

Appendix A

Solihull Council Greenhouse Gas Reporting Methodology

Introduction

In October 2019, Solihull Council passed a motion to recognise the Climate Change emergency and set an ambition to become net zero carbon in its main operations by 2030.

The Council reports on carbon and other Greenhouse Gas emissions arising from its operations for each financial year. Greenhouse Gases¹ include:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydroflurocarbons (HFCs)

Solihull Council will be using the [Local Government Association Green House Gas Reporting Tool](#) to calculate and report its Greenhouse Gas emissions (GHG). Local Partnerships, working with the Local Government Association (LGA) have developed this accounting tool to provide a consistent approach for councils seeking to calculate their carbon emissions. The tool uses international [GHG Reporting Protocol](#) standards and incorporates annually updated UK Government GHG conversion factors².

Reporting Boundary

There are several approaches an organisation can take when setting the scope of emissions that it reports (the Reporting Boundary). Solihull Council take the Operational Control approach; reporting on emissions from functions where it has a high level of authority to create operating policies and make operational decisions. The Operational Control approach is widely used by UK local authorities³.

Operational Scopes

Under the GHG protocol, GHG emission sources are classified as Scope 1, 2, or 3 as follows:

Scope 1: Direct emissions from council owned or controlled sources

This is mainly emissions arising from combustion of fossil fuels (such as gas and diesel) in council owned &/or controlled heating systems and fleet vehicles. It also includes emissions associated with refrigerant gases used in air conditioning systems controlled by the Council.

Scope 2: Indirect emissions from purchased energy

¹ When reporting, GHGs are expressed as CO_{2e} (CO₂ equivalent). CO_{2e} is a unit of measurement to allow comparison of the climate impact of different gases. To report the GHG emissions associated with an activity the 'activity data' i.e. litres of fuel used are multiplied by a carbon factor to determine the CO_{2e}.

² A carbon factor represents the amount of carbon dioxide (or equivalent) gas is released per unit of consumption. Central Government set the carbon factors, which are updated each year (further information can be found [here](#)). The LGA tool for reporting Greenhouse Gas emissions has the carbon factors for that year embedded into it for convenience.

³ For more detail on setting the organisational boundary see the [GHG Protocol](#).

This includes emissions associated with the generation of purchased electricity (& heat) used in the council's operational buildings, street lighting and for charging its electric vehicles (EVs).

Scope 3: Other indirect/supply chain emissions

These are emissions which are a result of the Council's activities, but which are from sources that the Council does not own or control, e.g. supplier activities, staff business mileage etc.

The Council is aiming to broaden the range of emissions it reports under Scope 3 and is reviewing its supply chain to include further relevant emission sources where possible and practical.

The Council takes the approach of reporting on emission sources where:

- it has significant level of influence or control over emissions
- there is consistent reliable data over time
- obtaining data is not unreasonably time consuming/expensive (data collection is proportionate to considered value of carbon reduction)

The Council prioritises reporting on emission sources that have the most substantial impact on its overall carbon footprint. Where an emission source is seen as having a substantial impact on the footprint but access to detailed data is not available or not available over a required time period, the Council will seek to use reasonable assumptions to provide an estimate.

The Council aims to continuously improve its reporting methodology to provide information that is as accurate as practically possible.

Methodology

The table below sets out GHG emission sources and the Council's reporting scopes/ boundaries.

* Emission sources included in Council net zero by 2030 ambition.

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|-----------------------------------|--|--------------------------------|---|--|--|--------------------------|--|
| *Scope 1: Direct Emissions | | | | | | | |
| Scope 1 | Gas – Corporate Properties | Existing | Includes gas burned in boilers in owned or leased corporate properties used for council operations | Resources - Property Services (& Economy and Infrastructure for Cemeteries & Crematoriums) | kWh data obtained from energy supplier | High level of confidence | Includes buildings the Council owns or leases to operate a Council service from. |
| Scope 1 | Gas - Leisure Properties | Existing | Includes gas burned in boilers and on-site CHP in Council owned leisure properties: Tudor Grange & North Solihull leisure centres | Resources - Property Services/Public Health | kWh data obtained from energy supplier | High level of confidence | While the leisure centres are operated by 'Everyone Active', the Council retains a significant level of responsibility for the properties. Discussion on-going with service provider to determine most effective approach for reporting responsibility with regard to scope. |
| Scope 1 | Gas – Adult Social Care residential properties (ASC) | New | Includes gas burned in boilers in council run residential care homes | Adult Social Care | kWh data obtained from energy supplier from 2025/26. | High level of confidence | |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------|---|--------------------------------|--|-------------------------------|---|--------------------------|---|
| | | | | | Estimate 2019/20 – 2024/25 | | |
| Scope 1 | Gas – Children’s Services | New | Includes gas burned in boilers in council run children’s residential homes | Children’s Services | kWh data obtained from energy supplier. Data available from 2024/25 Estimate 2019/20 – 2023/24 | High level of confidence | |
| Scope 1 | Gas - Solihull Community Housing (SCH) | New | Includes gas burned in boilers to heat offices, communal areas & other properties for which SCH pay the gas bill | SCH | kWh data obtained from energy supplier. Data available from 2024/25. Estimate 2019/20 – 2023/25. | High level of confidence | SCH is wholly owned by Solihull Council. The Council has a significant level of responsibility for SCH and therefore energy used, and energy efficiency measures. |
| Scope 1 | Fugitive emissions – Corporate & Leisure properties | New | Refers to gas or vapour released into the atmosphere from refrigerants from air conditioning units. | Resources - Property Services | Kg of refrigerant used annually obtained from maintenance contractor. Data from 2025/6 onwards only. Estimate 2019/20 – 2024/25. | High level of confidence | |
| Scope 1 | Fuel - Corporate vehicle fleet | Existing | Diesel & petrol used in Corporate leased | Resources - Property Services | Fuel (litres) - data obtained from fuel cards database | High level of confidence | |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------|--|--------------------------------|---|-------------------------------|--|--------------------------|--|
| | | | and owned vehicles | | | | |
| Scope 1 | Fuel – Strategic Environment Contract (SEC) fleet | Existing | Diesel, petrol & HVO used in vehicles used to deliver SEC contract (Veolia: refuse collection, street cleansing, grounds maintenance) | E&I – Waste Services (Veolia) | Fuel (litres) - data obtained from Veolia | High level of confidence | SEC fleet vehicles are operated by Veolia & mostly owned by the Council. Council has a high level of control over the types of vehicles used. Discussion ongoing with service provider to determine most effective approach for reporting responsibility with regard to scope. |
| Scope 1 | Fuel – SCH fleet | New | Diesel & petrol used in SCH vehicles (all leased). | SCH | Fuel (litres) data obtained from SCH | High level of confidence | SCH wholly owned by SMBC. The Council has a significant level of responsibility for SCH and therefore the vehicle type and fuel. |
| Scope 1 | Fuel – School Transport Service - Council vehicles | New | Diesel and petrol used in Council vehicles used for school transport. | Resources - Property Services | Fuel (litres) - data obtained from fuel cards database. Data from 2019/20 – 2024/25 to be obtained. | High level of confidence | To date estimates have been used. |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---|---------------------------------------|--------------------------------|---|---|---|--------------------------|--|
| | | | | | Data from 2025/6 onwards. | | |
| *Scope 2: Indirect Emissions from Purchased Energy | | | | | | | |
| Scope 2 | Electricity – Corporate Properties | Existing | Electricity purchased by Solihull Council and used in corporate buildings & carparks | Resources - Property Services | kWh data obtained from energy supplier | High level of confidence | Includes buildings the Council owns and leases to operate a Council service from. |
| Scope 2 | Electricity - Leisure Services | Existing | Electricity used in Council owned leisure properties: Tudor Grange & North Solihull leisure centres | Resources - Property Services/Public Health | kWh data obtained from energy supplier | High level of confidence | While the leisure centres are operated by 'Everyone Active', the Council retains a significant level of responsibility for the properties. Discussion on-going with service provider to determine the most effective approach for reporting responsibility with regard to scope. |
| Scope 2 | Electricity – Adult Social care (ASC) | New | Includes electricity purchased by Solihull Council used in council run residential care homes | ASC | kWh data obtained from energy supplier. Estimate 2019/20 – 2024/25 Data available from 25/26 | High level of confidence | |
| Scope 2 | Electricity – Children's Services | New | Includes electric used in council owned children's residential homes | Children's services | kWh data obtained from energy supplier. | High level of confidence | |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|--|--|--------------------------------|--|-------------------------------|--|----------------------------|---|
| | | | | | Estimate 2019/20 – 2024/25 Data available from 2024/25 | | |
| Scope 2 | Electricity - Solihull Community Housing (SCH) | New | Electricity used in SCH offices, depots, residential communal areas and other properties for which SCH pay the electricity bill. | SCH | kWh data obtained from energy supplier. Estimate 2019/20 – 2024/25 Data available from 2024/25 | High level of confidence | SCH is wholly owned by Solihull Council. The Council has a significant level of responsibility for SCH and therefore energy used, and energy efficiency measures. |
| Scope 2 | Electricity - Street Lighting | Existing | Electricity purchased by Solihull Council used in Council owned street lighting | E&I - Street Lighting | kWh data obtained from street lighting contractor | High level of confidence | |
| Scope 3: Other Indirect Emissions – Operational | | | | | | | |
| Scope 3 | * Electricity Transmission & Distribution losses | Existing | Related to all Scope 2 electricity consumption above | Resources - Property Services | kWh data obtained from electricity supplier & street lighting contractor | High level of confidence | |
| Scope 3 | * Business Travel (Grey Fleet) – miles | New | Diesel & petrol used in SMBC employee-owned vehicles for business travel | Resources - Human Resources | Data obtained from mileage expense records from HR. | Medium level of confidence | Milage may not always be claimed by staff even if undertaken. |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------|---------------------------------------|--------------------------------|--|--|--|--------------------------|--|
| | | | | | Data from 2019/20 to 2023/24 to be obtained. Data from 2024/25. Current data is in miles travelled. Will be developed over time to reflect fuel type/ source. | | |
| Scope 3 | Business Travel – public transport | N/A | | Resources - Human Resources | | NA | Reporting feasibility to be explored |
| Scope 3 | Business Travel – hotel accommodation | N/A | | Resources - Human Resources | | NA | Reporting feasibility to be explored |
| Scope 3 | Staff working from home | N/A | Emissions relating to heat & power used by Council staff when home working (includes SCH staff). | Resources - Human Resources & E&I – Sustainable Travel | | N/A | Reporting feasibility to be explored |
| Scope 3 | Staff commute | N/A | Fuel used in Council staff vehicles to commute to & from work (includes SCH staff). | E&I - Sustainable Travel | | N/A | Reporting feasibility to be explored |
| Scope 3 | * Water - Corporate Properties | New | Water use & wastewater treatment related to | Resources - Property Services | Data obtained from water supplier. | High level of confidence | Data from buildings the Council owns and |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------|-----------------------------------|--------------------------------|---|---|---|----------------------------|--|
| | | | owned or leased corporate properties used for Council services | | Estimate 2019/20 - 2023/24. Data from 2024/25. | | leases to operate a Council service from. |
| Scope 3 | * Water Use – Leisure Services | New | Water use & wastewater treatment related to Council owned leisure properties: Tudor Grange & North Solihull leisure centres | Public Health/Resources - Property Services | Data obtained from water supplier Estimate 2019/20 - 2024/25. Data from 2024/25. | High level of confidence | While the leisure centres are operated by 'Everyone Active', the Council retains a significant level of responsibility for the properties. |
| Scope 3 | * Water Use – ASC | New | Water use & wastewater treatment used in council run residential care homes | Adult Social Care | Data obtained from water supplier Estimate of emissions from bill charge. Therefore, medium level of confidence. Bills to be obtained from 2019/20. | Medium level of confidence | |
| Scope 3 | * Water Use – Children's Services | New | Water use & wastewater treatment used in council run children's homes | Children's Services | Data obtained from water supplier Estimate of emissions from bill charge. Therefore, medium level of confidence. | Medium level of confidence | |

| Scope | Emission Source | Reporting area – new/existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------|--|-------------------------------|---|-------------------------------|---|----------------------------|--|
| | | | | | Bills to be obtained from 2019/20. | | |
| Scope 3 | * Water - Solihull Community Housing (SCH) | New | Water use & wastewater treatment related to offices, depots, communal areas & other properties for which SCH pay the water bill | SCH | Data obtained from water supplier Estimate from bills. Bills to be obtained from 2019/20. | Medium level of confidence | SCH is wholly owned by Solihull Council. The Council has a significant level of responsibility for SCH and therefore water used and any efficiency measures. |
| Scope 3 | * Waste - Corporate Properties | New | Waste produced in corporate properties | Resources - Property Services | Data obtained from SMBC Waste Services – waste collection contract Data 2019/20 - 2023/24 to be obtained. Data available from 24/25 | High level of confidence | |
| Scope 3 | * Waste - Leisure | New | Waste produced in leisure properties: Tudor Grange & North Solihull leisure centres | Everyone Active | Data obtained from waste collection contract Data 2019/20 - 2023/24 to be obtained. Data available from 24/25 | High level of confidence | While the leisure centres are operated by 'Everyone Active', the Council retains a significant level of responsibility for the properties. |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|--|--|--|---|--|---|--------------------------|--|
| Scope 3 | * Waste – ASC | New | Waste produced in council run residential care homes | ASC | | N/A | Reporting feasibility to be explored |
| Scope 3 | * Waste – Children’s Services | New | Waste produced in council run children’s residential homes | Children’s services | | N/A | Reporting feasibility to be explored |
| Scope 3 | * Waste – SCH | New | Waste produced in SCH offices, depots, communal areas and other properties for which SCH pay for waste collection | SCH | Data obtained from SMBC Waste Services – Waste collection contract & SCH Data 2019/20 - 2023/24 to be obtained. Data available from 24/25 | High level of confidence | SCH is wholly owned by Solihull Council. The Council has a significant level of responsibility for SCH. SMBC provide waste collection & disposal |
| Scope 3: Other Indirect Emissions - Contracted Services | | | | | | | |
| Scope 3 | Fuel – School Transport Service - contracted | Existing. New methodology to be explored | Emissions based on spend data for contracted services. | Children’s Services - School Transport Service | Estimate based on £ spend data. Data 2019/20 - 2023/24 to be obtained. Data available from 24/25 | Low level of confidence | To date estimates have been used based on number of pupils transported. |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------|--|--------------------------------|---|---|--|------------------|--------------------------------------|
| | | | | | Methodology to be developed to reflect diesel, petrol and electricity used in contracted vehicles for School Transport Service (includes taxi companies, minibuses & coach routes) | | |
| Scope 3 | Facilities management contract - Grahams | N/A | Fleet & office energy used for purposes of contract | Resources - Property Services – (Grahams) | | N/A | Reporting feasibility to be explored |
| Scope 3 | SCH facilities management contract - Dodds | N/A | Fleet & office energy used for purposes of contract | SCH (Dodds) | | N/A | Reporting feasibility to be explored |
| Scope 3 | Highways Maintenance contract – Balfour Beatty | N/A | Diesel, petrol & electricity used in Balfour Beatty vehicles & plant used for Highways maintenance contract | E&I – Highways (Balfour Beatty) | | N/A | Reporting feasibility to be explored |
| Scope 3 | Care & Children’s home contracts – various | N/A | Buying places in care homes | ASC & Children’s Services | | N/A | Reporting feasibility to be explored |
| Scope 3 | Community care contracts | N/A | Home visits | ASC & Children’s Services | | N/A | Reporting feasibility to be explored |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------|---|--------------------------------|---|--|---|---------------------------|---|
| Scope 3 | Catering contracts | N/A | | Resources - Property & Childrens | | N/A | Reporting feasibility to be explored |
| Scope 3 | Municipal Waste management - Energy from Waste Plant operation | N/A | Emissions from heating & powering Coventry & Solihull Waste Disposal Company Ltd premises & vehicles | E&I - Waste Services (Coventry & Solihull Waste Disposal Company Ltd.) | 1/3 data (e.g. kWh) obtained from Coventry & Solihull Waste Disposal Company Ltd. | N/A | Reporting feasibility to be explored Company part owned by Solihull Council (1/3). Company providing Council service. |
| Scope 3 | Municipal waste management - Materials Recovery Plant operation | N/A | Emissions from heating & powering Sherbourne Recycling premises & vehicles | E&I - Waste Services (Sherbourne Recycling) | 14.6% data (e.g. kWh) obtained from Sherbourne Recycling | N/A | Reporting feasibility to be explored Part owned by Solihull Council (14.6%). Company providing Council service. |
| Scope 3 | Municipal waste management | New | Emissions from municipal waste management processes, (excluding waste from Council buildings (accounted for above)) | E&I - Waste Services | Data obtained from E&I Waste Services. Tonnes per waste stream & management route | High level of confidence. | Waste is predominantly produced by Solihull householders. Council is responsible for the collection & disposal of this waste. |
| Scope 3 | Other contracts/procurement | N/A | Emissions relating to goods & other procured Council services | Resources - Procurement | | N/A | Reporting feasibility to be explored |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|---------------------|-------------------------------------|--------------------------------|----------------------------|-------------------------------|---|---|---|
| Out of Scope | | | | | | | |
| Out of Scope | Solihull Council maintained schools | N/A | Emissions from utility use | Resources - Property Services | Data obtained from utility supplier | Inconsistent data | <p>Properties owned & maintained by Council. Utilities sourced and paid by Council.</p> <p>Inconsistent data as maintained schools are academising.</p> <p>Report kgCO2e/m2 as stand-alone metric.</p> |
| Out of Scope | Academies | N/A | Emissions from utility use | Academies | Data cannot be accessed or verified by the council. | Data cannot be accessed or verified by the council. | <p>While some academies lease property from the council, they are considered separate entities & are not providing council services.</p> <p>The Council has no control over utility use & cannot usually access utility consumption data.</p> |
| Out of Scope | Solihull Energy Ltd | N/A | Emissions from utility use | E&I - UKC | Not currently operating. | Not currently operating. | <p>Not currently operational.</p> <p>Wholly owned by Solihull Council -</p> |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|--------------|---|--------------------------------|---|--|---|---|---|
| | | | | | | | providing commercial energy service rather than Council service |
| Out of Scope | Mell Square Ltd. | N/A | Emissions from utility use in Council owned commercially let properties not providing council service | Resources - Strategic Property (Tenanted properties) | Data cannot be accessed or verified by the council. | Data cannot be accessed or verified by the council. | Company wholly owned by Solihull Council providing commercial property service rather than Council service. Tenants source own utilities & pay own utility bills. Utility data unobtainable - except for voids, for which there is inconsistent data. |
| Out of scope | Other Solihull Council owned, commercially let properties | N/A | Emissions from utility use in Council owned commercially let properties not providing council service | Resources - Strategic Property | Data cannot be accessed or verified by the council. | Data cannot be accessed or verified by the council. | Properties are not used for council services. In the main tenants of these properties organise and pay their own utility bills. Data unobtainable. |
| Out of Scope | Birmingham Airport | N/A | Emissions from operation of Birmingham Airport | Birmingham Airport | | Data cannot be accessed or verified by the council | Solihull Council has a 3.75% share in the airport. The Council has no operational control |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|--------------|-----------------------------|--------------------------------|---|---|--|---|--|
| | | | | | | | <p>over the airport. The airport is a separate entity from the Council and is not providing a council service.</p> <p>Ground based emissions from the airport are part of Borough wide carbon reporting. The airport publicly reports its emissions – see here for further information.</p> |
| Out of Scope | SCH residential properties. | N/A | Emissions from utility use in Council owned residential properties - rented/shared ownership. | <p>SCH are responsible for maintaining residential properties, including static heat & power systems e.g. gas central heating, solar PV etc.</p> <p>Tenants are responsible for own utility use, arranging energy supply & paying</p> | <p>Data cannot be accessed or verified by the council.</p> <p>No control over tariffs and use of energy.</p> <p>Estimation methodology could be developed using property EPC/ONS data.</p> | Data cannot be accessed or verified by the council. | <p>Council own the properties. SCH maintain them. Tenants are responsible for own utility use, arranging & paying utility bills. Data cannot be accessed or verified by the council. Emissions are part of Borough wide carbon reporting.</p> <p>Report SCH housing energy performance certification</p> |

| Scope | Emission Source | Reporting area – new/ existing | Description | Responsibility | Data Source & calculation methodology | Accuracy of Data | Notes including Scope rationale |
|-------|-----------------|--------------------------------|-------------|-----------------------|---------------------------------------|------------------|------------------------------------|
| | | | | energy & water bills. | | | performance as stand-alone metric. |

Renewable Energy

The Council generates renewable electricity from a number of roof mounted solar panel systems. Coventry & Solihull Waste Disposal Company's energy from waste plant also generates electricity and heat. The amount of energy generated will be reported alongside total GHG emissions. It can't be used to nett off total GHG emissions as the contribution of renewable energy generation is already accounted for in the following ways:

- Renewable energy generated and used by the Council reduces the total amount of grid energy used by the Council.
- Any surplus renewable electricity exported by the Council to the grid contributes to decarbonising grid electricity. It is therefore accounted for in the carbon factor used to calculate emissions from the Council's electricity use.