

CO2 emissions based upon the June 2015 recommended conversion factors provided by Defra and calculated using National Energy Foundation carbon calculator at <a href="http://www.carbon-calculator.org.uk/">http://www.carbon-calculator.org.uk/</a>

Typical household car usage from 2014 RAC figures

http://www.racfoundation.org/motoring-faqs/mobility#a18

2014 average annual UK car mileage = 7,900 miles. Assumes one car per household (2014 RAC figures show 59% of households have only one car, 24% of households have no car and 17% have two cars or over)

7,900 miles at "average UK passenger car" conversion factor = 2,370 KG CO2 emissions

Typical UK annual household gas and electricity consumption from Ofgem 2011 figures https://www.ofgem.gov.uk/sites/default/files/docs/2011/01/domestic-energy-consump-fig-fs\_1.pdf

Typical UK annual household GAS consumption = 16,500 kWh

16,500 kWh at "natural gas" conversion factor = 3,043 KG CO2 emissions

Typical UK annual household ELECTRICITY consumption = 3,300 kWh

3,300 kWh at "average UK grid electricity" conversion factor = 1,525 KG CO2 emissions

Flight distances calculated using:

http://www.greatcirclemapper.net/en/great-circle-mapper.html

Nautical Miles converted to miles using conversion factor of 1.1508 mile per nautical mile. Distance multiplied by 2 to give return flight distance and multiplied by 4 to give figure for family of 4.

London Heathrow to Majorca, Spain: 728 nm = 838 miles

838 x 2 x 4 = 6,704 passenger miles

6,704 passenger miles at "average default flight" conversion factor = 1,797 KG CO2 emissions

London Heathrow to Cairo, Egypt: 1909 nm = 2196 miles

 $2196 \times 2 \times 4 = 17,568$  passenger miles

17,568 passenger miles at "average default flight" conversion factor = 4,708 KG CO2 emissions

**London Heathrow to Orlando, US**: 6768 nm = 7,788 miles

 $7,788 \times 2 \times 4 = 62,304$  passenger miles

62,304 miles at "long haul, premium economy" conversion factor = 21,993 KG CO2 emissions

London Heathrow to Sydney, Australia: 9188 nm = 10,573 miles

 $10,573 \times 2 \times 4 = 84,584$  passenger miles

84,584 passenger miles at "long haul, premium economy" conversion factor = **29,858 KG CO2 emissions**