# 2015 CARBON MAPPING REPORT

**JULY 2016** 



# 2015 CARBON MAPPING

We are committed to mapping our carbon footprint each year to understand and reduce the impact of our activities on the environment. We see the urgent need to mitigate climate change and its adverse impact on children.

Our actions respond to the feedback of our people, as well as donor and peer expectations. With children on the frontline of climate change, every penny saved and action taken will help us to achieve our ambitious goals for children.

# **Calculating our Footprint**

Save the Children UK have mapped our annual carbon footprint since 2011. This report gives details of our 2015 carbon footprint, which covers emissions from the following areas for our six UK offices (London Headquarters and regional offices in Edinburgh, Glasgow, Belfast, Cardiff and Manchester) and 139 shops:

- Travel by staff (to/from/within the UK1)
- Energy use (electricity, gas, other fuels) at our UK offices and shops
- Paper use (in our offices)
- Waste and recycling (from our offices)
- Water use (in our offices and shops)

The reporting period is I January – 31 December 2015.

Our footprint is calculated in tonnes of carbon dioxide equivalent ( $CO_2e$ ) which is the standard unit for measuring carbon footprints. It expresses the impact of the three major greenhouse gases (that come from each direct or indirect use of fossil fuel in the above key areas) in units of carbon dioxide taking into account both amount and greenhouse-effect-potency. This allows us to come up with a standardised unit of measurement for each area, and for our overall footprint so that we can compare areas and compare ourselves to other companies. This analysis uses the most recent conversion factors and guidance from the Department for Environment, Food & Rural Affairs (DEFRA)<sup>2</sup>.

The data provided is derived from energy bills, expenses claims, data collected by employees and information from our travel agency. All the information is stored and processed in a specially tailored Microsoft Excel spreadsheet developed by the charity Global Action Plan, when they carried out our first carbon mapping in 2012 for our 2011 footprint. The spreadsheet has been updated to reflect the latest DEFRA conversion factors.

We are working to streamline the way in which we collect data and helping our staff to know what information is required for the mapping.

<sup>&</sup>lt;sup>1</sup> Our carbon footprint does not include any data for any offices or travel related to Save the Children International staff but some international travel is required by Save the Children UK

<sup>&</sup>lt;sup>2</sup> Latest conversion factors and guidelines available here: <a href="http://www.ukconversionfactorscarbonsmart.co.uk">http://www.ukconversionfactorscarbonsmart.co.uk</a>

# 2015 footprint

In 2015 our carbon footprint was 5,709 tonnes  $CO_2e$  for our UK offices and shops that were active over the year. Our electricity and travel accounted for 90.2% of our footprint, with paper, gas and other fuels, waste and water making up the other 9.8%. Figure 1 shows the breakdown of the footprint, and Figure 2 shows a summary of the data collected:

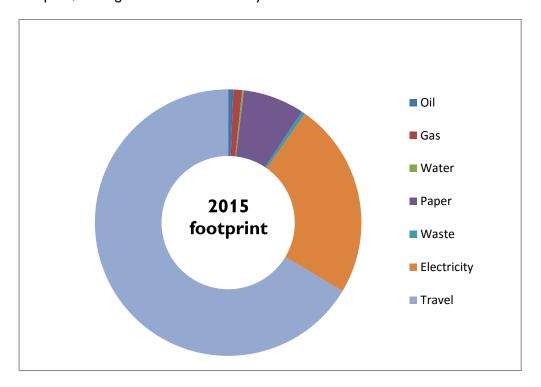


Figure 1 – How our 2015 footprint is made up

	Offices	Shops
Travel, miles	15,549,627	
Travel, tCO₂e	3,791	
Electricity, kWh	1,358,925	<sup>3</sup> 1,609,390.41
Electricity,tCO <sub>2</sub> e	136	872
Paper, tonnes	452	
Paper, tCO₂e	425	
Gas, kWh	550,174	<sup>4</sup> 86,441.08
Gas, tCO₂e	61	47
Oil, litres	5,500	
Oil, tCO <sub>2</sub> e	35	
Waste, tonnes	104	
Waste, tCO₂e	14	
Water, m <sup>3</sup>	6,313	⁵2503
Water, tCO₂e	12	

Figure 2 – Summary of data

<sup>&</sup>lt;sup>3</sup> Data from 8 shops of 139 (as in previous years and therefore comparable)

<sup>&</sup>lt;sup>4</sup> Data from 8 shops of 139 (as in previous years and therefore comparable)

<sup>&</sup>lt;sup>5</sup> Data from 41 shops of 139 (data from 28 shops in previous years, not comparable directly)

By analysing and sharing how our footprint is made up, we can identify key areas for improvement and also encourage our staff to be part of our efforts to minimise our environmental impact. Our 2015 footprint is 9.9% more than our 2014 footprint, which was 5,145.5 tonnes  $CO_{2}e$  but considering that our carbon footprint is measured in 'tonnes  $CO_{2}e$  per person', the fewer staff may account for the most part of this increase in production per person. Further comparison to our previous footprints is provided later in this report.

# Our Travel - 3,791 tonnes Carbon Dioxide Equivalent (CO<sub>2</sub>e)

Our staff travel extensively to achieve their mission; in 2015 we travelled over 15 million miles. Figure 3 shows an overview of how we travelled in 2015:

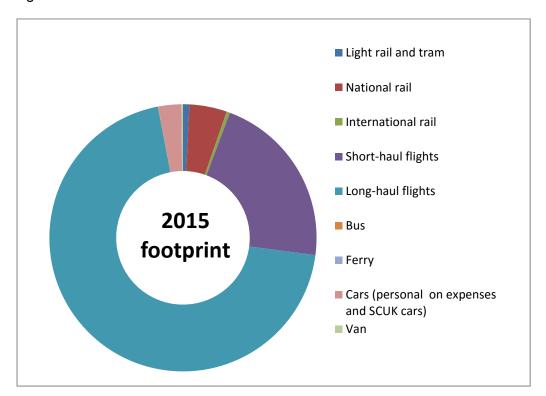


Figure 3 – How we travelled in 2015

In Figure 3, 'train' covers UK train and European train journeys and 'car/van' refers to staff transport in Save the Children cars and hire vans as well as personal cars used for work purposes. Figure 4 below shows our travel miles broken down into the different modes of transport:

2015	
Type of Transport	Distance in miles
Long-haul flights	10,872,786
Short-haul flights	3,319,593
Train	1,658,868
Car/van/taxi	460,238
Bus	6,301
Ferry	791

Figure 4 – our 2015 travel miles

Our staff fly many miles, primarily our humanitarian team, so the majority of our travel footprint comes from our flights. Travel to nearby mainland Europe, such as Paris and Brussels, is mostly done by train which has a lower carbon footprint than the equivalent journey by plane. We do not currently include staff commuting in the analysis; as our Headquarters in is central London the majority of staff travel by public transport or cycling in our Cycle to Work scheme. By understanding how much and the way in which we travel, we can identify areas where we can reduce our carbon footprint.

# Electricity, Gas and Oil - 1,455 tonnes Carbon Dioxide Equivalent (CO2e)

After travel, our energy usage is our biggest contributor to our footprint, making up 25.5% of our impact. We use electricity in our offices and shops. We also use gas for heating in our London headquarters, our Glasgow regional office and a small number of shops. Our Belfast office uses the fuel oil Kerosene. Details of our energy footprint are given below and shown in Figure 5:

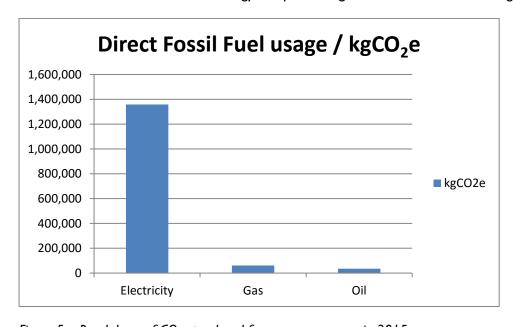


Figure 5 – Breakdown of  $CO_2e$  produced from our energy use in 2015

# **Electricity** – 1,359 tonnes Carbon Dioxide Equivalent (CO<sub>2</sub>e)

Our electricity use is divided between our offices (primarily our London headquarters) and our retail shops, with the latter making up slightly more than half the total electricity usage shown below in Figure 6. Our headquarters has used a renewable energy supplier since 2012 and as our carbon tracker assumes an average grid energy mix, our footprint is in fact lower than the calculated figures. In 2015 we used a total of 2,940,186 kWh of electricity.

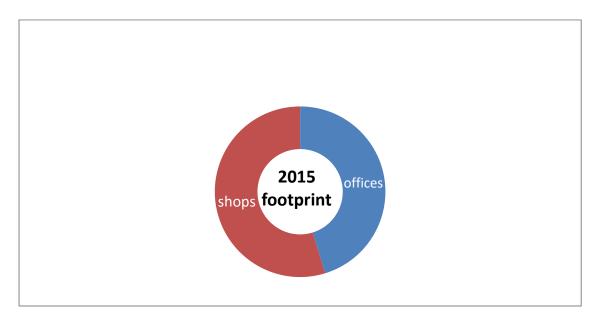


Figure 6 – Distribution of electricity used in our offices and shops

#### Gas – 61 tonnes Carbon Dioxide Equivalent (CO<sub>2</sub>e)

In 2015 our calculated gas use for heating was from our London Headquarters and from ten of our shops. There were a small number of shops where detailed billing information could not be collected for the reporting period, as well as for our regional office in Glasgow. Gas is one of the factors that varies most due to fluctuations in the climate.

# Other fuels – 35 tonnes Carbon Dioxide Equivalent (CO<sub>2</sub>e)

Our Belfast office uses the heating oil Kerosene and in 2015 they used 5,500 litres, equivalent to 35 tonnes  $CO_2e$ .

# Our Paper - 425 tonnes Carbon Dioxide Equivalent (CO<sub>2</sub>e)

In 2015 we used 425 tonnes of paper of which 232 tonnes was used for jobs through external printers for our London headquarters, and the rest was from our offices. Data was collected from our headquarters and from four of our regional offices. At our London headquarters 94% of the paper used in our office printers was recycled paper in 2015.

# Our Waste - 17 tonnes Carbon Dioxide Equivalent (CO<sub>2</sub>e)

We have calculated that we produced 104 tonnes waste in 2015. Data was available for our London Headquarters and for two of our regional offices. In 2015 approximately 57.4% of our 104 tonnes of office waste was recycled.

#### Our Water - 12 tonnes Carbon Dioxide Equivalent (CO<sub>2</sub>e)

Whilst our water accounts for a very small proportion of our carbon footprint, it is important to make every effort to minimise our water usage. Currently there is only complete data for a small number of shops, our London Headquarters and our Belfast regional office, since water bills are often included in the rates and/or are not metered. We do expect that we will be able to collect more data for the forthcoming years, as more and more sites become metered.

# Comparison to our 2012, 2013 and 2014 footprints

Our staff numbers and the number of shops differ each year, and a range of external factors produce variations in our energy use and travel, such as the number of natural disasters and emergencies as well as longer term weather conditions or health epidemics.

In 2014 our carbon footprint was 5,146 tonnes  $CO_2e$ ; in 2013 our carbon footprint was 5,621 tonnes  $CO_2e$ ; in 2012 our footprint<sup>6</sup> was 5,807 tonnes  $CO_2e$ . These previous footprints are quite similar to our 2015 footprint (5,697 tonnes  $CO_2e$ ) in how they are made up, with travel and electricity accounting for approximately 90% of the footprint in each case.

It is also interesting to look at the carbon emissions per staff member; in 2012 our emissions were approximately 4.77 tonnes  $CO_2e$  per person. In 2013, whilst the number of staff increased, the emissions figure was 4.19 tonnes  $CO_2e$  per person. In 2014 our number of staff was lower, and we produced 4.27 tonnes  $CO_2e$  per person. In 2015 again our staff numbers reduced and our carbon emissions were approximately 4.95 tonnes  $CO_2e$  per person.

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<sup>&</sup>lt;sup>6</sup> This figure has been recalculated from the original figure to reflect the updated DEFRA carbon factors

A comparison of the two biggest contributors to the footprint, travel and electricity, is shown for the past three years in Figure 7:

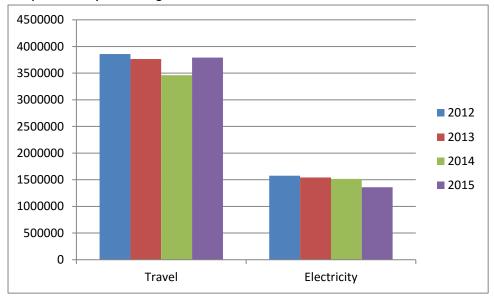


Figure 7 – Travel and electricity in 2012, 2013, 2014 and 2015

In 2015 we took more flights than in previous years due to an unprecedented number of emergencies to attend to, which brought our amount of travel up. We installed energy-saving light-emitting diodes on the basement floor of our largest UK office in London and also initiated a 'power off after 9pm unless otherwise programmed' system for our computers in this office extending over all four floors. This has, of course saved us money as well as reducing our carbon impact.

Our emissions from paper use were greater in 2015 making up over 7.4% of our footprint compared to that in 2014 making up over 4% and to 3% in 2013. This was actually down to a large paper order we made in 2015 to save money, which will last us over a year. And whilst we have remained relatively steady in terms of the amount of recycled paper used in printing, in 2015 we did use 5% less recycled paper than in 2014 out of all printing paper used, but have improved significantly since using only 70% recycled paper to print in 2012.

Accuracy and completeness of the data collected for our 2015 mapping was very similar to the data for our 2014 mapping, with a couple of improvements. In 2015 we were able to collect water usage data from 41 shops rather than 28, for example. We are always striving to collect more data about our carbon footprint, and to retrieve data that will provide a meaningful analysis that we can learn from.

# **Conclusions**

Save the Children will continue to calculate and monitor our carbon footprint each year. Our mapping identifies travel and electricity usage as the biggest contributors to our footprint, so changes in these areas have the greatest potential for reducing our environmental impact.

In 2015 as part of our Smart Working project we modernised our London working space and rolled out a couple of new environmentally focussed initiatives. We installed energy-saving light-emitting diodes on the basement floor of our largest UK office in London and also initiated a 'power off after 9pm unless otherwise programmed' system for our computers in this office extending over all four floors. This has, of course saved us money as well as reducing our carbon impact.

To realise the potential in mapping our carbon footprint we will continue to research initiatives that that may help us to reduce our environmental impact and we strive to engage staff at all levels of our organisation to minimise our carbon footprint whilst also achieving our ambitious goals for children.
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