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| Report title | Runnymede Borough Council Green House Gas Emissions Report 2023/2024 |
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| Department | Planning, Economy, and Built Environment |
| Exempt? | No |

Purpose of report:

- **For information**

Synopsis of report:

This report outlines the Council's Greenhouse Gas (GHG) Emissions for the financial year 2023/24. The report sets out the approach taken to calculate the GHG emissions resulting from the Council's service and operation, and presents this data for the financial year 2023/24, with a summary of the key emissions sources and comparison with previous years provided.

1. Context and background of report

- 1.1 The Council has been reporting the GHG emissions resulting from its service and operation annually since the financial year 2008/2009.
- 1.2 In October 2023, Stage 1 of Runnymede Borough Council's Climate Change Study was completed (hereafter referred to as the Aether baseline study). This work established the emissions baseline for both the Council and the borough, improving and streamlining the Council's carbon monitoring, measuring, and reporting methodologies. The Council's emissions baseline year was chosen to be 2019 to be in line with Surrey County Council reporting.
- 1.3 This is the second annual report of emissions since the Aether baseline study was completed and it uses the emissions accounting approach and methodology developed in that study in its calculations. The key elements of this approach are given below. For more information on this approach, members attention is directed to the report delivered at Corporate Management Committee on 18 April 2024 concerning the Council's GHG emissions for the 2022/23 financial year and accompanying update to the Aether baseline report figures.

Approach

- 1.4 The emissions accounting methods used to calculate the Council's GHG emissions are derived from the guidance given in the GHG Protocol. The GHG Protocol supplies the world's most widely used GHG emissions accounting standards and establishes comprehensive global standardised frameworks to measure emissions from private and public sector operations, value chains and mitigation actions. The standards are designed to provide a framework for businesses, governments, and

other entities to measure and report their GHG emissions in ways that support their goals.

Operational Boundary

- 1.5 An operational boundary defines the emission sources that are included in GHG reporting. Within the GHG reporting guidelines, emission sources are divided into three scopes. Setting a clear operational boundary defines which emission sources are included in the reporting and which ones are excluded. Table 1 sets out scope definitions as described in the GHG protocol. Figure 1 below gives an overview of the scopes and emissions across a typical organisation.

| Scope | Definition |
|---------|---|
| Scope 1 | GHG emissions from sources owned or controlled by the council. |
| Scope 2 | GHG emissions from the consumption of purchased electricity, steam or other sources of grid-generated energy. Includes electricity supply to the council's operational buildings. |
| Scope 3 | GHG emissions that occur indirectly from council activities, outside the control of the council (e.g. the council's procured services and investments). |

Table 1: Definition of emissions scopes as described in the GHG protocol.

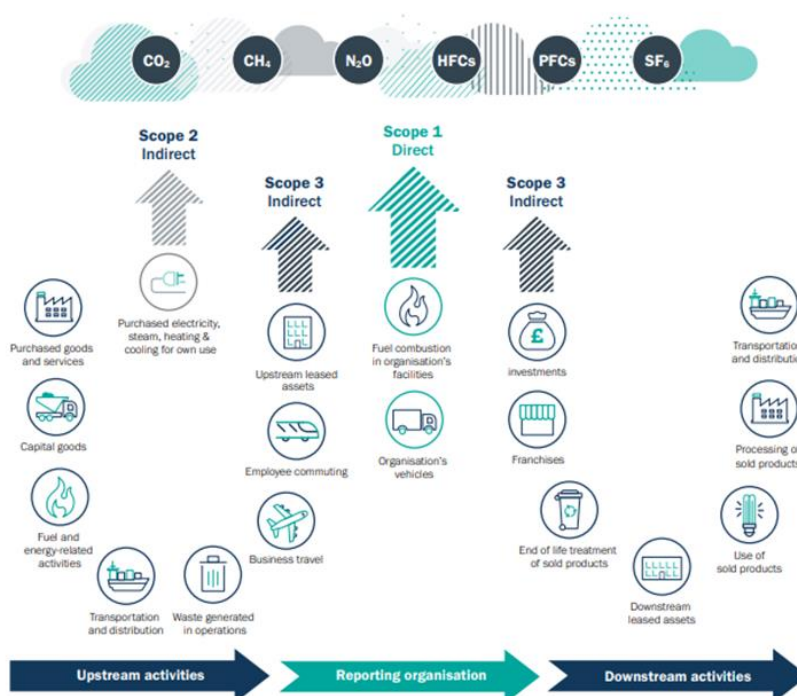


Figure 1: Overview of scopes and emissions sources for a typical organisation.

- 1.6 An organisational boundary defines which parts of an organisation are included for the purpose of GHG reporting. At Corporate Management Committee in March 2023, it was agreed that the Council would report its emissions using an operational boundary approach. This operational boundary approach is defined in the GHG Protocol corporate reporting guidance as:

'Your organisation reports on all sources of environmental impact over which it has operational control. Your organisation is considered to have operational control over

an operation if it or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation.'

- 1.7 It is important to note that the organisational boundary agreed will be for reporting purposes only and does not preclude the Council from working to reduce emissions in areas of its influence not included or reported on within the chosen boundary. This also applies to areas where data to show progress is hard to come by.
- 1.8 The Council is committed to considering the full scope of emissions occurring within the operational boundary within the limits of the organisational boundary. Figure 2 below presents more detail on the activities within the three scopes that are included in the Council baseline and subsequent reporting.

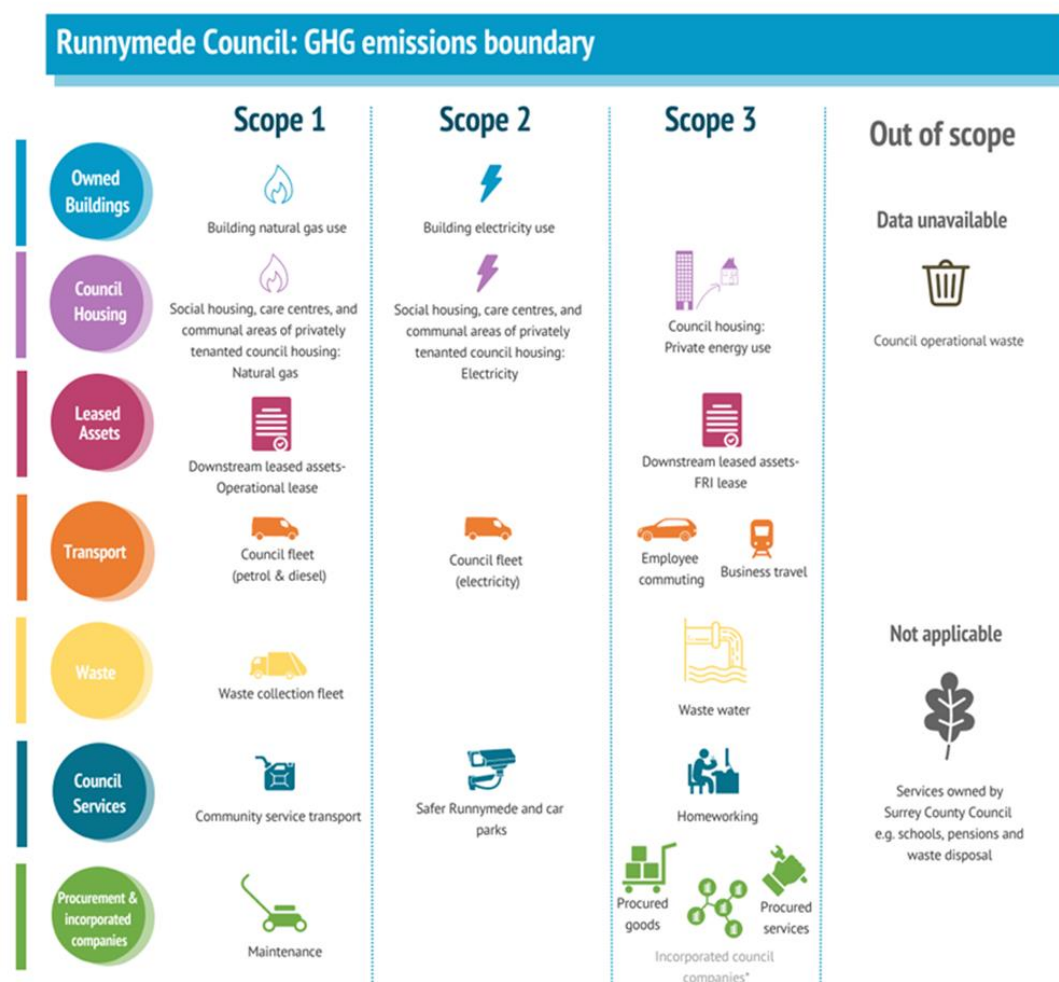


Figure 2: Details of activities included in the three scopes used for the calculation of the Council's baseline and subsequent reporting related to GHG emissions.

Key points regarding the organisational approach and emission allocation

Leased Assets

- 1.9 Leased assets may be included in a local authority's Scope 1 or Scope 2 inventory depending on the type of lease and the consolidation approach the local authority uses to define its organisational boundaries. Under the operational approach chosen, when the Council leases a building to another user on a Fully Repairing and Insuring

(FRI) lease, the emissions associated with the operation of that building are allocated to Scope 3. This is because the level of influence such a lease allows means that the Council is limited in the work that can be done until break clauses in the associated contracts occur.

Council Housing

- 1.10 **Sheltered housing and care provision:** Emissions from all council owned and operated sheltered housing, including care and retirement homes, are included under Scope 1 and 2.
- 1.11 **Communal areas:** The Council is responsible for communal areas of housing such as external lighting, entryways, corridors, stairways, etc. Therefore, it has control over the emissions from the lighting, heating, etc. in these areas. As the Council can influence the emissions by, for example installing more energy efficient lighting or replacing gas central heating with a heat pump, it makes sense for the Council to account for these emissions. Reporting for these areas falls under Scopes 1 and 2.
- 1.12 **Landlord services:** Although the Council owns the heating systems installed in our properties used for Council housing, these properties are privately tenanted. As such, the Council is not responsible for the payment of bills and does not have operational control of the use of energy. Therefore, the energy emissions from privately tenanted housing are included under Scope 3 in line with a service and operational based accounting approach.

Incorporated Council Companies

- 1.13 The operational emissions of the RBC Companies (RBC Heat, RBC Investments and RBC Services) are included in the 'Council buildings – community leased assets' sector.

Exclusions from scope

- 1.14 Surrey County Council Services i.e. waste processing, streetlighting, schools and pension fund. Runnymede Borough Council is not a waste authority and therefore in accordance with the LGA reporting guidance for local authorities will not report emissions arising from waste in the Council estate scope. The emissions from the waste collection fleet however are included under Scope 1. The same principle has been applied to other services that Surrey has operational control over such as schools.

Accounting approach and methodology

- 1.15 As mentioned in paragraph 1.3 of this report, this is the second annual report of emissions since the Aether baseline study was completed. The emissions accounting approach and methodology developed in the Aether baseline study have been used to compile the financial year 2023/24 GHG emissions estimates for the Council. For more information on this methodology, key concepts of emissions accounting, and input data used for these calculations, members attention is directed to the report delivered at Corporate Management Committee on 18 April 2024 concerning the Council's GHG emissions for the 2022/23 financial year and accompanying update to the Aether baseline report figures.
- 1.16 Emissions are reported as a mass of CO₂ equivalent, otherwise expressed as CO₂e. Whilst less abundant than CO₂, other GHGs such as methane (CH₄) and nitrous

oxides (N₂O) have a greater warming effect than CO₂. A Global Warming Potential (GWP) factor is applied to these GHGs to convert to CO₂e.

2. Report and, where applicable, options considered and recommended

2.1 The Council's estimated GHG emissions for all financial years since 2019/20 (re-defined baseline year) for all three scopes are presented in Table 2 below.

| Sector | Scope | Emissions (tCO ₂ e) | | | | | Change between 2019/20 baseline and 2023/24 (%) |
|---|------------|--------------------------------|---------------|---------------|---------------|---------------|---|
| | | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | |
| <i>Council Buildings – Operational</i> | 1+2 | 256 | 249 | 220 | 214 | 206 | -19.5% |
| <i>Council Buildings – Sheltered housing and communal use</i> | 1+2 | 106 | 93 | 93 | 78 | 71 | -32.9% |
| <i>Council Buildings – Community</i> | 1+2 | 260 | 212 | 227 | 210 | 262 | +0.8% |
| Council buildings – Total | 1+2 | 622 | 554 | 540 | 502 | 539 | -13.3% |
| Green spaces and machinery | 1+2 | 47 | 44 | 19 | 41 | 47 | 0.0% |
| Council fleet | 1 | 147 | 81 | 102 | 132 | 91 | -38.1% |
| Streetlighting + CCTV | 2 | 24 | 18 | 18 | 20 | 18 | -25.0% |
| Waste collection & transport | 1 | 513 | 470 | 470 | 528 | 496 | -3.3% |
| Scope 1 and 2 emissions total | | 1,353 | 1,167 | 1,149 | 1,223 | 1,191 | -12% |
| Council buildings – community leased assets | 3 | 423 | 397 | 444 | 458 | 435 | +2.8% |
| Water | 3 | 38 | 45 | 36 | 20 | 36 | -5.3% |
| Commuting | 3 | 752 | 433 | 434 | 418 | 415 | -44.8% |
| Business travel | 3 | 36 | 15 | 25 | 26 | 24 | -33.3% |
| Homeworking | 3 | 0 | 180 | 213 | 189 | 189 | N/A |
| Housing – tenant consumption | 3 | 9944 | 9957 | 9909 | 9739 | 9890 | -0.5% |
| Procurement of goods and services | 3 | 5612 | 13291 | 8908 | 6275 | 4977 | -11.3% |
| Transmission and distribution losses | 3 | 0 | 0 | 0 | 0 | 27 | N/A |
| Scope 3 emissions total | | 16,805 | 24,318 | 19,969 | 17,125 | 15,993 | -4.8% |
| Council total | | 18,158 | 25,485 | 21,118 | 18,348 | 17,184 | -5.4% |

Table 2: GHG emissions estimates (in tCO₂e) for each scope and sector for 2019/20, 2020/21, 2021/22, 2022/23, and 2023/24, and percentage change from 2019/20 (re-defined baseline year) to 2023/24.

Total emissions for Scopes 1, 2 and 3

2.2 The Council's total GHG emissions (Scopes 1-3) in 2023/24 were estimated to be 17,184tCO₂e. A 5.4% decrease in total emissions was estimated between the baseline year of 2019/20 and 2023/24. This decrease is due to emission reductions

across all Scopes in all categories except 'Council Buildings – Community' which saw a 0.8% rise in CO₂e and 'Council buildings – community leased assets' which saw an increase of 2.8% CO₂e between the reporting years of 2023/24 and 2019/20. Please see paragraph 2.17 below for further information.

- 2.3 Overall, emissions from Scope 3 sources (GHG emissions that occur indirectly from Council activities, outside of the direct control of the Council) account for 93% of the Council's total GHG emissions. Emissions from Scope 1 and 2 (emissions arising from sources owned or controlled by the Council directly or resulting from the consumption of purchased electricity, steam or other sources of grid-generated energy) account for the remaining 7% of the total GHG emissions.
- 2.4 The adopted Council target to achieve operational 'Net Zero Carbon' emissions from our services and operations by 2030, agreed in January 2022, includes all Scope 1 and 2 emissions. Scope 3 emissions sit outside this target as they occur indirectly from Council activities. However, the Council is committed to reducing Scope 3 emissions and other emissions that may fall outside the scope of reporting as far as practicably and economically possible within its sphere of influence.

Scope 1 and 2 – within council target

- 2.5 Emissions arising from Scope 1 and 2 only, are estimated to be 1,191tCO₂e for the year 2023/24. This represents a decrease in GHG emissions of 12% when compared against the baseline year of 2019/20.
- 2.6 Considering emissions from Scope 1 and 2 only, the most significant proportion of emissions arise from energy consumption within Council buildings (45% of the total Scope 1 and 2 for 2023/24). Waste collection and transport is the next most significant source comprising 42% of total Scope 1 and 2 emissions. The remaining Scope 1 and 2 GHG emissions are from fuel consumed by the Council fleet (8% of total), green spaces and machinery (4% of total) and street lighting & CCTV (1% of total).
- 2.7 A reduction in emissions is shown for Council buildings, where emissions dropped 13.3% in 2023/24 compared to the baseline year, driven by 'Council Buildings – Operational' and 'Council Buildings – Sheltered housing and communal use' where gas and electricity usage have declined, alongside the decarbonisation of the electrical grid associated with electricity consumption.
- 2.8 Previous versions of the Council's annual greenhouse gas reporting have shown higher values for the 'Council Buildings - Sheltered housing and communal use' sector when compared to the 2023/24 report. After further investigation into the buildings which were included in this sector, it was found that a proportion of the gas usage associated with Independent Retirement Living (IRL) buildings is related to the tenants' own energy usage and should therefore be redistributed to the Scope 3 'Housing – tenant consumption' category. For the 2023/24 emissions report, this change has been made and backdated to previous years. This has reduced the overall figures for the 'Council Buildings - Sheltered housing and communal use' sector, and the Council's total Scope 1 & 2 emissions.
- 2.9 It is notable that 'Council Buildings – Community' GHG emissions are 0.8% above that of 2019/20 and have risen when compared to the 2022/23 financial year. This is due to increased electricity usage in community buildings for 2023/24 attributed to an increased understanding and expansion of the Council's reported assets following these assets being brought under a single energy provider. Consequently, the

number of assets reported on for the 2023/24 financial year has grown, as has the subsequent emissions figure, which reflects a continuous improvement in the Council's GHG emissions reporting.

- 2.10 It is positive to see that GHG emissions associated with other Scope 1 and 2 sources have largely decreased, mostly notably for the Council fleet where emissions have dropped 38.1% compared with the baseline year. This is attributed both to a decline in the fuel litreage used by the Council fleet and in portion due to the transition of the Council's four Meals at Home vans from diesel to electric. In 2022/23, the GHG emissions associated with the Meals at Home vans were 6.1tCO₂e when powered by diesel, compared with 1.7tCO₂e now that they have been switched to electric.
- 2.11 Due to the adoption in April 2024 of the Council's Sustainable Fleet Management Strategy, and the agreement at Environment and Sustainability Committee on 7th March 2024 to make Hydrotreated Vegetable Oil (HVO) the preferred fuel choice for the Council fleet from the 2024/25 financial year, significant further progress in reducing GHG emissions associated with the Council's 'Green spaces and machinery', 'Council fleet', and 'Waste collection and transport' sectors is expected in the emissions reporting for 2024/25. This will lead to overall reductions in the Council's scope 1 and 2 emissions from the 2024/25 financial year onwards. To give an example of the significant reductions expected for 2024/25, the Council's 'Waste collection and transport' in-scope emissions for 2023/24, calculated at 496tCO₂e, would have been 7tCO₂e if fueled using HVO.

Scope 3 – outside of Council target

- 2.12 As discussed in paragraph 2.3 above, emissions arising from Scope 3 are significant, comprising 93% of the total GHG emissions from the Council estate in 2023/24. Emissions in this scope are dominated by two sectors with large associated emissions, namely 'Council housing - tenant consumption' and 'Procurement of goods and services' making up 62% and 31% of total Scope 3 emissions respectively. Following these, the largest estimated sources are those attributed to 'Council buildings – community leased assets', 'Commuting' and 'Homeworking' contributing 3%, 3% and 1% respectively to total Scope 3 emissions.
- 2.13 It is encouraging that all but one of the Council's Scope 3 emissions sources have declined since 2019/20. The most significant declines in tCO₂e are evident in commuting, due to the prevalence of homeworking following the Covid-19 pandemic, and procurement which, while positive, can be subject to annual fluctuations according to significant Council projects. For more information on emission trends associated with procurement of goods and services by the Council's, members are directed to the Corporate Management Committee report of 18 April 2024 providing the Council's GHG emissions for the 2022/23 financial year and an accompanying update to the Aether baseline report figures.
- 2.14 However, supported by the Council's adoption of a new Procurement Strategy and Sustainable Procurement policy in March 2023, procurement will continue to include consideration of ethical and environmental impacts as part of contractual requirements and seek the achievement of sustainable outcomes that support the climate change agenda. The Sustainable Procurement Policy sets out how environmental considerations will be built into the procurement and delivery of goods, works and services through its specifications, tender questions, evaluation criteria, key performance indicators and clauses of contracts. The implementation of this policy is therefore anticipated to help reduce emissions in future years.

- 2.15 In the 2024/25 financial year, a Green Travel Strategy for staff (following staff engagement via a survey) is to be produced to help address emissions in the 'Commuting' sector. The survey will allow the climate change team to gather an updated position on current commuting trends among staff for emissions reporting purposes and to identify barriers to the uptake of sustainable commuting and initiatives that encourage more sustainable commuting patterns.
- 2.16 In relation to tenant energy use, the Council's Housing Team continues to work towards achieving its target for all tenanted council homes to achieve EPC C by 2030. This work will be supported by the successful bid by the Housing team to secure £1.25M from the UK Government's Social Housing Decarbonisation Fund, which will be matched by £1.28M put aside by the Council from rent income to pay for upgrades and modernisation. 169 Council homes will benefit from energy efficiency measures such as external wall insulation, cavity wall insulation and solar panels installed over the next two years. In addition to emission savings, the cost saving per household is estimated at £473/year.
- 2.17 As shown in Table 2 above 'Council buildings – community leased assets' shows a 2.8% increase in emissions compared with the baseline year. This is due principally to the commencement of the District Heat Network (DHN) for the Magna Square development during the 2022/23 financial year. It should be noted that the figures incorporated for the Addlestone DHN for the 2023/24 reporting year are estimated based on previous years due to a faulty meter (due to be fixed soon) and will be refined and updated in future reports. Members will note that in previous Council Emissions Reports the DHNs and buildings managed by RBC Services were included within a separate 'RBC Companies' category. Due to refinement of our scope category information based on building ownership, the associated emissions from these have now been included within 'Council buildings – community leased assets'.
- 2.18 For this year's emissions report officers have been able to obtain additional historical data for the buildings managed by RBC Companies which has led to an increase (when compared to previous years reports) in emissions in the 'Council buildings – community leased assets' category for the years 2019/2020, 2020/2021 and 2021/2022. This change has also contributed to the reduced percentage increase from the baseline year to the present reporting year for these buildings reflected now in the 'Council buildings – community leased assets' category.
- 2.19 A new sector for Scope 3 GHG emissions sources has been added to reporting for 2023/24. 'Transmission and Distribution Losses' refers to "the difference between the electrical energy that enters the distribution network and the electrical energy that reaches the customer. Consequently, a proportion of the energy generated does not reach the end user, meaning more power must be produced to meet demand¹". Calculation of this source was not considered as part of baseline determined by Aether. However, with the continued refinement and improvement in the Council's emission reporting over time, it is a relevant emission source which should be considered moving forward.

3. Policy framework implications

- 3.1 In January 2022, the Council committed to tackling climate change and adopted a target to achieve operational 'Net Zero Carbon' emissions from its services and

¹ National Grid (2024) [National Grid - Distribution losses](#)

operations by 2030. The overarching target for the Borough and the UK is to reach net zero carbon emissions by 2050.

- 3.2 In October 2022, the Council adopted its Climate Change Strategy which reconfirms the Council's commitment to acting on climate change. A Climate Change Action Plan to set out a roadmap of activities which the Council could undertake to help achieve the 2030 and 2050 targets was adopted by the Council in February 2024.
- 3.3 In December 2023, the Council resolved to declare a climate emergency, recognising that the consequences of global temperatures rising above 1.5 degree Celsius are so severe that preventing this from happening must be humanity's priority. As such, the Council committed to using its reasonable endeavours to continue its work to meet the Council's target of net zero operational emissions by 2030, and to use its sphere of influence to support the Borough and its communities to achieve the 2050 national net zero target for the UK.
- 3.4 Calculating the annual GHG emissions of the Council's services and operations is essential to enable the Council to achieve these targets and successfully measure and monitor our progress towards doing so.

4. Resource implications/Value for Money

- 4.1 Although there are no immediate resource implications arising from this report, to meet the Council's operational Net Zero target and decarbonise our estate, considerable additional funding will be needed. The Council has allocated some budget to help work towards its climate change commitments over the coming years, however this funding is likely to be insufficient to meet its operational net zero target. Therefore, officers will continue to pursue opportunities to secure grant funding where appropriate to help bridge the anticipated funding gap.

5. Legal implications

- 5.1 The Paris Agreement, which is a legally binding international treaty on climate change, was adopted by 196 Parties, including the UK, at COP 21 in Paris on 12 December 2015 and came into force on 4 November 2016. Its goal is to limit global warming to well below 2 degrees Celsius, preferably 1.5 degrees Celsius, compared to pre-industrial levels.
- 5.2 In June 2019, Parliament passed The Climate Change Act 2008 (2050 Target Amendment) Order 2019, which requires the Government to reduce the UK's net GHG emissions by 100 per cent relative to 1990 levels by 2050.
- 5.3 The then Department of Energy and Climate Change signed a Memorandum of Understanding (MOU) with the Local Government Association on 9 March 2011 to recognise the pivotal role local authorities have in reducing GHG emissions at the local level.
- 5.4 Local Authorities in England are required by the Department for Energy Security and Net Zero (DESNZ) to measure and report on the GHG emissions from their own estate and operations.

6. Equality implications

- 6.1 There are not considered to be any equality implications related to this report.

7. Environmental/Sustainability/Biodiversity implications

- 7.1 The objectives set out in the Council's Climate Change Strategy aim to enhance the environment and to promote sustainability and biodiversity. Annual GHG emissions reporting is essential in enabling the Council to successfully measure and monitor its progress towards achieving its targets and goals to combat climate change.

8. Risk Implications

- 8.1 There is a risk to the Council from not meeting its agreed 2030 net zero target its services and operations, largely due to financial and resource constraints. This risk is captured in the Council's Corporate Risk Register.

9. Other implications

- 9.1 Not applicable.

10. Timetable for Implementation

- 10.1 The Council will report annually on its GHG emissions.

11. Conclusions

- 11.1 The Council's total GHG emissions (Scope 1-3) in 2023/24 were estimated to be 17,184tCO₂e. Overall, GHG emissions associated with the Council's operation have declined by 5.4% since the baseline year of 2019/2020. This is due to multiple sectors where emissions have reduced, but most significant in Scope 1 and 2 are 'Council Buildings – Total' and in Scope 3 are 'Procurement of goods and services' and 'Commuting'.
- 11.2 In sectors where the Council has seen an increase in GHG emissions compared with the baseline year, namely in 'Council buildings – Community' and 'Council buildings – community leased assets', this is largely attributed to the commencement of the District Heat Network (DHN) for the Magna Square development during the 2022/23 financial year and further refinement of the emissions reporting process leading to a continuously improving understanding of the Council's operations. This continuous refinement should be viewed as an essential part of the emissions reporting process and is also reflected in the introduction of the 'Transmission and distribution losses' Scope 3 sector for the 2023/24 reporting year.
- 11.3 There is an overall decrease of 12% in our estimated Scope 1 and 2 emissions totals between our baseline year of 2019/20 and 2023/24. All categories of emission sources in our Scope 1 and 2 (emissions arising from sources owned or controlled by the Council directly or resulting from the consumption of purchased electricity, steam or other sources of grid-generated energy), except 'Council Buildings – Community', have decreased compared with the baseline year 2019/20, with most also decreasing compared with the 2022/23 financial year. As discussed in paragraph 2.11, significant further declines in the GHG emissions associated with the Council's fleet operations are expected in 2024/25 following the transition from diesel to HVO.
- 11.4 Further initiatives to reduce the Council's total GHG emissions are described in paragraphs 2.14, 2.15, and 2.16, and are supported by the continual implementation of approved strategies and actions, including the Council's Climate Change Action Plan, Electric Vehicle Strategy, Sustainable Fleet Management Strategy and

Sustainable Procurement Policy. However, there is still considerable work to be done to meet our agreed target of Net Zero emissions from our operations and services (Scope 1 and 2) by 2030.

- 11.5 With access to new data sources and developing understanding of the Council's operations and services, it is expected that there will be a continuous improvement in reporting of the Council's GHG emissions over time. Dependent on the updated/refined information identified in the reporting process, this may lead to emissions increasing, decreasing, or being redistributed. Wherever these changes occur, the climate change team will highlight any such changes and provide explanation of any amendments and the impact on the reported GHG emissions for the Council.

12. Background papers

- 12.1 Members attention is drawn to the Corporate Management Committee report of 18 April 2024 providing the Council's GHG emissions for the 2022/23 financial year and an accompanying update to the Aether baseline report figures, available here: <https://democracy.runnymede.gov.uk/ieListDocuments.aspx?CId=152&MId=955&Ver=4>

13. Appendices

- 13.1 None