

Carbon emissions report

Period: 1 May 2021 – 30 April 2022 **Author:** Josie Murdoch, Policy Principal

KEY FINDINGS

- The Aldersgate Group has updated its methodology for this reporting period, to more accurately reflect the use of renewable energy tariffs in place across its office site and staff homes.
 - The Office Group the Aldersgate Group's office provider uses renewable energy tariffs and electricity-only across the sites the Group has rented in recent years. Over half of Aldersgate Group Secretariat use renewable energy tariffs at home. Other organisations report only emissions from electricity on non-renewable tariffs – along with gas. We have therefore adjusted our methodology to be consistent with the market. For the purposes of this transitional report, we use the new methodology in the text but accompany this with comparisons against the old methodology in Tables. We have also included new estimates which go further back into previous reporting periods to add new data (such as for computer equipment), to improve the quality of our benchmarking year-on-year.
- Total measured emissions increased year-on-year by 75%
 - This increase is largely attributable to the increase in the number of Full Time Employees (FTE) in this reporting period (with 8 FTE for the full 12 months, compared to an average of 6.16 FTE for the last period). The uptake of "normal" activities post-pandemic – such as business travel and commuting – also led to a significant upswing in Scope 3 emissions.
- The average emissions per Full Time Employee was 510.66kg of CO₂e¹
 - This compares with 379.01kg of CO_2e per employee in the previous year² an increase of 35% per person. However, when compared to the pre-pandemic reporting period (2018-19), emissions per employee decreased by -9.85%.
- Scope 1 & 2 emissions were 438.56kg CO₂, a decrease of -61%
 - In the previous reporting period, changes to working practices due to COVID-19 pandemic resulted in the inclusion of the Secretariat's home energy consumption, in addition to that of the Aldersgate Group's office space (The Office Group, or TOG). In this reporting period, the Aldersgate Group returned to a hybrid working model, with an average of two days spent working from the office and three days from home.
- Scope 3 emissions increased by 200%
 - This increase took place across commuting, business travel, hotel stays, data storage and embodied carbon in computer equipment, which is reflective of both the increased team size and the return of travel post-pandemic. Emissions from paper remained at 0. Emissions relating to waste removal and water usage were not included due to a lack of available data.
- Data storage emissions decreased by -24%

¹ This estimate is based on an average of 8 full time employees (FTEs).

² This figure accounts for the change to methodology and exclusion of renewable energy tariffs. The figure based on the old methodology was 392.47kg of CO₂e per employee.



- Actual data consumption increased, driven by the increase in the team size and the new inclusion of data relating to the use of Microsoft Teams – which the team increasingly uses for video conferencing (in addition to Zoom, for which we are unable to source emissions data). However, because data hosting moved to Microsoft, the methodology changed to reflect their good record on sustainability and renewable energy use.
- Emissions from computer and office equipment increased by 25%³
 - These changes are attributable to the team growth which took place at the end of the previous reporting period (2020-21) where two new roles were created in the team. In this reporting period (2021-22) one new FTE directly replaced one staff member who went on maternity leave. Overall this led to a greater volume of computer and office equipment in use by the team.
- The pandemic continued to impact the availability of data for the third year running, but next year should see a change in this trend.
 - In our office space, we were unable to attain water and waste data once again.
 However, TOG has confirmed this will be different for the 2022-23 reporting period, due to the re-hire of a Sustainability Manager following the pandemic.

SUMMARY

The Aldersgate Group monitors the climate and environmental impacts which arise from carrying out its business. The Group's overall impacts remain low. However, total emissions increased for the second year in a row, primarily due to another increase in the number of Full Time Employees, as well as the continued inclusion of home working-related emissions and the product carbon footprints from office equipment. In past reporting periods, the Group's main sources of emissions related to the amount and mode of business and commuting travel, as well as office tenancy.

Unfortunately, it is not always possible to obtain data on all of the Group's impacts from our suppliers. For example, waste and water consumed on our office premises. These challenges have continued this year following key team members from The Office Group (TOG) being made redundant during the pandemic, thereby limiting the ability to obtain specific data. Similarly, some data from home working is based on estimates, or is not possible to source (for example home consumption of waste and 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 63 organisation members and a permanent Secretariat which doubled in size from 2018 to 2022. 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).

³ To reflect a more accurate computer equipment emissions figure across the last three reporting periods and enable more accurate benchmarking, the numbers for 2018-19, 2019-20 and 2020-21 were updated based on estimates.



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. This has led to a review of some of the data included in the carbon emissions report – with office equipment being included for the first time in 2020-21 – to ensure calculations and reporting are as accurate as possible. Due to changes in working practices which arose during the COVID-19 pandemic and led to a permanent transition to a hybrid mode of working, a new methodology was used to calculate emissions from home energy consumption across Scopes 1 and 2 starting in 2020-21. Some staff in the Secretariat remain unable to obtain specific data on their gas and electricity usage, whereby estimates are used instead. Additionally, the impacts of the pandemic have continued to affect the ability to gather data on some Scope 3 emissions, such as waste and water from TOG, as members of staff were placed on furlough and then made redundant, and have not yet been re-hired.

ASSESSMENT

The Aldersgate Group has updated its methodology for this reporting period, to more accurately reflect the use of renewable energy tariffs in place across its office site and staff homes. The Office Group – the Aldersgate Group's office provider – uses renewable energy tariffs and electricity-only across the sites the Group has rented in recent years. Over half of Aldersgate Group use renewable energy tariffs at home. Other organisations report only emissions from electricity on non-renewable tariffs – along with gas. We have therefore adjusted our methodology to be consistent with the market. For the purposes of this transitional report, we have included comparisons against the old methodology and included new back-dated estimate calculations for additional areas of reporting (such as computer equipment) where possible. These comparisons be found in Tables 1 and 2. The team size was eight Full Time Employees (FTE) for the full reporting period 2021-22, as the Secretariat went through a period of growth and change at the end of the previous reporting period, seeing an increase from 6 to 8 FTE. Details of these changes can also be found in Tables 1 and 2.

Table 1: Summary of emissions year-on-year including renewable tariffs, in kg CO_2e^4					
Reporting period	2018-19	2019-20	2020-21	2021-22	
Scopes 1 & 2	340.08	387.46	1675.49	932.21	
Scope 3	3262.26	2354.13	1215.74	3733.16	

⁴ 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, gas heating in homes was 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.



Total	3602.34	2741.60	2891.23	4665.37
Change YOY	n/a	-23.89%	5.46%	61.36%
Per employee	720.47	548.32	468.85	583.17
Change YOY	n/a	-24%	-14%	24%
# employees	5	5	6.16667	8

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

Scope 1 & 2 emissions

Scope 1 & 2 emissions decreased by -61%, though they remain higher than pre-pandemic due to the inclusion of home working emissions.

A significant portion of the reduction in emissions is attributable to a change in working practices introduced post-pandemic. The calculations in the current reporting period (2021-22) are based on all staff working from home for three days a week, with two days in the office. In the previous reporting period (2020-21), the office was closed for the majority of the year, so home working emissions were based on a full week and reported in addition to the office emissions for the full week. This naturally leads to a reduction in emissions relating to home energy-consumption. These figures are a rough estimate, as specific data for home working was not possible to obtain for every member of staff, and included only as a benchmark for future reporting.

It is important to highlight that scope 1 & 2 emissions remain significantly higher than pre-pandemic reporting period – and our SBTi baseline – at 438% above our 2019-2020 consumption. This is largely attributable to the continued inclusion of 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

The Aldersgate Group Secretariat is based in a co-working space, which is owned and managed by The Office Group (TOG). During the COVID-19 pandemic, the Aldersgate Group Secretariat worked from home for 99% of the year. In this reporting period, working practices transitioned to

⁵ The methodology for reporting data emissions was adjusted to reflect the transition to Microsoft for data hosting and online meetings, and to reflect Microsoft's good record on sustainability and renewable energy use (see page 7 for further information). For year-on-year comparability, the old methodology was used to calculate the figure in Table 1.



a hybrid split with an average of two days spent in the office and three days at home. The Secretariat therefore continues 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 the previous reporting period. 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 due to staffing pressures. Instead, electricity is calculated by floor (Aldersgate Group 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. The TOG Sustainability Coordinator was placed on furlough during the COVID-19 pandemic and has since been made redundant, and our main point of contact for this period was the building manager who has been stretched with other responsibilities. This has led to a perennial challenge with acquiring data to the same level of specificity as in previous years and the annual electricity consumption was only given to us as a rough yearly estimate instead of monthly readings, as was the case in reporting periods in before 2019. In May 2022 we were advised that a Sustainability Manager was being recruited, and it is our hope that the data collection process will become more straightforward in the future.

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 CO₂ 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 438.56 kg CO_2 . This is a decrease of -61% year-on-year, a reduction which is largely attributable to the change to a hybrid working model – with an average split of two days a week in the office, and the remaining three days at home. Approximately two-thirds of these emissions are from gas usage. This is the second 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 those staff who could not, Typical Domestic Consumption Values (TDCVs) calculated by Ofgem were used. These 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 a range of suppliers going under – and related impacts on prices and the ability of staff to switch providers – we have decided against this for now.

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 held accountability in terms of the impact of our actions on emissions. However, with the TOG Sustainability Coordinator being placed on furlough and then made redundant during the previous reporting period, we have been unable to secure data on waste and water consumption from TOG for the third year in a row.

We made some changes to how we monitor and calculate Scope 3 emissions last year, which have continued into this reporting period. Following the inclusion of additional emissions sources, in line with the recommendations of the Science-Based Targets Initiative (SBTi), we include the product carbon footprints of computer equipment (such as monitors and business laptops) for the second time. We also updated the methodology for calculating data emissions, following the transition to Microsoft for data hosting, which has better sustainability credentials. All other scope 3 emissions have been monitored as before.

The Secretariat's Scope 3 emissions increased by 200%. A breakdown of Scope 3 emissions by type can be found in Table 3. Part of this increase is attributable to the increase in the number of Full Time Employees during this reporting period, as well as the return of activities which had been paused during the COVID-19 pandemic. Emissions relating to commuting saw the biggest upswing due to the return to hybrid working, with an increase of 8129% following a reporting period consisting of predominantly home-working. Increases also occurred across business travel and hotel stays, with in-person conferences returning for Labour and Conservative parties, and the annual Conference of the Parties 26 (COP26) taking place in Glasgow, the latter of which saw five Aldersgate Group team members in attendance. However, to keep emissions as low as possible, staff members have opted for train travel over air travel for all of these events, in spite of the disruptions to rail services which took place ahead of the COP26 summit.

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



Data emissions decreased by -24%. Actual data consumption increased from 35.44GB in 2020-21 to 302.23GB in 2021-22, driven by the increase in the team size and the new inclusion of data relating to the use of Microsoft Teams. However, the methodology for calculating data emissions has been updated, to reflect Microsoft's good record on sustainability and renewable energy use.⁶

A significant bulk of emissions data continues to be excluded from our reporting. Data on emissions resulting from the use of Zoom – which was the primary video conferencing platform used for the 2020-21 reporting period – continues to be unavailable. In 2021-22, following a shift from other data hosting to Microsoft, Teams began to be used in place of Zoom for a number of internal and external meetings. It continues to not be possible to source data on Zoom-related emissions, despite the high volume of meetings and webinars conducted using the video conferencing application during this reporting period. 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-introducing printed materials as and when inperson meetings and events began to take place again. An effort had already been made prepandemic to begin distributing reports and briefings digitally, and this was sustained postpandemic.

Emissions relating to waste removal and water usage were not included due to lack of available data. We hope this will be the last year we unable to report this data, as TOG has now recruited a Sustainability Manager to monitor waste and water usage in addition to energy consumption.

Estimated emissions from embodied carbon in computer and other office equipment (including monitors, keyboards and office chairs) increased overall by 25%. 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 growth which took place at the end of the previous reporting period (2020-21) where two new roles were created in the team. In this reporting period (2021-22) one new FTE directly replaced one staff member who went on maternity leave, which required the purchase of a new laptop.

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

⁶ Conversion factors used for data storage are taken from the WSP Environment & Energy and the LLC Natural Resources Defense 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 Zoho to Microsoft for data storage, the Private Best Practice conversion factor has now been used and should be used for future reporting.



emissions calculations. A monitoring process is in place for this. The Secretariat has also committed to purchasing second hand equipment wherever possible; this policy has already been implemented in the reporting period 2022-23, with two monitors bought on eBay; these monitors will not need to be included in emissions reporting.

FUTURE EFFORTS

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

- 1. Supplier engagement: Once disruptions caused by COVID-19 and furloughed members of staff return, we will resume engaging with The Office Group to access a full data set for Scope 3 emissions. We are hopeful that we will have access to data on waste and recycling volumes in the next reporting period, as we have been advised by TOG that they are recruiting a new Sustainability Manager. The next reporting period is likely to follow a similar hybrid-working approach to this period, which will mean a continued monitoring of Scope 1 and 2 emissions across home and working.
- 2. Scope 3 emissions: The Secretariat will continue to monitor and endeavour to limit Scope 3 emissions, by continuing to use low carbon transport methods as far as possible, purchasing second-hand computer and office equipment, combining meetings when travelling and in particular continuing to use online platforms for meetings where these would be just as appropriate, given the effectiveness of the transition to web-based meetings during the course of the pandemic.
- 3. Measuring emissions from home-based working: The Secretariat, as of August 2022, is continuing with a similar approach to hybrid-working as in the reporting period 2021-22 with two dates in the office and three spent at home. The Secretariat will therefore 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, which have been exacerbated by the ongoing energy crisis. We will continue to engage with other organisations to gather best practice approaches.

The Aldersgate Group's long term aim is to produce zero net emissions as a result of its activities and the Group recently joined the <u>Pledge to Net Zero coalition and, in May 2021, set its science-based emissions reduction targets</u> as part of this. 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. However, as anticipated the first reporting period saw an increase of 34% and the second reporting period has now seen a further increase of 75%. As such, the reductions in future reporting periods will need to be higher.

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 predicted in our 2020-21 report that we would see a further increase in emissions in the 2021-22 reporting period – which is correct. We are therefore hopeful that the 2022-23 report will be more similar to current emissions, and that emissions will begin to decrease thereafter.

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; and (vi) overnight hotel stays. A further two emissions reductions targets



should be considered in light of this year's environmental impact report: (vii) reducing home working emissions and (viii) reducing emissions associated with office equipment. The Group will work with experts and our suppliers to identify opportunities for delivering these reductions as swiftly as possible.