

Mott MacDonald Carbon Footprint in 2014 - Summary

Introduction

Mott MacDonald's carbon footprint refers to greenhouse gases (GHG) emitted directly by ourselves or from sources over which we have control. We first estimated our carbon footprint for 2007 and reported it in our 2008 Corporate Responsibility Report. At the same time we made a long term commitment to reduce our carbon footprint per member of staff by 5% per year.

We have reported our 2014 emissions as tonnes of carbon dioxide equivalent (tCO₂e). We have undertaken the calculations based on the approach set out in ISO 14064, which has previously been verified..

Boundaries

Our organisational boundaries are set according to the *control* approach, under which Mott MacDonald accounts for 100% of GHG emissions from operations over which it has control.

Our operational boundaries are set in accordance with the three *scopes* defined by the GHG Protocol:

- **Scope 1:** Direct GHG emissions from sources owned or controlled by us, such as gas or oil-fired boilers for heating. We have also considered losses of GHG from air conditioning.
- **Scope 2:** Indirect GHG emissions from the generation of purchased electricity used by us.
- **Scope 3:** Other indirect GHG emissions. We have included business travel as this is an important source of operational emissions.

Sources of operational data

We have gathered information from Mott MacDonald controlled offices and from the business travel of our employees. We have not included Scope 1 and 2 emissions associated with *site offices*, such as joint venture offices, staff collocated in clients' offices and temporary offices on actual construction sites in our footprint. However, we have included business travel from these employees where these journeys are recovered through Mott MacDonald.

Parts of the Group have access to travel agencies for booking air travel, rail travel, and car hires. Booking reports from these agencies were obtained and some reports provided the distance travelled. For other journeys, distances were estimated between the origin and destination points. Data on business travel by personal car and other travel modes was obtained from business expense claims.

Sources of emission factors

Emission factors convert the data on energy usage or travel distances to equivalent emissions of CO₂. The selection of specific emission factors is critical to a reliable estimate of a carbon footprint and must be robust and justifiable. We have used the emission factors published by the GHG Protocol and Defra/DECC (UK) to estimate our impacts appropriate to the geography where the activity occurred.

Calculations

The data received from each office, and the data obtained on business travel, were multiplied by the respective emissions factors to obtain aggregate emissions, expressed as tCO₂e. Taking each component in turn:

- **Scope 1:** Billed or metered gas consumption for office heating were converted to emissions in tCO₂e using the emission factor, and expressed as tCO₂e. Some offices that use gas are not able to meter it (for example charged through rent). For these offices we estimated based on the average of the known offices and the size of the office. We have a small number of company owned vehicles. The fuel for these vehicles is included in our Scope 3 estimate due to our accounting practice. However we have estimated that these vehicles represent about 2% of our total road vehicle mileage.
- **Scope 2:** Billed or metered measurements of electricity usage in offices were converted to emissions of tCO₂e using the emission factor. Some offices that use electricity are not able to meter it (for example charged through rent). For these offices we estimated based on the average of the known offices and the number of people in that office, by country or region as appropriate.
- **Scope 3:** Emissions from air travel were estimated from the flight distance data multiplied by the air travel emission factors for each journey type. Emissions from surface travel were estimated in the same way from travel distance data for each journey multiplied by the emissions factor for each mode. We have changed the way we estimate emissions from travel this year to better reflect individual journeys.

Results

Emissions for Mott MacDonald Group in 2014 were:

Scope	Total emissions tCO ₂	Emissions per staff member tCO ₂ /p
Scope 1 (gas, AC)	1,061	
Scope 2 (electricity)	16,252	
Scope 1-2 (office energy)	17,313	1.32
Scope 3 (business travel)	17,208	1.09
Scope 1-3 (total emissions)	34,521	2.41

Total emissions decreased by 3.9% between 2013 and 2014. The majority of this decrease was for office-based employees, as the energy use in offices decreased due to some specific interventions, movements to new premises and changes in emission factors. There was also a smaller reduction in travel emissions.

We have also estimated the emissions based on the geographical spread of our employees.

Region	Total emissions tCO ₂	Emissions per staff member tCO ₂ /p
Asia Pacific	2,497	1.56
Europe, Russia and Africa	17,493	2.31
- Of which UK	12,192	2.35
Middle East	5,691	1.86
North America	8,840	2.75

Future developments

We have made considerable improvements to our emission data collection systems since we began our carbon footprint process including increasing the amount of data that is not estimated in North America. We anticipate making further improvements in the next year and in future years:

- An integrated environmental reporting system, allowing local office managers to enter office energy data directly to the carbon

reporting system. This will facilitate more automated calculation of our carbon footprint, and benchmarking of offices, countries and regions against each other.

- We will encourage all offices and business units to demand business travel distance data reports from their travel suppliers, especially from air travel agents.

We will revise and update our Carbon Reduction Plan that assigns responsibility to business and office managers for actions that will make a significant reduction in our carbon footprint. The Plan includes:

- **Business management:** including sustainability as an agenda item in all management board meetings
- **Office management:** taking steps to reduce energy use in offices through better building management and driving changes in staff behaviour. We have implemented specific measures in some of our key offices to reduce energy use by replacing lighting and improving HVAC systems. We also include office energy performance as part of our criteria for selecting new offices.
- **Business travel:** a global standard for office travel plans that addresses not just travel to work by our staff, but also how our we travel on business and how visitors travel to our offices. We have increased focus on reducing our internal operational travel, although the demand for travel overall is dependent on our work. We have fully rolled out new IT infrastructure to remove barriers to conferencing and communication and will continue to do so which has contributed to reducing overhead travel.
- **Staff behaviour:** continuing to provide information and training to staff so they can take action to reduce their carbon footprint at home and at work.

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