Carbon Footprint Calculator

Compare different components of personal carbon footprints, to show how including flights can greatly increase the annual total

Flights   Carbon emissions from various journeys

Return flight for one person from London to	Economy Class		First Class	
	Just the CO2	x 1.9 to include radiative forcing	Just the CO2	x 1.9 to include radiative forcing
Paris	0.07 tonnes	0.13 tonnes	0.10 tonnes	0.20 tonnes
Geneva	0.15	0.29	0.21	0.43
Edinburgh	0.20	0.38	0.41	0.78
Rome	0.29	0.55	0.44	0.83
Malaga	0.34	0.65	0.86	1.63
Athens	0.49	0.93	1.22	2.32
Cairo	0.72	1.36	1.07	2.04
Dubai	1.00	1.90	3.99	7.57
New York	1.01	1.92	4.06	7.71
Delhi	1.22	2.32	4.88	9.27
San Francisco	1.57	2.98	6.28	11.93
Bangkok	1.67	3.17	6.68	12.69
Sydney	3.09	5.87	12.37	23.50
Auckland	3.34	6.35	13.36	25.38

Car use   Carbon emissions for annual car use - various cars shown

Car	7,000 miles per year	10,000 miles per year
EU 2008 FIAT Panda 1.3 16v MultiJet, M5 (114 g/km (+15%))	1.48 tonnes	2.11 tonnes
EU 2005 BMW 5 Series E60/E61 530d Saloon , M6 (184 g/km (+15%))	2.38 tonnes	3.41 tonnes
EU 2007 TOYOTA Yaris 1.3 VVT-i 3 & 5 door, M5 (141 g/km (+15%))	1.83 tonnes	2.61 tonnes
EU 2006 VOLVO S40 Model Year 06 2.4i (170 bhp), A5 (217 g/km (+ 15%))	2.81 tonnes	4.02 tonnes
EU 2009 LAND ROVER Freelander 2 3.2 i6 (2009 MY) A6 (265 g/km (+15%))	3.43 tonnes	4.9 tonnes

House heating and electricity   Annual use per home (not per person, if sharing)

Gas		Electricity	
CO2	Annual gas bill	CO2	Annual electricity bill
2.7 tonnes	around £500	1.4 tonnes	around £300
3.3 tonnes	around £600	1.9 tonnes	around £400
3.8 tonnes	around £700	2.4 tonnes	around £500
4.3 tonnes	around £800	2.9 tonnes	around £600
4.9 tonnes	around £900	3.3 tonnes	around £700
5.4 tonnes	around £1,000	3.8 tonnes	around £800

Rail and Bus Journeys   A couple of examples

8,800 miles per year on national rail. = 40 miles return commuting trip (20 x 2) x 5 per week for 44 weeks each year	0.80 tonnes
2,200 miles per year by bus. = 10 miles return trip (5 x 2) x 5 per week for 44 weeks each year	0.48 tonnes

Secondary carbon footprint   Other activities and consumption

The carbon calculator comes out with a figure of around 7 tonnes CO2 per year for a pretty average but affluent UK citizen.

Someone who:
- eats meat every day
- does not buy organic food
- does not choose foods in season
- does not notice where things they buy have come from
- buys new clothes whenever they need them
- mostly buys new, but keep some things for more than 5 years
- recycles some of their waste
- often goes to restaurants, films, bars etc.
- owns a car
- uses a standard range of financial services

Or someone with a more modest range of choices might have a secondary carbon footprint of around 2.5 tonnes CO2 per year.

Someone who:
- eats some meat
- buys some organic food
- tries to grow some food and buy some things only in season
- buys only second hand clothes
- tries to avoid excess packaging
- mostly buys new, but keep some things for more than 5 years
- recycles or composts everything
- occasionally goes out to places like cinema, bars or restaurants
- does not own a car
- uses the standard range of financial services

So most people in the UK have a secondary carbon footprint of between 2 and 10 tonnes CO2 per year.
http://www.carbonfootprint.com/calculator.aspx

What one individual's carbon footprint might be composed of:

	Tonnes CO2	
1. Say, 5 tonnes CO2 from Secondary Carbon Footprint (food, purchases, activities, recycling)	5.0	
2. Domestic electricity and gas, assuming the individual shares a home with several others. Perhaps 2.5 tonnes CO2	2.5	
3. Use of car, assuming the individual shares a fairly small car with another person. Perhaps 1.5 tonnes CO2	1.5	Sub-total (= 9 tonnes)

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4. One return flight to, say, Rome. About 0.5 tonnes CO2	0.5	
5. One return flight to, say, San Francisco. About 3 tonnes CO2	3.0	
		Total = 12.5 tonnes

Or another example:

	Tonnes CO2	
1. Say, 7 tonnes CO2 from Secondary Carbon Footprint (food, purchases, activities, not recycling, owning dogs)	7.0	
2. Domestic electricity and gas, assuming the individual shares a home with several others. Perhaps 3.5 tonnes CO2	3.5	
3. Use of car, assuming the individual shares a fairly large car with another person. Perhaps 2.5 tonnes CO2	2.5	Sub-total (= 13 tonnes)

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4. One return flight to, say, Rome. About 0.5 tonnes CO2	0.5	
5. One return flight (skiing) to Geneva. About 0.3 tonnes CO2	0.3	
6. One return flight to, say, Australia. About 6 tonnes CO2	6.0	
		Total = 19.8 tonnes