

STOCKPORT CLIMATE ACTION NOW
ANNUAL GREENHOUSE GAS EMISSIONS REPORT 2023/24

Report of the Director of Place Management

1. INTRODUCTION AND PURPOSE OF REPORT

- 1.1. In order to monitor the council's progress towards net zero, the council must measure its greenhouse gas (GHG) emissions and regularly report on progress. This is Stockport Council's second annual GHG emissions report and covers the period from April 2023 to March 2024.
- 1.2. Stockport Council has committed to reduce its operational emissions to net zero by 2030 (see figure 4 for details of which sources of council GHG emissions are included within the 2030 operational net zero target).
- 1.3. The following report highlights the council's progress towards the 2030 net zero target and is a reminder of how important the next 5 years will be to accelerate action if we stand a chance of meeting ambitions. The solutions exist but the challenges around funding, especially from national government including reductions in local government finances, are major obstacles. Ensuring strategic decision making considers all co-benefits and the wider long-term gains versus short-term obstacles will be key to accelerating action.
- 1.4. When undertaking a new data reporting regime, especially given the commitment to adopt a continual improvement approach, subsequent years' reports will differ in terms of what data is included. As ways of reporting and collecting data are refined and our ability to report on new sources of emissions that were previously unrecorded improves, differences between annual GHG emissions reports will be apparent, as is the case this year. Details of new data sets and changes to what has been reported this year to last year are outlined in the appendix. Consideration of these differences must be taken into account when comparing year-to-year emissions. However, where data sets have remained the same, it is possible to see progress being made towards our net zero goal, albeit not in line with the decrease required to meet a net zero position by 2030.

2. KEY FINDINGS

- 2.1. As detailed in the previous annual report and outlined in the appendix (see section 'Scope Definitions') there are three 'scopes' of council emissions that we will be reporting on. The following key findings from this year's report listed below will help determine where the council focuses its efforts to reduce GHG emissions and thereby achieve our target of net zero by 2030.

- Our scope 1 emissions, which come mainly from gas used to heat buildings, make up 17% of total emissions. Accounting for de minimis changes to the data, scope 1 emissions have decreased by approximately 17% since the baseline year in 2018-19. This is due to significant investment during this period in energy efficiency measures, decarbonising heating and insulating council buildings.
- Emissions from scope 2, which come from electricity usage, make up 20% of our emissions. Accounting for de minimis changes to the data, scope 2 emissions in 2023-24 have halved (-50.1%) since the baseline year. Again, this was due in part to energy efficiency measures plus increased use of solar PV, but mostly due to the increase in renewable energy used in the national grid.
- Scope 3 emissions that we are currently measuring contributed 63% of our emissions in 2023-24. Scope 3 emissions have increased in the last year (+11%) due to the addition of new data sets from previously unreported sources. The increase would have been larger had previous years data sets not been omitted (see appendix sections 'New & Incomplete GHG Emissions Data Sets').
- Our biggest sources of emissions included in our net zero target boundaries are buildings (in particular, leisure centres, schools and offices) and fleet vehicles. Therefore, the most significant priorities for climate action are currently focussed on these areas, with work on finding alternative sources of energy to gas used in buildings, energy efficiency in buildings, and replacing diesel used in our fleet vehicles.

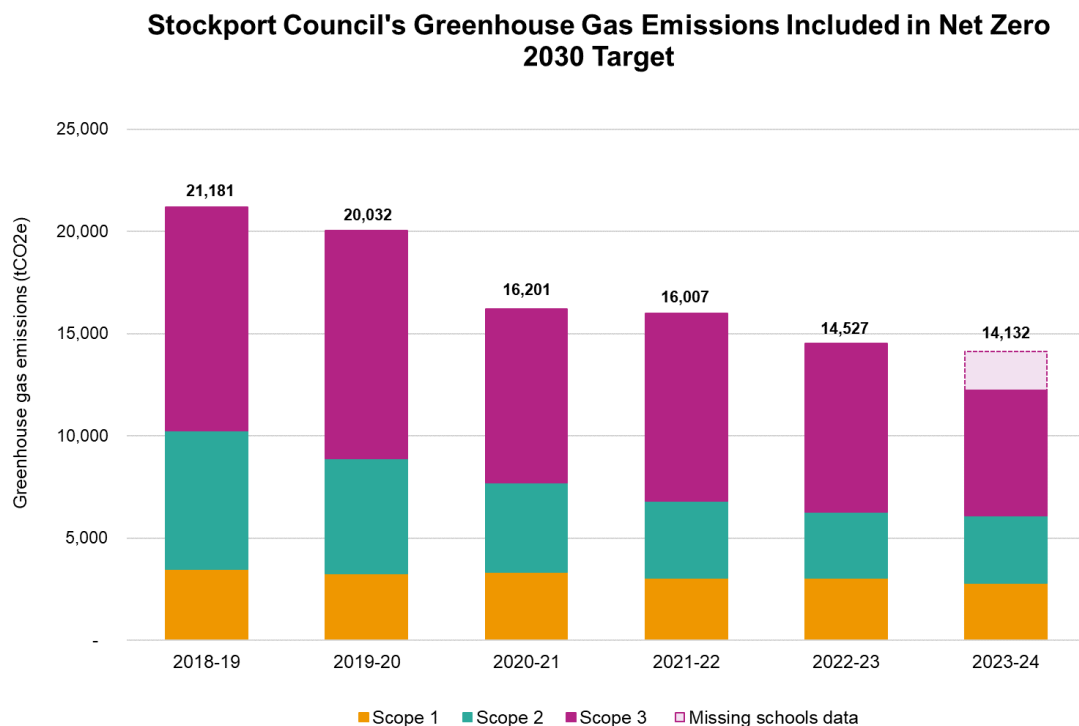


Figure 1. Stockport council's reported annual greenhouse gas inventory from baseline year (2018-19) to current reporting year (2023-24) for all sources of emissions included within our net zero 2030 target. The 2023-24 bar accounts for the missing data from some schools as detailed in the appendix.

- 2.2. When comparing like-for-like emissions within our net zero 2030 boundary, they have decreased by 33% since the baseline year of 2018-19 and 3.1% in the last year (see figure 1).

3. **STOCKPORT COUNCIL'S OPERATIONAL GHG EMISSIONS**

- 3.1. Figure 2 shows all the greenhouse gas emissions we have data for, including those outside of our Net Zero 2030 boundaries.

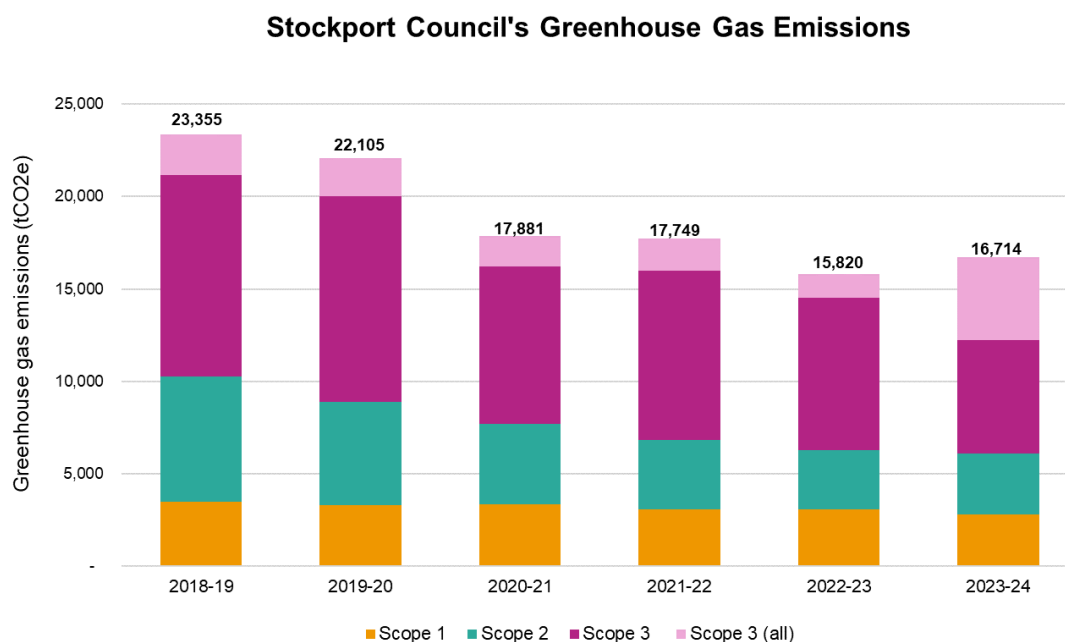


Figure 2. Stockport council's reported annual greenhouse gas inventory from baseline year (2018-19) to current reporting year (2023-24) for all sources of emissions, including newly-identified scope 3 emissions.

Scope 1 GHG Emissions

- 3.2. Scope 1 emissions mostly come from gas used to heat the council's civic estate buildings (e.g. town hall and council owned office administration buildings, libraries, non-mainstream schools) and are included in our net zero by 2030 target. Our scope 1 emissions have been slow to decline; however, this year they are at their lowest point since measuring began, representing a 17% decrease since the baseline year. This decrease is likely due to energy efficiency measures put in place, for example through the renovations in Stopford House between 2020 and 2022.
- 3.3. However, at the current rate of decline in the council's scope 1 emissions, it would take significantly longer than 5 years to reach our 2030 net zero target and there are only limited cost-effective ways to improve gas use efficiency. If we are to eliminate the council's scope 1 emissions, alternative ways to heat and provide hot water from

renewable sources of energy will be required. The slow rate of reduction in scope 1 emissions reinforces the need for replacing gas with renewable sources of energy on a larger scale. For example, the opportunities presented by employing a district heat network powered by low carbon energy could help achieve this goal.

Scope 2 GHG Emissions

- 3.4. Scope 2 emissions mainly come from electricity used to power civic estate buildings and streetlighting and are also included in our net zero by 2030 target. These have halved since the baseline year but have increased by 2% in 2023-24 compared to the previous year. This highlights that further work is needed to reduce electricity consumption across the civic estate, through energy efficiency measures, behaviour change, and increasing local sources of renewable electricity. The total sum of all generated electricity from solar installed across council-owned sites as a proportion of scope 2 emissions is around 8%.
- 3.5. Emissions from streetlighting sharply decreased (Figure 3) due to all streetlighting in Stockport being replaced with energy efficient LED bulbs over the past few years. This work was completed last year which explains why further reductions in emissions from streetlighting have not been seen this year.
- 3.6. It is important to note that there are [two methods](#) to report scope 2 emissions: location-based and market-based reporting. The location-based method uses emissions figures from average power taken from the National Grid. The market-based method reflects emissions from electricity that an organisation purchases to take into account choices around electricity providers. We have used a location-based method for this report in order to maintain full transparency on the amount of electricity the council uses. However, the council purchases 100% renewable electricity through a REGO-backed supplier for its own operations, and as such the emissions under a market-based method would be significantly lower. Therefore, the council must continue to purchase electricity from at least a REGO-backed supplier or look to power purchase agreements (PPA) either from other renewable energy generators or investing in local renewable electricity such as solar PV. This will be required to ensure the reduction in scope 2 emissions remains on course for the council's net zero target of 2030.

Scope 3 GHG Emissions

- 3.7. As previously described, we have included newly reported data sets this year. There are also gaps in previously reported data sets that have arisen due to operational issues (see appendix for details). This means conclusions drawn from looking at scope 3 emission data as a whole is difficult. However, it is possible to look at like-for-like data sets with confidence in order to identify trends.

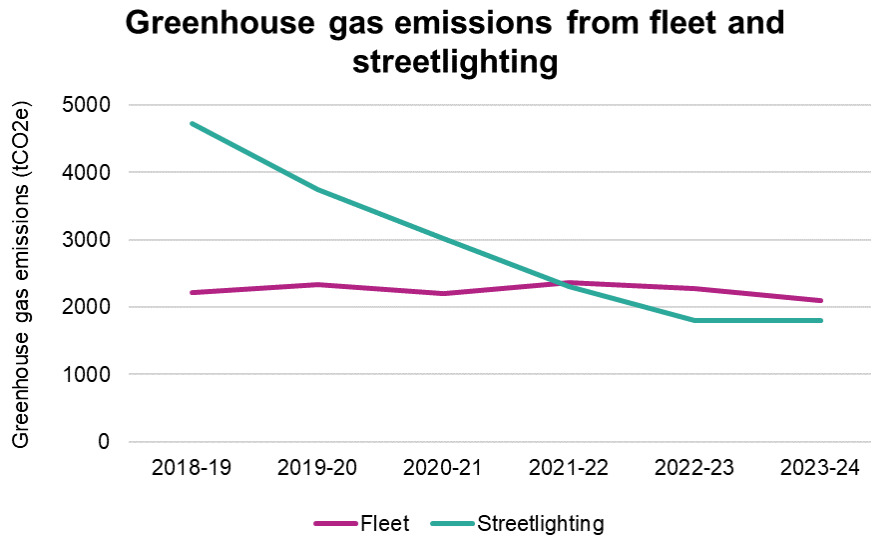


Figure 3. Emissions from two major sources of greenhouse gases: electricity used by streetlighting and fleet vehicles.

- 3.8. Emissions from fleet vehicles are categorised as scope 3 emissions as the majority of the fleet utilised by the council is owned and maintained by the Totally Local Company (TLC). GHG emissions arising from TLC's fleet make up 12.7% of the council's total reported emissions. Fleet emissions are also included within the net zero 2030 target boundary. Fleet emissions have fluctuated year-on-year but in general have remained constant since the baseline year (Figure 3). This highlights the need for feasible solutions to decarbonise the TLC fleet in order to achieve the 2030 target. Both TLC and the council are exploring alternative lower-carbon fuels in the short-term (such as biofuels) and in the longer term are looking to move away from petrol and diesel vehicles towards electric vehicles, where availability, infrastructure and affordability allows.
- 3.9. Buildings (such as leisure centres, schools, and SHG managed buildings) are by far the biggest contributor to the council's scope 3 emissions as it stands; though further GHG emissions data from sources such as the council's supply chain will impact this in the future. Additional data from Stockport Homes Group new to this reporting year indicates that several residential buildings maintained by Stockport Homes are high GHG emitters, such as Mottram Towers, Hanover Towers and Bowden House. These buildings house the pumps for heat networks that supply power to the buildings which is the main contributor of emissions generated, as well as electricity used in communal spaces (such as lifts). Emissions arising from energy used by tenants in their homes are currently not recorded and therefore not reported in our scope 3 emissions.
- 3.10. Analysis of high-emitting buildings will continue to direct strategic decisions, allocation of resources and efforts to secure government funding for retrofit and renewable energy projects, such as the ongoing Powering Our Schools programme and the Heat

Network Efficiency Scheme improvements completed by Stockport Homes Group this year. In the coming year the council will support 9 schools to install solar on school roofs. Other strategic decisions that will help reduce the council's scope 3 emissions will be the use of renewable and non-fossil fuel-based energy, such as those proposed for the new Marple Hub. This kind of development, alongside the target of net zero in operation for the new building, will ensure the council can meet its net zero targets.

- 3.11. The impact of completed solar panel projects can be seen in the data this year – emissions from electricity at Grand Central Leisure centre, which has had solar panels installed, has decreased by 9.3% in the last year, the equivalent of 15 tonnes CO₂e. However, electricity usage only makes up 17% of Grand Central's total energy usage, which again reinforces the much-needed requirement for alternative, renewable sources of energy for heating and hot water other than from gas.

4. **STOCKPORT COUNCIL NET ZERO BOUNDARIES**

- 4.1. The council has varying degrees of influence regarding the emissions produced by services, organisations and companies in the council's scope 3 emissions. We aim to include organisations over which the council has significant influence or control (such as SHG, TLC and Life Leisure) within our net zero by 2030 target. All of the council's scope 1 and 2 emissions are included in the net zero by 2030 target.
- 4.2. The boundaries and rationale for Stockport Council's operational greenhouse gas emissions inventory (i.e. the 2030 net zero target) were established in the [CAN Annual Report 2022-23](#). This year a decision was made based on the GHG Accountancy Protocols to include emissions arising from corporate waste. Our inventory boundaries are summarised in figure below.

Scope		Description	Examples	Currently measuring
1		Emissions from fossil fuels burned directly by the organisation	Gas and heating oil used within the civic estate and non-mainstream schools	Y
2		Emissions from imported electricity	Electricity used within the civic estate and non-mainstream schools	Y
			Electricity used for public street lighting	Y
3	Included in Net Zero 2030 target	Emissions from the activities and functions that occur from sources not directly controlled by the council but over which the council has significant ownership and influence	Commissioned services where the council uses third-party delivery (including Totally Local Company, Stockport Homes Group and Life Leisure) - this includes TLC fleet	Y
			Business travel	Y
			Employee commuting	N

		Emissions from the operational buildings, activities and fleet from any companies wholly-owned by the council	Corporate waste	Y
			Fuel and energy related activities (not included in Scopes 1 or 2)	Y
			Water use	Y
			Maintained and voluntary controlled schools	Y
	Not included in Net Zero 2030 target	Emissions from the activities and functions that occur from sources not controlled by the local authority and over which the local authority has limited influence	Supply chain – purchased goods and commissioned services	N
			Council-owned housing	N
			Municipal waste	N
			Investments and franchises	N
			Academies and voluntary aided schools	Y

Figure 4. Stockport Council's greenhouse gas emissions inventory and boundaries.

5. **NEXT STEPS**

- 5.1. Although the council's operational GHG emissions (i.e. those included in the 2030 net zero target) are reducing, they are not doing so at a rate that will mean the 2030 target is achieved. The actions undertaken by the council to date have been largely funded by national and European government competitive funding schemes such as the Public Sector Decarbonisation Scheme and European Regional Development Fund. Improvements arising from more renewable energy being used in the national grid have also had a significant effect on the decrease in reported GHG emissions for the council.
- 5.2. Figure 5 highlights estimated potential GHG emissions savings arising from decarbonisation of our fleet vehicles and the impact a town centre district heat network might have on the council's emissions.
- 5.3. Figure 5 demonstrates how analysis of the GHG emissions data can help bolster the feasibility work and strategic decision making undertaken by the council. Analysis of GHG emissions data demonstrates that current workstreams focusing on buildings and fleet will be key to meeting the council's ambition to be operationally net zero by 2030. Feasibility work on decarbonising the fleet and the development of district heat networks for Stockport are areas of work the council are focusing on.
- 5.4. Similarly, the data suggests that both the decarbonisation of the national grid and increasing the amount of renewable energy generated in Stockport will be key aspects of the council's net zero ambitions. Work looking to increase the amount of solar PV coverage on buildings and council land is underway.

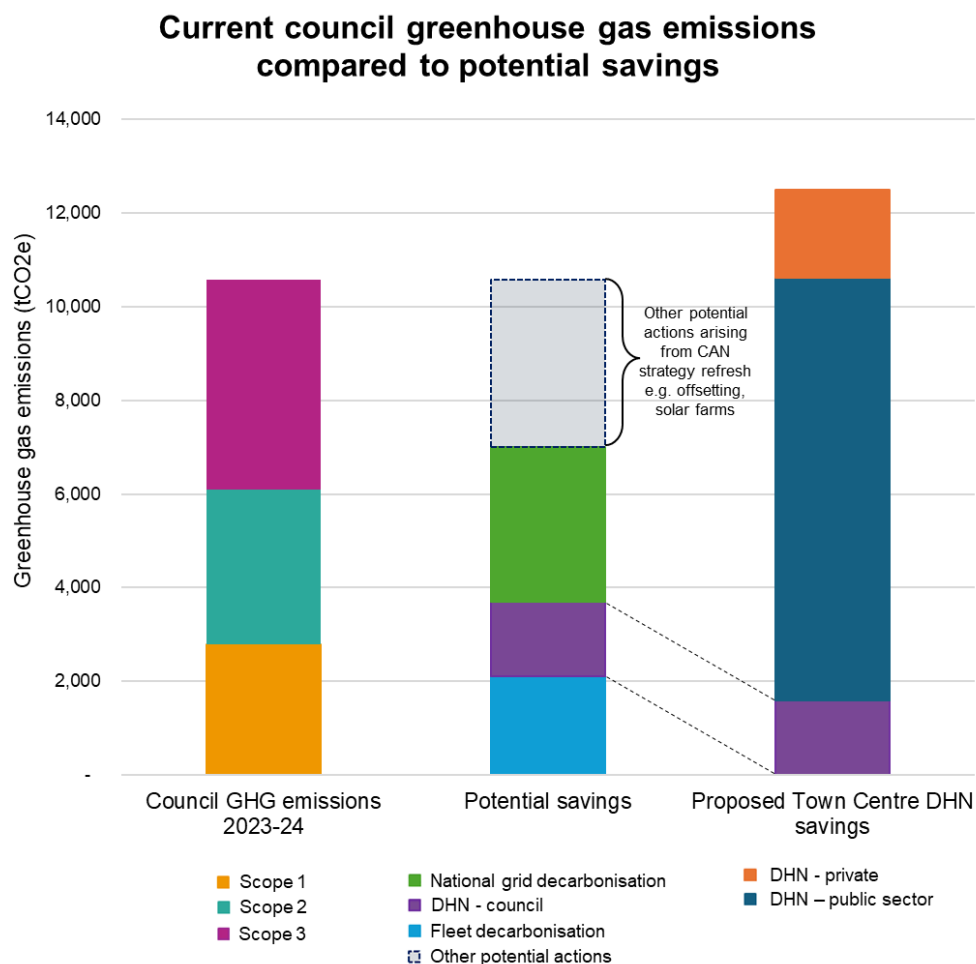


Figure 5. Stockport council's reported annual greenhouse gas emissions from 2023-24 within our net zero by 2030 boundary, compared with potential future greenhouse gas savings. DHN = District Heat Network.

- 5.5. As part of the continual improvement approach for the GHG emission reports, Stockport Council is working alongside key stakeholders such as employees, SHG, TLC and Life Leisure to identify new sources of emissions data not currently reported. This work is especially important for sources of emissions that are included within our net zero by 2030 target. One area of focus for the coming year will be working with council employees to collect data related to employee commuting and homeworking as these are currently unreported. Another emerging area of work is around quantifying scope 3 emissions that come from major infrastructure projects. Pilot work is underway to monitor and manage these types of GHG emissions using the A34 road improvements scheme and employing a carbon management plan. We will also continue to work with STAR Procurement and contractors to begin to identify, quantify and reduce supply chain emissions. This year first steps were taken to help with reducing supply chain emissions by introducing pass/fail requirements for large tenders around our highest value contracts. These pass/fail tender requirements require companies to measure and report on their emissions and supply data to the council while having a carbon reduction plan in place.

- 5.6. Improving the current data collection processes is also key. An internal audit of the council's GHG emissions reporting was carried out this year which identified several improvements to the data collection processes. These improvements, which included a review of internal buildings lists to ensure completeness and integration of data sharing systems between data holders and the Business Intelligence and CAN Teams, have been completed.
- 5.7. Future GHG emissions reports would benefit from an external auditing process which is being explored. The council is already seeking disclosure of our climate strategy and actions through the Carbon Disclosure Project (CDP), with the intention for this analysis by CDP to support the goal of introducing and embedding science-based targets (SBTs) within our GHG reduction strategies. SBTs will ensure our alignment with climate science to limit global warming to 1.5°C, as per the Paris Agreement, and will continue to support resource prioritisation based on high-impact areas, with a focus on the highest-emitting buildings and services first.
- 5.8. Collaboration with other Greater Manchester local authorities, as well as public bodies across Greater Manchester including GMCA, NHS organisations and the Fire & Rescue Service will be key to aligning and learning from other approaches to GHG emission reporting and reduction strategies.
- 5.9. The robustness of the council's net zero ambition relies on reducing GHG emissions as far as possible, but it is expected that there will be some residual emissions that will need to be accounted for. As part of the SBT work, the council will look to understand how these residual emissions will be 'offset' so a net zero position can be achieved. The current work around refreshing the council's CAN strategy will explore how the Natural Environment objectives and biodiversity net gain legislation and implementation could help account for any residual GHG emissions. Increasing tree canopy and enhancing local nature will undoubtedly play a role.

6. **CONCLUSION**

- 6.1. This year's data shows us that the council's Climate Action Now strategy should continue to focus available resources and funding opportunities towards energy efficiency in buildings and fleet, together with exploring large-scale interventions for reducing fossil fuel consumption such as gas for heating and hot water. It is apparent that the council needs to continue to purchase renewable electricity and needs to benefit more from renewable energy generation at a local level which will help the council achieve its net zero by 2030 ambitions.
- 6.2. It is clear progress is being made concerning reducing the council's operational GHG emissions, but much more will be required if we are to meet the 2030 target. It is also clear that reported scope 3 emissions will begin to dwarf scopes 1 and 2, and therefore more effort will be required to identify and reduce these emissions, especially those arising from the council's supply chain. This will be a crucial aspect

of delivering our borough wide 2038 carbon neutrality target and to help the nation meet its legally enshrined net zero by 2050 target.

7. RECOMMENDATIONS

- To note and comment on the report.

APPENDIX

8. KEY DIFFERENCES BETWEEN 2022-23 & 2023-24

- 8.1. The council aspires to be open and transparent about its GHG emissions reporting. In this report there are significant changes to the data sets (outlined below in section 'Approach to newly reported & missing data'). As such year-on-year comparisons between the first report and this one are difficult, not least due to better detection and improved reporting regimes.
- 8.2. It is also recognised that the size of scope 3 emissions reported at the start of a new reporting regime are significantly underreported. This is due to the ability to obtain reliable, if any, GHG emissions data arising from main contributors, such as the council's supply chain. Several reasons for this difficulty, ranging from the ability of supply chain companies to measure and monitor their own GHG emissions, to apportioning them to the council's use of their goods and services, means this is difficult data to obtain and process. However, it is the intention to improve on this aspect in time for next year's report. From work already undertaken around the council's supply chain, we do know that it will account for a large proportion of scope 3 emissions, so as work progresses on gathering and recording the council's scope 3 emissions, it is expected these will significantly increase in the coming years.
- 8.3. This year, we have reported on more sources of emissions, especially scope 3 emissions such as corporate waste. We have also improved previous years' GHG emissions data going back to 2018, and this accounts for the different year-on-year figures from last year's report. The improvements included changes to the data processing code which had previously filtered out a small number of buildings that should have been included. Unfortunately, there are also gaps in data sets that have arisen due to operational issues (see section 'Incomplete GHG emissions data sets') at Stockport Homes Group, Life Leisure and Totally Local Company.
- 8.4. Understanding the sources of all scopes of GHG emissions informs the strategy and work programmes currently underway to reduce the council's use of energy and fossil fuels, and those arising from our supply chain. This will be detailed in this report.

9. **APPROACH TO NEWLY REPORTED & MISSING DATA**

- 9.1. The principles that underpin greenhouse gas emission accounting emphasise transparency, consistency and accountability plus adopting a continual improvement approach. In order to adhere to these principles, we aim to be clear about what changes have been made year-on-year. The following section will detail changes made in the last year, including new sets of data and those which have not been possible to include.
- 9.2. The Greenhouse Gas Protocol sets out standardised categories of data that form part of an organisation's GHG inventory. As part of our commitment to continual improvement, we are working towards collecting all categories of data in future iterations of our annual GHG report. This means that we are expanding the number of data sets we include, and therefore the data will change and reported GHG emissions will increase as time goes on. If a dataset cannot be backdated, this may result in an increase in reported GHG emissions for that year and every year going forward.

New GHG Emissions Data Sets

- 9.3. There are two new datasets that have been included in the most recent GHG report. These are: corporate waste, and additional data for Stockport Homes operations.
- 9.4. Corporate waste includes emissions from the disposal of waste generated by council-owned buildings. This includes five recycling streams: card, glass, dry mixed recycling (DMR), mixed waste, and waste electrical and electronic equipment (WEEE). It is important to note that the data for corporate waste has not been backdated, which means that only data from the reporting year 2023-24 has been included, which accounts for 3.6 tCO₂e.
- 9.5. There has also been significant new emissions data for energy used by Stockport Homes Group operations that previously went unreported. This includes energy used in communal areas in Stockport Homes housing, for example, gas for heating and electricity used to power elevators and lighting in Stockport Homes-owned flats. Inclusion of this new data has added over 4,000 tCO₂e to the council's Scope 3 emissions.
- 9.6. A methodological change has been implemented to the categorisation of emissions arising from the transmission and distribution (T&D) of energy used by Stockport Council. These emissions were reported as a separate category in the 2022-23 GHG report but have now been merged into the category 'Fuel and energy related activities not included in Scopes 1 or 2' which has been reflected in figure 4 'Stockport Council's greenhouse gas emissions inventory and boundaries'.

Incomplete GHG Emissions Data Sets

- 9.7. Four omissions of previously reported GHG emissions data have occurred this year:

- Many schools in the borough have an energy provision agreement managed by Stockport Homes Group. Energy data from 43 of these schools has not been included in the GHG emissions data this year due to an issue with billing management. This includes data from a mix of non-mainstream schools, maintained and controlled schools, and academies, which accounted for approximately 3,000 tCO₂e across all three scopes in the previous year.
- An issue with metering connections at Endeavour House has resulted in missing electricity usage data supplied by TLC between September 2023 and March 2024. This means there is a gap in the data for this part of the council's estate that, based on 2022-23 data, was estimated to be around 22 tCO₂e.
- There are missing water meter readings across several Life Leisure properties due to flooding of meter chambers resulting in readings being unable to be taken. These changes are likely to be de minimis.
- Finally, there were issues with SHG's billing cycle meaning electricity readings data is missing for Stockport Homes Group offices in February and March 2024. It is expected that these issues will be resolved at a later date therefore future iterations of this report will include this missing data.

9.8. Unfortunately, all scopes of council emissions are affected by the above missing data which means it is harder to analyse the headline scope figures shown in figure 2, without looking at more detailed like-for-like comparisons. Any high-level conclusions taken from the data outlined in figure 2 need to take these anomalies into account.

10. **SCOPE DEFINITIONS**

- 10.1. GHG emissions are often split into three groups, called scope 1, scope 2 and scope 3 emissions. As described in the [GHG Protocol](#), the scopes are a way of categorising different sources of an organisation's emissions. They describe whether emissions come from sources that are owned or controlled by the organisation or whether they come from sources that are a consequence of the organisation's activities.
- 10.2. Scope 1 emissions cover sources that the organisation directly owns and often come from fuel that is burned by the organisation – for example, gas in boilers used to heat buildings or fuel used by fleet vehicles.
- 10.3. Scope 2 covers emissions from power that is generated elsewhere and then purchased and transported in for use by the organisation – for example, electricity used to power buildings.
- 10.4. Scope 3 emissions cover everything else the organisation is responsible for but that they do not directly produce or control – for example, the emissions that come from when an organisation buys products from suppliers. This represents the biggest scope for many organisations and these can often be the most difficult to measure and to reduce.

11. **BACKGROUND PAPERS**

- [CAN Annual Reports from previous years](#)

Anyone wishing to inspect the above background papers or requiring further information should contact Nick Leslie on Tel: 07775804984 or by email on nick.leslie@stockport.gov.uk