


Figure 2 – The sources of emissions by type demonstrate clearly the two most significant sources of emissions are from Neighbourhood Services transport and leisure centres.