

# **CARBON EMISSIONS REPORT**

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### **KEY FINDINGS**

- Total measured emissions decreased year-on-year by 18%
  - Total measured emissions have decreased and are more similar to prepandemic levels. The Aldersgate Group anticipated an initial emissions rise in 2021/2 due to changes in working practices resulting from the pandemic, updates to our emissions reporting methodology, and growth of the Secretariat. The Group is pleased to see this progress towards meeting our science-based target and will aim to build on this in the 2023/4 reporting period.
- The average emissions per Full Time Employee was 373.21kg of CO<sub>2</sub>e<sup>1</sup>
  - This compares with 510.66kg of CO<sub>2</sub>e per employee in the previous year, a decrease of 27% per person.
- Scope 1 & 2 emissions were 683.39kg CO2, an increase of 56%
  - The large increase in scope 1 & 2 emissions is largely attributable to the increase in the number of Full Time Employees (FTE). In this reporting period. There were nine FTE for the full 12 months, compared to eight for the last period. In addition, the number of FTEs that use renewable energy tariffs has fallen slightly from six in the 2021-2 reporting period, to five in 2022-3.
- Scope 3 emissions fell by 27%
  - This decrease took place across commuting, hotels stays, and embodied carbon in computer equipment. Business travel and data storage emissions in this reporting period increased. Emissions from paper remained at 0. Emissions relating to waste removal and water usage were not included due to a lack of available data.

### SUMMARY

The Aldersgate Group monitors the climate and environmental impacts which arise from carrying out its business. The Group's overall impact remains low and total emissions during the 2022-23 reporting period fell when compared to the previous period. This is primarily due to a large drop in scope 3 emissions (such as commuting and hotel stays), which outweighs increases in scope 1 & 2 emissions.

Unfortunately, it is not always possible to obtain data on all of the Group's impacts from our suppliers. Waste and water consumed on our office premises are examples of this. Similarly, some data on home working is based on estimates, or is not possible to source (for example

<sup>&</sup>lt;sup>1</sup> This estimate is based on an average of 9 full time employees (FTES)

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home waste production and consumption of water). Additionally, carbon product footprints are still in their infancy and data is limited, so embodied carbon estimates are based on footprints provided by manufacturers of equivalent products rather than the items Aldersgate Group uses. Where we cannot obtain specific data, we continue to engage with suppliers to improve their measurement and management of environmental impacts and share the data with us.

### BACKGROUND

The Aldersgate Group is an alliance of leaders from business, academia, politics and civil society that drives action for a sustainable economy. Formed in 2006, the Group now has 67 member organisations and a permanent Secretariat which has more than doubled in size from 2018 to 2023. The carbon emissions report refers to impacts of the Secretariat's activities and does not include the emissions resulting from its membership or Board of Directors (except where travel was undertaken by Directors on Aldersgate Group business).

The Aldersgate Group has prepared annual reports monitoring its greenhouse gas (GHG) emissions since its 2011-2012 financial year. However, changes in scope of data have affected the consistency of accounting over recent years, primarily arising from challenges in obtaining robust and comparable data from key suppliers, which change over time. In 2016, the Group determined that the ongoing effort to publish full GHG emission reports was not justified due to a lack of comparability of data year-on-year. However, the Secretariat acknowledged the value of monitoring key activities to help identify and manage its impacts, as well as to better understand the challenges in emissions-reporting faced by its members. The Secretariat's ability to report specific GHG emissions has improved over time as more organisations and businesses begin to monitor and report their own GHG emissions.

In 2021, the Group joined the Science Based Targets initiative and set a target to, by 2030, reduce its Scope 1 & 2 emissions by 42% and Scope 3 emissions 46.2% against a baseline of 2019-2020. As such, continuing to measure the Group's emissions footprint will remain an important priority.

### **METHODOLOGY**

In 2021-2, the Aldersgate Group updated its methodology to reflect changes in working practices which arose during the COVID-19 pandemic and led to a permanent transition to a hybrid working model.<sup>2</sup>. Key changes include:

Factoring the use of renewable energy tariffs into scope 1 & 2 emissions. Other organisations report only emissions from electricity on non-renewable tariffs, along with gas. The Office Group – the Aldersgate Group's office provider during this period – uses renewable energy tariffs and electricity-only across the sites the Group has rented in recent years. Over half of the Aldersgate Group Secretariat use renewable energy tariffs at home.

<sup>&</sup>lt;sup>2</sup> Aldersgate Group's hybrid working model has an average of two days spent working from the office and three days from home.



- In line with the recommendations of the Science-Based Targets Initiative (SBTi), we included the product carbon footprints of computer equipment (such as monitors and laptops).
- The inclusion of data relating to the use of Microsoft Teams which the team increasingly used for video conferencing. The methodology changes to reflect Microsoft's good record on sustainability and renewable energy use.

We have continued to use this updated methodology in the 2022-3 carbon emissions report, but we accompany this with comparisons against the old methodology in Tables below. In the last report, new estimates were included for previous reporting periods to add new data (such as computer equipment), to improve the quality of our benchmarking year-on-year.

It should be noted, however, that there is some data which the Aldersgate Group is not able to process:

- Some staff in the Secretariat remain unable to obtain specific data on their gas and electricity usage, so estimates are used instead.
- It has not been possible to gather data on some Scope 3 emissions, such as waste and water from TOG.
- We are not able to source emissions data relating to Zoom activity.

Table 1: Summary of emissions year-on-year including renewable tariffs, in kg CO <sub>2</sub> e <sup>3</sup>								
Reporting Period	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023			
Scopes 1 & 2	340.08	387.46	1675.49	932.21	1162.88			
Scope 3	3262.26	2354.13	1215.74	3733.16	2675.50			
Total	3602.34	2741.60	2891.23	4665.37	3358.89			
Total change year-on-year	n/a	-23.89%	5.46%	61.36%	-18%			
Per employee	720.47	548.32	468.85	583.17	426.49			
Per employee change year-on-year	n/a	-24%	-14%	24%	-27%			
# employees	5	5	6.16667	8	9			

## Assessment

<sup>&</sup>lt;sup>3</sup> For Scopes 1 & 2 in Table 1 and Table 2, the data for 2018-19 and 2019-20 covers emissions from energy consumption at The Office Group – our office site – only. The Aldersgate Group only began to include home energy-related emissions during the COVID-19 pandemic, due to changes in working practices. From 2020-21 onwards, gas heating in homes has been included in emissions calculations. If the Group had continued to use office-related emissions only, the figure would be 0 for Scopes 1 & 2 in Table 2.



Table 2: Summary of emissions year-on-year excluding renewable tariffs, in kg CO2e								
Reporting period	2018-19	2019-20	2020-21	2021-22	2022-3			
Scopes 1 & 2	0.00	0.00	1121.50	438.56	683.39			
Scope 3	3262.26	2354.13	1215.74	3646.72	2675.50			
Total	3262.26	2354.13	2337.24	4085.29	3358.89			
Total change year-on-year	n/a	-28%	-1%	75%	-18%			
Per employee	566.45	365.63	379.01	510.66	373.21			
Per employee change year-on-year	n/a	-35%	4%	35%	-27%			
# employees	5	5	6.16667	8	9			

### Scope 1 & 2 emissions

Scope 1 & 2 emissions increased by 56% compared to 2021-22, and still remain higher than pre-pandemic levels due to the inclusion of home working emissions. This increase in emissions is largely attributable to the increase in the number of Full Time Employees (FTE) in this reporting period. There were nine FTE for the full 12 months, compared to eight for the last period. In addition, the number of FTEs that use renewable energy tariffs has fallen slightly from six in the 2021-2 reporting period, to five in 2022-3.

Higher energy consumption may also reflect the colder than average winter in 2022/3, compared to the milder than average winter in 2021/22 – the eight mildest in the Met Office's series from  $1884.^4$ 

It is important to highlight that scope 1 & 2 emissions remain significantly higher than the pre-pandemic reporting period – and our SBTi baseline – at 683% above our 2019-2020 consumption. This reflects our decision to include home energy consumption in addition to that of the Aldersgate Group's office space – which means gas is included – as well as the increased team size.

### The Office Group

During this reporting period, the Aldersgate Group Secretariat was based in a co-working space that is owned and managed by The Office Group (TOG). The Secretariat also continues to work a hybrid split, with an average of two days spent in the office and three days at home. We therefore continue to report home working-related energy consumption in addition to the emissions from TOG.

A lack of data has limited consistency and accuracy in this reporting year, as was the case in previous reporting periods. Though TOG has previously announced plans to introduce an energy portal to monitor electricity use, which would have helped to secure more specific data, this has not yet materialised. Instead, electricity is calculated by floor (Aldersgate Group

<sup>&</sup>lt;sup>4</sup> Met Office, <u>Seasonal Assessment – Winter 2022</u>



Secretariat occupies a proportion of one floor), and then divided by square footage to give an estimate for the energy consumed in the spaces rented by the Aldersgate Group.

Based on annual metered building electricity consumption provided by TOG, the Aldersgate Group estimates its electricity consumption to be 1,157.27 kWh. If the TOG used a standard energy tariff this would equate to 243.2kg CO<sub>2</sub> of scope 2 emissions. However, because TOG is on a renewable energy tariff, Scope 2 emissions from office working are not included in our calculations to match market reporting.

### Home working

The Aldersgate Group estimates its Scope 1 and 2 emissions from home working to be 683.39 kg  $CO_2$ . This is an increase of 56% year-on-year, which is attributable to increases in the Secretariat size, a decrease in the number of staff with renewable energy tariffs, and a colder winter. Approximately 45% of these emissions are from gas usage. This is the third year in which the Secretariat has reported scope 1 and 2 emissions from home working, which it will continue to do so long-term as the Group continues to use hybrid working.

As with collecting accurate data from the TOG, it has been difficult to obtain specific details about home energy consumption. Each energy provider has its own data portal which presents usage data in a unique way, and some staff have smart meters which break down their usage on a monthly basis, while others simply provide annual estimates. Despite this, two-thirds of staff were able to give data on their actual usage, which was used in the calculations. For the three staff which have left the Aldersgate Group during this reporting period, we have used their annual emissions data from the 2021/2 reporting period or the Typical Domestic Consumption Values (TDCVs) calculated by Ofgem.<sup>5</sup> The TDCVs were last updated in 2020 and so do not reflect the changes to home working which resulted from the pandemic, and may therefore be an underestimate of the current average usage. Similarly, TDCVs are offered in three tiers which are based on the number of bedrooms in the property, rather than square footage, and they do not reflect the property's energy efficiency rating. Therefore, as with the emissions for the office, the estimate should only be used for benchmarking.

In addition to our office space with TOG, a number of staff are on green tariffs for their electricity (scope 2). In previous reports we included the emissions from electricity as calculated using the Defra conversion factors provided by the Government. However, because other organisations choose not to include electricity-related emissions which come from renewable energy sources in their emissions reporting, we have updated our methodology to reflect the market reporting standard. The Group has considered encouraging all FTE to switch to renewable energy providers at home. However, due to the ongoing energy crisis – and related impacts on prices and the ability of staff to switch providers – we have decided against this for now.

<sup>&</sup>lt;sup>5</sup> Ofgem, Average gas and electricity use explained <u>here</u>.



#### Scope 3 emissions

The Aldersgate Group has continued to closely monitor Scope 3 emissions, as historically this has been the sole area where we have consistently monitored emissions. For the fourth year in a row, we have been unable to secure data on waste and water consumption from TOG.

The Secretariat's Scope 3 emissions decreased by 27%. A breakdown of Scope 3 emissions by type can be found in Table 3. Emissions related to hotel stays saw the largest decrease. In the 2021-22 reporting period, there were 42 hotel stays across the Secretariat compared to only 15 in the 2022-23 reporting period. This difference can be explained by COP26, held in Glasgow in November 2021, which saw five Aldersgate Group team members attend and counted for 37 of the 42 hotel stays. The other large year-on-year decrease has been in commuting. During the 2022-3 reporting period, an increasing number of Secretariat have taken up active travel (such as cycling or walking) to get to work or have transitioned from car travel to train travel.

Table 3: Summary of emissions year-on-year excluding renewable tariffs, in kg CO2e								
Reporting period	2018-19	2019-2020	2020-21	2021-2	2022-3			
Commuting	1354.13	947.86	16.10	1324.81	905.68			
Business travel	612.73	504.24	0.00	290.81	355.98			
Hotels	468.90	232.80	0.00	583.70	208.50			
Data	51.44	72.01	107.20	81.00	91.13			
Paper	337.03	71.23	0.00	0.00	0.00			
Waste	8.03	0.00	0.00	0.00	0.00			
Computer equipment	430.00	526.00	1092.44	1366.41	1114.21			
Scope 3 emissions total	3262.26	2354.13	1215.74	3646.72	2675.50			

**Business travel emissions increased by 22% in this reporting period.** Over half of these emissions can be attributed to two all-Secretariat visits to member sites. In this reporting period, two team members travelled outside of the UK for a conference. To keep emissions as low as possible, these staff members opted for train travel over air travel.

**Data emissions increased slightly by 13%.** Estimated data consumption increased from 302.23GB in 2021-22 to 340.00 in 2022-3, driven by the increase in the team size.<sup>6</sup>

Some emissions data continues to be excluded from our reporting. It continues to not be possible to source data on emissions resulting from the use of Zoom – the primary video

<sup>&</sup>lt;sup>6</sup> Conversion factors used for data storage are taken from the WSP Environment & Energy and the LLC Natural Resources Defence Council (October 2012) guide The Carbon Emissions Of Server Computing For Small - To Medium-Sized Organizations. Previously, the Average Public Cloud conversion factor was used to calculate data emissions. However, following the transition from Zoom to Microsoft for data storage, the Private Best Practice conversion factor was used in the 2021-22 emissions report as well as this report.



conferencing we use for hosting online events. We hope that Zoom will begin to provide this information in the future, so this will need to be explored in future reporting periods.

**Estimated emissions associated with the use of paper saw no change**. At the start of the pandemic a conscious decision was made to move away from printing reports and briefings to producing online-only materials, with the view to re-introduce printed materials as and when in-person meetings and events began to take place again. Over the 2022-23 reporting period, we have continued to adopt this approach. Emissions relating to waste removal and water usage were not included due to lack of available data.

Estimated emissions from embodied carbon in computer and other office equipment (including monitors, keyboards and office chairs) decreased by 18%. This is a single figure which covers embodied carbon in products already in use, as well as those purchased during the reporting period. Emissions relating to computer and other office equipment are monitored in two ways: new equipment purchased that year, and equipment purchased in previous years up to a total of five-years – in other words, only a fifth of the emissions are included in our calculation each year. These changes are attributable to the team's growth. Over this period, the Aldersgate Group purchased two new laptops, one chair, one mouse, one screen, and two keyboards.

These figures have been calculated using estimates for equivalent products online, as data on product carbon footprints for the specific products purchased for use by the Secretariat was not available. This is likely to be an underestimate as some products – such as headsets and webcams – currently have no product carbon footprints equivalents available online and so could not be included in the estimate.

It continues to be important for all office equipment purchased by the organisation – in particular laptops and monitors, which make up the bulk of the estimated emissions – to be recycled by future employees given their high carbon emissions and to ensure that all items are used for their full five-year life cycle. It will also be necessary to check annually for laptops and other computer equipment which has finished their five-year life cycles and will no longer to be included in the emissions calculations. A monitoring process is in place for this. The Secretariat has also committed to purchasing second hand equipment wherever possible. Over the 2022-23 reporting period, two monitors were purchased on eBay – these have not been included in emissions reporting. It should also be noted that during this period, four old laptops and one tablet were recycled responsibly.

### **FUTURE EFFORTS**

The Secretariat continued to struggle with consistency of emissions measurement data from suppliers. In the year ahead, we will:

1. **Improve supplier engagement**: We had difficulty accessing a full data set for Scope 3 emissions (for example, waste and recycling volumes) from The Office Group. In April 2023, the Aldersgate Group moved to a co-working space, *Sustainable Ventures* 



in County Hall. Given the ethos of the working space, we are optimistic we will be able to access this information for the 2023/4 reporting period.

- 2. Encourage emissions reductions from home-based working. The Secretariat will consider how best to measure Scope 1, 2 and 3 emissions in this scenario and consider what measures it needs to take to support staff in reducing home-based emissions (such as switching to renewable energy tariffs), which have been exacerbated by the ongoing energy crisis. We will continue to engage with other organisations to gather best practice approaches.
- 3. Consider outsourcing our emissions reporting information to ensure quality and independence. By doing so, we hope to increase the consistency and accuracy of the metrics which we utilise in calculating the organisation's emissions footprint.

The Aldersgate Group's long-term aim is to produce zero net emissions as a result of its activities. The Group recently joined the Pledge to Net Zero coalition and, in May 2021, set its science-based emissions reduction targets. The Group has committed to reducing its scope 1 & 2 emissions by 42% by 2030 against its baseline of 2019-2020 and its scope 3 emissions by 46.2% by 2030. This would be around 4.6% reduction per year.

It is worth noting that while setting its science-based target, the Group anticipated an initial rise in emissions due to changes to working practices resulting from the pandemic (such as the inclusion of home energy consumption) and the subsequent return to "normal" after lockdown, as well as the increase in size of the Secretariat. We correctly predicted in our 2020-1 report that we would see a further increase in emissions in the 2021-22 reporting period and were hopeful in our 2021-22 reporting period that the 2022-23 report would be more similar to pre-pandemic emissions (which they are).

The Group has already identified priority areas for emissions reduction as: (i) choice of office tenancy; (ii) active engagement with office managers; (iii) travel and commuting; (iv) use of paper; (v) data management; (vi) overnight hotel stays; (vii) reducing home working emissions; and (viii) reducing emissions associated with office equipment. The Aldersgate Group will continue to work with experts and our suppliers to identify opportunities for delivering these reductions as swiftly as possible.