

## Metadata

### Notes

- \* Based on revision of "2007-8 Baseline email" in areas where I had already estimated amounts
- \* Half of the electricity was on a green tariff, but in the calculator I just calculated backwards from
- \* I had 1.94 tonnes for transport, but know that this did not include train or car travel
- \* Retrieved some details from actonco2 - aroughwaite@gmail.com, password lunasciz

### \* Added vehicle trips:

|                  |                     |        |
|------------------|---------------------|--------|
| - glastonbury    | 444 5 people in car |        |
| - scotland       | 500 2 people in car | diesel |
| - dusk 'til dawn | 246 5 people in car |        |
| - dartmoor       | 580 3 people in car |        |

TOTAL **1770**

### \* Added train trips

|                             |      |
|-----------------------------|------|
| - Germany 950km one way     | 950  |
| - scotland 1300km           | 1300 |
| - one way Brighton 90km     | 90   |
| - south downs return 140km  | 140  |
| - cambridge one way 93km    | 93   |
| - oxford return 200km       | 200  |
| - 15 trips on tube ave 10km | 150  |

TOTAL **2923**

most trips estimated by googlemaps

next time can use [www.transportdirect.info](http://www.transportdirect.info) or [www.chooseclimate.org](http://www.chooseclimate.org)

|                                     |              | chooseclimate<br>kg |
|-------------------------------------|--------------|---------------------|
| * Re-calculated flights             |              |                     |
| - Iceland return to germany 2155km  | 2155         | 536                 |
| - London to iceland 1897km          | 1897         | 505                 |
| - Australia return 14,466*2 = 28932 | 28932        | 3184                |
| TOTAL                               | <b>32984</b> | 4225                |

sites for calculating distance are [www.timeanddate.com](http://www.timeanddate.com) and <http://www.convertunits.com>

- \* Foodcarbon.co.uk says "A return flight to Australia releases 3737 kgs of carbon dioxide." that is
- \* Chooseclimate.org says re: return flight to Australia would emit 3184kg carbon, warming effect
- \* Chooseclimate.org says re: return flight to Australia "would cost an extra £776 if tax and duty w

## Metadata

e.g. home  
in my original estimate and put it as conventional

effect

1608  
1515  
9551

12674

is significantly less than what the CRAG factor says.  
of 9551kg CO2 equivalent  
were charged at the same rate as on petrol in the UK.”

# CALCULATE YOUR CARBON EMISSIONS

|  | Enter the figure for how much you use | multiply by conversion factor | to find out kg of CO2 |
|--|---------------------------------------|-------------------------------|-----------------------|
| <b>HOUSE HEATING</b>   |                                       |                               |                       |
| <b>GAS HEATING</b>   |                                       |                               |                       |
| Enter a figure for just one of the following!  |                                       |                               |                       |
| New style units (Cubic metres) of mains gas  |                                       | 2.2                           | 0                     |
| Old style units (100's cubic feet) of mains gas  |                                       | 6.2                           | 0                     |
| Kilowatt hours (kWh) equivalent  | 4440                                  | 0.2                           | 888                   |
| £1 of gas bill (approx)  |                                       | 13.3                          | 0                     |
| <b>COAL</b>  |                                       |                               |                       |
| One sack of coal usually weighs 50kg   |                                       |                               |                       |
| Kilograms of anthracite  |                                       | 1.9                           | 0                     |
| Kilograms of bituminous  |                                       | 2.5                           | 0                     |
| <b>HEATING OIL</b>   |                                       |                               |                       |
| Enter a figure for just one of the following!  |                                       |                               |                       |
| Litres of heating oil  |                                       | 3                             | 0                     |
| Gallons of heating oil   |                                       | 13.6                          | 0                     |
| <b>ELECTRICITY</b>   |                                       |                               |                       |
| Kilowatt hours (kWh) of conventional electricity   | 1860                                  | 0.5                           | 930                   |
| Kilowatt hours (kWh) of green tariff electricity   |                                       | 0                             | 0                     |
| <b>CAR</b>   |                                       |                               |                       |
| Enter a figure for just one of the following!  |                                       |                               |                       |
| Litres petrol  |                                       | 2.3                           | 0                     |
| Gallons petrol   |                                       | 10.4                          | 0                     |
| Litres diesel  |                                       | 2.7                           | 0                     |
| Gallons diesel   |                                       | 12.2                          | 0                     |
| <b>OR</b>  |                                       |                               |                       |
| enter your miles or kilometers according to your car type  |                                       |                               |                       |
| <b>Small petrol car up to 1.4 litre engine</b>   |                                       |                               |                       |
| Kilometers   |                                       | 0.17                          | 0                     |
| Miles  |                                       | 0.28                          | 0                     |
| <b>Medium petrol car 1.4 to 2.1 litre engine</b>   |                                       |                               |                       |
| Kilometers   | 282.13                                | 0.22                          | 62.07                 |
| Miles  |                                       | 0.36                          | 0                     |
| <b>Large petrol car over 2.1 litre</b>   |                                       |                               |                       |
| Kilometers   |                                       | 0.27                          | 0                     |
| Miles  |                                       | 0.43                          | 0                     |
| <b>Small diesel car up to 2.0 litre engine</b>   |                                       |                               |                       |
| Kilometers   |                                       | 0.12                          | 0                     |
| Miles  |                                       | 0.19                          | 0                     |
| <b>Large diesel car over 2.0 litre engine</b>  |                                       |                               |                       |
| Kilometers   | 299.2                                 | 0.14                          | 41.89                 |
| Miles  |                                       | 0.22                          | 0                     |
| <b>LPG car</b>   |                                       |                               |                       |
| Kilometers   |                                       | 0.17                          | 0                     |
| Miles  |                                       | 0.28                          | 0                     |
| <b>PUBLIC TRANSPORT (bus, train, etc)</b>  |                                       |                               |                       |
| Kilometers   | 2923                                  | 0.07                          | 204.61                |
| Miles  |                                       | 0.11                          | 0                     |
| <b>PLANE</b>   |                                       |                               |                       |
| Kilometers   | 32984                                 | 0.51                          | 16821.84              |
| Miles  |                                       | 0.82                          | 0                     |
| OR go to <a href="http://www.chooseclimate.org">www.chooseclimate.org</a> to calculate emissions for each flight and enter the total results in the grey box |                                       |                               |                       |
|  |                                       |                               | 0                     |

| <b>ANDREW'S CARBON EMISSIONS</b>                         |                                       |                               |                       |  |          |             |
|--|---------------------------------------|-------------------------------|-----------------------|--|----------|-------------|
|  | Enter the figure for how much you use | multiply by conversion factor | to find out kg of CO2 | Notes  |          |             |
| <b>HOUSEHOLD</b>   |                                       |                               |                       |  |          |             |
| <b>GAS</b>   |                                       |                               |                       |  |          |             |
|  |                                       |                               |                       |  | 6 months | monthly ave |
| Kilowatt hours (kWh) equivalent (one cubic m = 10.67kWh) | 2626.12                               | 0.19                          | 498.96                | Six months gas in a four-person home. Second 6 months is green energy (so zero emissions) / travelling.  | 246.12   | 41.02       |
|  |                                       |                               |                       |  | 2626.12  | 437.69      |
| <b>ELECTRICITY</b>                                       |                                       |                               |                       |  |          |             |
| Kilowatt hours (kWh) of conventional electricity         | 3616.25                               | 0.43                          | 1554.99               |  | 6 months | monthly ave |
| Kilowatt hours (kWh) of green tariff electricity         |                                       | 0                             | 0                     | Six months electricity in a four-person home. Second 6 months is green energy (so zero emissions) / travelling.                                      | 3616.25  | 602.71      |
| <b>PUBLIC TRANSPORT EUROPE</b>                           |                                       |                               |                       |  |          |             |
| <b>Train</b>   |                                       |                               |                       |  |          |             |
| Kilometers   | 10414                                 | 0.06                          | 624.84                | See metadata notes for details of all trips.   |          |             |
| <b>Local Bus</b>   |                                       |                               |                       |  |          |             |
| Kilometers   |                                       | 0.11                          | 0                     | Estimated: zero, but may actually take some local buses in cities.   |          |             |
| <b>Coach</b>   |                                       |                               |                       |  |          |             |
| Kilometers   |                                       | 0.06                          | 0                     |  |          |             |
| <b>Underground</b>                                       |                                       |                               |                       |  |          |             |
| Kilometers   | 300                                   | 0.11                          | 33                    | 15 return trips of an average of 10km each   |          |             |
| <b>Ferry/Boat</b>  |                                       |                               |                       |  |          |             |
| 1 kilometer by ferry                                     |                                       | 0.75                          | 0                     |  |          |             |
| 1 day at sea on a cruise ship                            |                                       | 230kg/day                     |                       |  |          |             |
| <b>TO AUSTRALIA</b>                                      |                                       |                               |                       |  |          |             |
| <b>Train</b>   |                                       |                               |                       |  |          |             |
| Kilometers   | 28440                                 | 0.06                          | 1706.4                | 25500 estimated to Sydney, plus 2440 Melbourne to Perth on a train (in March)  |          |             |
| <b>Local Bus</b>   |                                       |                               |                       |  |          |             |
| Kilometers   |                                       | 0.11                          | 0                     |  |          |             |
| <b>Coach</b>   |                                       |                               |                       |  |          |             |
| Kilometers   | 7000                                  | 0.06                          | 420                   | Estimated: 2000km+ in Iran/Pakistan, likely some buses in China, India. Bus from Darwin to Brisbane, then Bus from Sydney to Melbourne (1500km est.) |          |             |
| <b>Underground</b>                                       |                                       |                               |                       |  |          |             |
| Kilometers   |                                       | 0.11                          | 0                     |  |          |             |
| <b>Ferry/Boat</b>  |                                       |                               |                       |  |          |             |
| 1 kilometer by ferry                                     | 1000                                  | 0.75                          | 750                   | Estimated: I will likely take a ferry or two in SE Asia e.g. Singapore to Indonesia, Java to Bali  |          |             |
| 1 day at sea on a cruise ship                            |                                       | 230kg/day                     |                       |  |          |             |
| <b>PLANE</b>   |                                       |                               |                       |  |          |             |
| <b>Long haul</b>   |                                       |                               |                       |  |          |             |
| Kilometers   |                                       | 0.34                          | 0                     |  |          |             |
| <b>Short Haul</b>  |                                       |                               |                       |  |          |             |
| Kilometers   | 1487                                  | 0.54                          | 802.98                | Estimated: Kolkata to Kunming  |          |             |
| <b>FOOD</b>  |                                       |                               |                       |  |          |             |
|  |                                       |                               | 584.9                 | From <a href="http://www.foodcarbon.co.uk">http://www.foodcarbon.co.uk</a>   |          |             |
| <b>TOTAL CO2 EMISSIONS</b>                               |                                       |                               | <b>6976.07</b>        |  |          |             |

Metadata 2009 2010

| <b>TRAIN</b> | # return trips | <i>one way</i> | <i>return</i> |
|--------------|----------------|----------------|---------------|
|--------------|----------------|----------------|---------------|

TOTAL

| <b>BUS</b> | # return trips | <i>one way</i> | <i>return</i> |
|------------|----------------|----------------|---------------|
|------------|----------------|----------------|---------------|

\* Foodcarbon.co.uk says "A return flight to Australia releases 3737 kgs of carbon dioxide." that is c

\* Chooseclimate.org says re: return flight to Australia would emit 3184kg carbon, warming effect o

Metadata 2009 2010

*Multi-trip*      *Total*

**0**

*Multi-trip*      *Total*

significantly less than what the CRAG factor says.  
f 9551kg CO2 equivalent

| <b>ANDREW'S CARBON EMISSIONS</b>                         |                                       |                               |                       |   |          |             |
|--|---------------------------------------|-------------------------------|-----------------------|---|----------|-------------|
|  | Enter the figure for how much you use | multiply by conversion factor | to find out kg of CO2 | Notes   |          |             |
| <b>HOUSEHOLD</b>   |                                       |                               |                       |   |          |             |
| <b>GAS</b>   |                                       |                               |                       |   |          |             |
|  |                                       |                               |                       |   | 6 months | monthly ave |
| Kilowatt hours (kWh) equivalent (one cubic m = 10.67kWh) | 2626.12                               | 0.19                          | 498.96                | Six months gas in a four-person home. Second 6 months is green energy (so zero emissions) / travelling.   | 246.12   | 41.02       |
|  |                                       |                               |                       |   | 2626.12  | 437.69      |
| <b>ELECTRICITY</b>                                       |                                       |                               |                       |   |          |             |
| Kilowatt hours (kWh) of conventional electricity         | 3616.25                               | 0.43                          | 1554.99               |   | 6 months | monthly ave |
| Kilowatt hours (kWh) of green tariff electricity         |                                       | 0                             | 0                     | Six months electricity in a four-person home. Second 6 months is green energy (so zero emissions) / travelling.   | 3616.25  | 602.71      |
| <b>PUBLIC TRANSPORT EUROPE</b>                           |                                       |                               |                       |   |          |             |
| <b>Train</b>   |                                       |                               |                       |   |          |             |
| Kilometers   | 10414                                 | 0.06                          | 624.84                | See metadata notes for details of all trips.  |          |             |
| <b>Local Bus</b>   |                                       |                               |                       |   |          |             |
| Kilometers   |                                       | 0.11                          | 0                     | Estimated: zero, but may actually take some local buses in cities.  |          |             |
| <b>Coach</b>   |                                       |                               |                       |   |          |             |
| Kilometers   |                                       | 0.06                          | 0                     |   |          |             |
| <b>Underground</b>                                       |                                       |                               |                       |   |          |             |
| Kilometers   | 300                                   | 0.11                          | 33                    | 15 return trips of an average of 10km each  |          |             |
| <b>Ferry/Boat</b>  |                                       |                               |                       |   |          |             |
| 1 kilometer by ferry                                     |                                       | 0.75                          | 0                     |   |          |             |
| 1 day at sea on a cruise ship                            |                                       | 230kg/day                     |                       |   |          |             |
| <b>TO AUSTRALIA</b>                                      |                                       |                               |                       |   |          |             |
| <b>Train</b>   |                                       |                               |                       |   |          |             |
| Kilometers   | 25170                                 | 0.06                          | 1510.2                | Lon-Tehran = 6000, lahore-kolkata = 2000, kuming-singapore = 2000 (rest buses). Australia taken from GSR for Darwin-Ad, Melb-Perth, Syd-Perth*2   |          |             |
| <b>Local Bus</b>   |                                       |                               |                       |   |          |             |
| Kilometers   |                                       | 0.11                          | 0                     |   |          |             |
| <b>Coach</b>   |                                       |                               |                       |   |          |             |
| Kilometers   | 10942                                 | 0.06                          | 656.52                | Estimated: 2000 tehran-lahore, lahore-kol 750, kunming-singapore 1000, 1250 extra..., pakanburu-den 2000, 1000km china. Australia: 881*2 Melbourne to Sydney, Melbourne to Adelaide 728km, Geraldton to Perth 424*3, 90*2km Byron to Gold Coast |          |             |
| <b>Underground</b>                                       |                                       |                               |                       |   |          |             |
| Kilometers   |                                       | 0.11                          | 0                     |   |          |             |
| <b>Ferry/Boat</b>  |                                       |                               |                       |   |          |             |
| 1 kilometer by ferry                                     | 435                                   | 0.75                          | 326.25                | Actual – 400km Singapore to Pakenburu, 30 km Sumatra to Java, 5km Java to Bali.   |          |             |
| 1 day at sea on a cruise ship                            |                                       | 230kg/day                     |                       |   |          |             |
| <b>PLANE</b>   |                                       |                               |                       |   |          |             |
| <b>Long haul</b>   |                                       |                               |                       |   |          |             |
| Kilometers   |                                       | 0.34                          | 0                     |   |          |             |
| <b>Short Haul</b>  |                                       |                               |                       |   |          |             |
| Kilometers   | 3247                                  | 0.54                          | 1753.38               | Estimated: Kolkata to Kunming 1487km + 1760 Denpasar to Darwin.   |          |             |
| <b>FOOD</b>  |                                       |                               |                       |   |          |             |
|  |                                       |                               | 584.9                 | From <a href="http://www.foodcarbon.co.uk">http://www.foodcarbon.co.uk</a>  |          |             |
| <b>TOTAL CO2 EMISSIONS</b>                               |                                       |                               | <b>7543.04</b>        |   |          |             |

| <b>ANDREW'S CARBON EMISSIONS</b>                         |                                       |                               |                       |  |
|--|---------------------------------------|-------------------------------|-----------------------|--|
|  | Enter the figure for how much you use | multiply by conversion factor | to find out kg of CO2 | Notes  |
| <b>HOUSEHOLD</b>   |                                       |                               |                       |  |
| <b>GAS</b>   |                                       |                               |                       |  |
| Kilowatt hours (kWh) equivalent (one cubic m = 10.67kWh) |                                       | 0.19                          | 0                     |  |
| <b>ELECTRICITY</b>                                       |                                       |                               |                       |  |
| Kilowatt hours (kWh) of conventional electricity         |                                       | 0.43                          | 0                     |  |
| Kilowatt hours (kWh) of green tariff electricity         |                                       | 0                             | 0                     |  |
| <b>PUBLIC TRANSPORT AUSTRALIA</b>                        |                                       |                               |                       |  |
| <b>Train</b>   |                                       |                               |                       |  |
| Kilometers   |                                       | 0.06                          | 0                     |  |
| <b>Local Bus</b>   |                                       |                               |                       |  |
| Kilometers   |                                       | 0.11                          | 0                     |  |
| <b>Coach</b>   |                                       |                               |                       |  |
| Kilometers   |                                       | 0.06                          | 0                     |  |
| <b>Underground</b>                                       |                                       |                               |                       |  |
| Kilometers   |                                       | 0.11                          | 0                     |  |
| <b>Ferry/Boat</b>  |                                       |                               |                       |  |
| 1 kilometer by ferry                                     |                                       | 0.75                          | 0                     |  |
| 1 day at sea on a cruise ship                            |                                       | 230kg/day                     |                       |  |
| <b>PLANE</b>   |                                       |                               |                       |  |
| <b>Long haul</b>   |                                       |                               |                       |  |
| Kilometers   |                                       | 0.34                          | 0                     |  |
| <b>Short Haul</b>  |                                       |                               |                       |  |
| Kilometers   |                                       | 0.54                          | 0                     |  |
| <b>FOOD</b>  |                                       |                               |                       |  |
|  |                                       |                               |                       | From <a href="http://www.foodcarbon.co.uk">http://www.foodcarbon.co.uk</a> |
| <b>TOTAL CO2 EMISSIONS</b>                               |                                       |                               | 0                     |  |