

Environmental Progress report

Period: 1st May 2016 – 30th April 2017

Author: Alex White, Policy Officer

At a glance

Table 1.1 Summary of Aldersgate Group emissions

Aldersgate Group emissions ¹	2015-2016 Kg CO ₂ e ²	2016-2017 Kg CO ₂ e
Scope 1	1,117.42	3,727.64
Scope 2	596.40	660.29
Scope 3	2,698.95	3,136.27
Total	4,412.78	7,524.21

Background

The Aldersgate Group is an alliance of leaders from business, politics and civil society that drives action for a sustainable economy. Formed in 2006, the Group now has 85 members and a permanent Secretariat of five. Its principle activities are:

- Secretariat services for members
- Hosting public and private events
- Writing reports
- Meeting with stakeholders and influencers

Principal areas of responsibility to be reported are:

- Emissions associated with the Secretariat’s work (office space, commuting)
- Business travel by Secretariat and Board
- Paper use through printing and production of reports
- Database storage for electronic files

Methodology

Adopted Methodology

This report was written in accordance with the Department for Environment, Food and Rural Affairs’ (Defra) guidance for compliance with greenhouse gas reporting regulation, which took effect from 1st October 2013.³

Conversion factors

All calculations requiring conversion factors were made using Defra’s Greenhouse Gas Conversion Factor Repository.⁴ The conversion factors used are valid for UK based organisations until 31st June 2017.

¹ All totals in this report represent net emissions, discounting offsets for pre-booked taxis and computer server emissions, unless otherwise stated.

² Scope 2 emissions adjusted retrospectively due to use of an old conversion factor

³ Department for Environment, Food and Rural Affairs (October 2013) *Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance* <http://bit.ly/1cUDUtF>

⁴ <http://www.ukconversionfactorscarbonsmart.co.uk/>

Office space

The Aldersgate Group is based in Hub Westminster, which is an open plan hot desking space that comprised the entirety of the first floor of New Zealand House until 1 April 2017, when the floorspace was revised downwards to reduce business rates. The additional floorspace remains unoccupied but is lit and heated, so these calculations have not taken this change in floorspace into consideration. Energy bills are provided for the whole building and building management has advised that the first floor is responsible for 13.617% of the building's total.

The Aldersgate Group's responsibility for the energy bills has been calculated as a portion of the Hub Westminster's total responsibility, based upon the number of days the Secretariat works in the office in relation to the total number of days available (*average number of people in the office x total working days in the year*). This has estimated the Aldersgate Group's responsibility for energy bills in Hub Westminster to be 4.13% this reporting year, over 3% higher than the previous year. This is because the average number of people in the office has decreased from 150 last year to 90 this year, making the Group's share of overall emissions significantly higher.

Staff

During this period, there were five members of staff: Executive Director, Policy Manager, Affairs Officer, Policy Officer and Communications Manager. The Executive Director reduced hours by 0.5 days from April 24, and the Policy Manager works 4 days per week. The Communications Manager left at the end of April, overlapping with her replacement Communications Officer between 3 April and 28 April. Thus over the course of the reporting period there have been between five and six members of staff. Travel emissions have been captured for all staff members.

Commuting

Distances have been calculated by postcode for each employee, based upon driving distances. All employees live within England.

Business travel

Expenses incurred through business travel are itemised over the course of the year. Associated carbon emissions were also calculated using conversion factors from Defra's Greenhouse Gas Conversion Factor Repository.

Calculations

Scope 1

The Aldersgate Group office is heated by gas. New Zealand House building management JLL has shared some of its energy bills from Gazprom with the Secretariat for this report. Bills were only available for the months of November 2016 – February 2017 and April 2017, in spite of concerted efforts to procure the other bills, both by Hub Westminster and the Secretariat. Usage was calculated based on an average over the five months and extrapolated for the fiscal year. This failed to capture seasonal changes between winter and summer and as such is likely to be higher than the actual usage.

For the four months where invoices were available for both 2015-2016 and 2016-2017, figures diverged significantly, making data largely incomparable. As New Zealand House building

management were not available to discuss changes in usage and 7 months of data is unavailable, no useful conclusions can be drawn regarding year-on-year change.

The Group will continue to try to engage New Zealand House on discrepancies and providing invoices.

Table 1.2 Summary of Scope 1 emissions

Gas	2014-2015		2015-2016		2016-2017	
	kWh	Kg CO _{2e}	kWh	Kg CO _{2e}	kWh	Kg CO _{2e}
New Zealand House	2,285,429.14	420,678.94	2,608,078.80	480,069.06		
Aldersgate Group	5,632.84	1,036.84	6,072.93	1,117.42		

Scope 2

JLL has shared some electricity invoices with the Secretariat for this report. Bills were only available for the months of September 2016 – January 2017 and March and April 2017, in spite of concerted efforts to procure the other bills, both by Hub Westminster and the Secretariat. The invoices include electricity readings from all parts of the Hub Westminster office space, including the lobby and stairwells, broken down into day and night time usage. It is important to note that Hub Westminster was unable to confirm the units being invoiced although they believe the units are billed as kilowatt hours (kWh). Furthermore, there are inconsistencies within the data provided in terms of missing measurements. JLL did not respond to multiple requests for clarification.

For months where year on year comparison was possible, usage decreased significantly. Average usage over the seven months of available data in 2016-17 was 34% lower than the average usage over the same months in 2015-16. However, as the Aldersgate Group now makes up a larger percentage of overall use of the Hub due to decreasing occupancy, average CO_{2e} increased on the previous reporting year. Once again, As JLL were not available to discuss changes in usage and 5 months of data is unavailable, no useful conclusions can be drawn regarding year-on-year change.

The Group will continue to try to engage New Zealand House on discrepancies and providing invoices.

JLL building management have informed us directly that New Zealand House is under the SmartestEnergy 100% renewable ‘Natural Renewables’ plan⁵. Hub Westminster has yet to make this certification available and it is currently unclear whether this applies only to the most recent fiscal year. While we anticipate that actual Scope 2 emissions will therefore be lower than indicated, Defra guidance on accounting for renewable electricity recommends using the grid average conversion factor while the approach is being reviewed.⁶

⁵ <http://smartestenergy.com/business-electricity/renewable-electricity/>

⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206392/pb13944-env-reporting-guidance.pdf

Table 1.3 Summary of Scope 2 emissions

Electricity	2014-2015		2015-2016		2016-2017	
	kWh	Kg CO _{2e}	kWh	Kg CO _{2e}	KWh	Kg CO _{2e}
Hub Westminster	53,911.69	24,917.44	101,674.80	41,895.10		
Aldersgate Group	976.21	451.20	1,447.41	596.40		

Scope 3

The table below summarises Scope 3 emissions for the Aldersgate Group.

Table 1.4 Summary of Scope 3 emissions

Scope 3	2014-2015 Kg CO _{2e}	2015-2016 Kg CO _{2e}	2016-2017 Kg CO _{2e}
Commuting	2,444.70	1,318.84	1,522.48
Business travel	593.24	1,169.48	2,441.04
Paper	409.01	160.12	120.74
Couriers	5.45	3.23	4.82
Data storage	0.00	47.29	?
Total	3,452.40	2,698.95	4,089.12

Commuting

Staff commutes were all undertaken within England by train, tube, bus, cycling and walking.

The composition of the Secretariat changed through the year, and varied between five and six staff. The average commute distance taken by the Secretariat for each day worked decreased from 24.6 miles in 2015-2016 to 22.87 miles in 2016-2017. However total emissions increased by 15%. This is due primarily to the increase in permanent staff from four for eight months in 2015-2016, to five over the full course of the reporting year.

Staff members primarily commute during peak periods when occupancy is highest and therefore per person emissions were lowest. Occupancy is not accounted for in the adopted methodology, which applies Defra's conversion factors.

Table 1.5 Summary of Commute-related emissions

Commuting	2015-2016		2016-2017	
	Miles	Kg CO _{2e}	Miles	Kg CO _{2e}
Train	11,266.48	885.73	12,923.30	1,015.98
Bus	2,042.00	242.53	2,427.00	288.25
Tube	2,045.64	190.58	2,342.60	218.25
Cycling or walking	1,014.74	0.00	2,469.47	0.00
Total	16,368.86	1,318.84	16,368.86	1,522.48

Business travel

Staff made business trips on behalf of the Group, by train, car, bus, taxi, plane and on one instance by ferry. Business travel figures include travel by our Chair, Joan Walley and Director Steve Wallace for our REBus work in the UK and in Europe.

Total miles travelled increased by 58.84% and emissions grew by 108.73%. The increase can be largely attributed to the significantly higher volume of flights, which within the Secretariat were necessary due to tight time constraints and for Steve Wallace due to practicality, given he does not live in London. There was also a significant increase in train travel which reflects the Group's endeavours to increase presence outside of London in light of political developments, and the Group's efforts to engage more with the membership by visiting facilities where possible.

Table 1.6 Summary of emissions from business travel

Business travel	2015-2016		2016-2017	
	Miles	Kg CO ₂ e	Miles	Kg CO ₂ e
Train	6727.20	539.60	17,225.85	841.48
Eurostar	4314.00	84.28	4239.00	82.82
Car	1093.00	322.02	1,533.70	280.77
Taxi	67.53	19.81	88.36	23.84
Plane	767.00	203.77	4,552	1,209.33
Bus	N/A	N/A	53.5	2.47
Ferry	N/A	N/A	11.39	0.35
Total	12,968.73	1169.48	20,600.93	2,441.07

Paper

The Aldersgate Group has a paperless office with an emphasis on keeping electronic files, rather than hard copies. Staff seek to print only when strictly necessary.

Emissions decreased 32% since 2015-2016 in spite of publishing more reports. This can be attributed to one report (the 10-year Anniversary brochure) being printed on lighter paper, and a smaller print volume per report. Other professional print jobs were limited to business cards.

Hub Westminster installed Papercut⁷ in 2015, which provided a direct emissions calculation based on printing from associated accounts. Hub Westminster changed the printing system once more on 20 April 2017, resulting in incompatible metrics for measurement. Emissions for office printing have therefore been calculated by weight, based on total pages printed. Total printed pages increased significantly from 2015-2016 to 2016-2017, which may be due to the increase in Secretariat staff members. The Group will monitor this going forwards.

Table 1.7 Summary of emissions from paper usage

Paper	2014-2015		2015-2016			2016-2017		
	Weight (tonnes)	Kg CO ₂ e	Weight (tonnes)	Kg CO ₂ e	Pages	Weight (tonnes)	Kg CO ₂ e	Pages

⁷ <https://www.papercut.com/>

Business cards	0.001	1.00	0.002	1.49	-	0.001	1.32	-
Office print outs	0.066	61.70	-	16.20	3602	0.024	22.18	4,734
Reports	0.379	346.30	0.148	134.80	-	0.107	97.24	-
Envelopes			0.01	7.62	-	N/A		
Total	0.446	409.01	0.16	160.11		0.132	120.74	-

Couriers

The Aldersgate Group required seven couriers during the financial year, which transported event supplies between the Hub Westminster office and event venues.

Table 1.8 Summary of emissions from couriers

	2014-2015		2015-2016		2016-2017	
	Miles	Kg CO ₂ e	Miles	Kg CO ₂ e	Miles	Kg CO ₂ e
Couriers	23.60	5.45	13	3.23	18.40	4.82

Computer servers and data storage

UKFast provides hosting services for the Aldersgate Group. It has PAS 2060⁸ certification, which demonstrates carbon neutrality, due to their contributions to a number of hydropower renewable energy schemes.⁹

Aldersgate Group email has been hosted by zoho.com since 23rd September 2015, switching from UKFast due to problems with functionality. As zoho.com is not carbon neutral, these emissions have been included in calculations from that date onwards. The Secretariat will need to continue to archive and discard unnecessary emails.

The Aldersgate Group stores shared files on Dropbox.com. Dropbox does not report on their emissions or give any indication of the emissions footprint of their data storage service. However, a study between the NRDC and WSP gives an estimate of average carbon emissions per GB of storage for public cloud users of 1.4kg CO₂e per year¹⁰. This data was published in 2012, and therefore may no longer be entirely accurate. Methodology remains the same as last year.

Online data storage on capsulecrm.com is used to maintain a contacts database. This uses just 50.6KB of data, which is negligible in terms of calculating emissions.

Table 1.9 Summary of emissions from computer servers and data storage

	2014-2015		2015-2016		2016-2017	
	Storage (GB)	Kg CO ₂ e	Storage (GB)	Kg CO ₂ e	Storage (GB)	Kg CO ₂ e
Web	2	0.00	0.78	0.00		0.00

⁸ <http://www.bsigroup.co.uk/en-GB/PAS-2060-Carbon-Neutrality/>

⁹ <http://www.ukfast.co.uk/carbon-neutral-hosting.html>

¹⁰ Figure 2 https://www.nrdc.org/sites/default/files/NRDC_WSP_Cloud_Computing_White_Paper.pdf

hosting						
Email	-	-	7.25	6.13		
Dropbox	-	-	29.4	41.16	31.75	44.45
Total	2	0.00	37.43	47.29		

Assessment

Gas usage

No useful conclusions can be drawn regarding gas usage due to difficulties in obtaining data. The Group will continue to work with Hub Westminster and JLL to improve access to data and more consistent measurements.

Electricity usage

No useful conclusions can be drawn regarding electricity usage due to difficulties in obtaining data. The Group will continue to work with Hub Westminster and JLL to improve access to data and more consistent measurements.

Paper

The instalment and subsequent removal of Papercut over two reporting years has made it difficult to assess emissions. However the Group has increased number of pages printed this reporting year. A reminder has been sent to all staff to only print when strictly necessary, and this will be monitored over the year.

Data storage

This is the first year the Aldersgate Group has reported on data storage for cloud computing on Dropbox. Overall data storage has increased, suggesting a need to streamline email inboxes in particular for all staff. More up-to-date figures for calculation would provide a more accurate picture of associated emissions.

Overall

Overall, it is difficult to draw any useful conclusions about the Group's emissions in 2015-2016 as a result of the difficulty in obtaining invoices. Where invoices have been available, the Group's emissions have increased since our presence in the shared working space is proportionally greater, due to fewer other companies working in the space. The Group does have full access to Scope 3 emissions, which has increased by over 1/3 since the last reporting year. This is principally due to a significant increase in number of flights taken. The Secretariat and others will endeavour to limit air travel to a minimum, taking flights only when unavoidable.

Reduction strategy

In the last report, we set goals to improve:

1. Supplier engagement: The Aldersgate Group has attempted to engage with building management and key suppliers about our desire for more accurate information and the value of lower impact services. The Group has struggled to procure data and invoices from the Hub this year, due in part to changeover of staff in NZ House building management who have been

unresponsive. The Group has been able to use more sustainable services, such as an increased use of hybrid electric vehicles for taxis and couriers.

Outcome: Ongoing, will continue to engage with JLL on our desire for accurate information

2. Methodology: The Aldersgate Group continues to use Defra's guidance for compliance with greenhouse gas reporting regulation¹¹ and Defra's greenhouse gas conversion factors.¹² However, Defra has not updated its conversion factors for 2017 at the time of writing.

Consistency of metrics has continued to be a challenge, given the change in floorplan and total people working in the Hub Westminster office space during this reporting year. Similarly, the change in printing systems has resulted in inconsistent emissions results from office printing. The Group will engage with Hub Westminster to request greater consistency where it does not impact operational efficiency.

Data...

Outcome: ongoing objective

The Aldersgate Group will continue to monitor the key factors influencing our environmental impacts as part of our annual reporting process and employ effective carbon reduction strategies.

Next steps

The Aldersgate Group has produced reports on the environmental impacts of its operations since 2011/12, which included our best attempt to compare the data year on year. The accuracy of these reports has consistently been restricted due to the inability of key suppliers (e.g. of office accommodation) to provide necessary information (e.g. on energy consumption) and as a result of changing measurement parameters year on year. The limited accuracy of the data means that it isn't possible to provide a meaningful annual comparison of the data, limiting the value of these reports in relation to the time required to write them.

In line with recommendations from Directors, the Aldersgate Group decided to continue calculating our emissions to form a knowledge base for any future work and to ensure the Group continues to employ carbon reduction strategies. As of 2015-16 we have not published this data in our annual reports and have sought instead to improve our ability to monitor our environmental impacts and share progress and lessons learnt through an annual environmental progress report. With a limited data set this reporting year, the value of this is not entirely clear. Nonetheless, it has continued to be useful to monitor Scope 3 emissions, where the Group has greater agency over impacts.

Our approach going forward is therefore to:

1. Take steps to reduce personal emissions where possible (e.g. in streamlining data storage and emails)
2. Monitor the key factors influencing our Scope 3 impacts including printing and business travel as part of our annual reporting process.

¹¹ Department for Environment, Food and Rural Affairs (October 2013) <http://bit.ly/1cUDUtF>

¹² <http://www.ukconversionfactorscarbonsmart.co.uk/>