**CARBON FOOTPRINT CALCULATOR – Moretonhampstead and Area**

For anyone concerned about the extremely serious problem of Global Warming, it is important to learn how each of us contributes to the problem. Only then can we take the steps in our own lives to help reduce carbon dioxide (CO2) emissions.

This sheet helps to calculate the annual CO2 emissions for any individual. Although it has been simplified as far as possible, it may still take 20 minutes or so to complete – mainly because you will need to track down your energy bills for the last 12 months as well as miles travelled.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **THE HOME (Responsible for 30% of average UK carbon footprint)** | | | | |
| **Electricity** | Units (kWh) used per year  (If from renewable source or supplier enter 0) | **………** | **x 0.43 =** | **……… kgs CO2** |
| **Gas (natural)** | Units used per year | **………** | **x 0.19 =** | **……… kgs CO2** |
| **Oil** | Litres used per year | **………** | **x 3 =** | **……… kgs CO2** |
| **Gas (Propane)** | Litres used per year (tank) | **………** | **x 1.6** | **……… kgs CO2** |
| **Coal** | Kilograms used per year | **………** | **x 3** | **……… kgs CO2** |
| **Wood** | Carbon neutral so enter 0 | **………** | **x 0** | **……… kgs CO2** |
| **Total** | | **……… kgs CO2** | | |
| **Divide by number of adults in the house** | | **……… kgs CO2 per person** | | |

|  |  |  |
| --- | --- | --- |
| **TRANSPORT** **(Responsible for 36% of average UK carbon footprint)** | | |
| **Car**: | 1. Work out how many miles per gallon your car does and see below for the CO2 grams per kilometre this produces.     Miles per gallon: 50 45 40 35 30 25 20  **Converts to**: Kilometres per gallon: 80 72 64 56 48 40 32  **Producing:** CO2 grams per kilometre: 138 171 180 196 225 260 310 | **……… CO2 grams per kilometre** |
| 1. Now work out how many miles per year the car does (MOT certificates normally record mileage each year) and convert to kilometres by multiplying by 1.6 | **……… x 1.6 ………** |
| 1. CO2 grams per kilometre x kilometres per year divide by 1000 | **……… kgs CO2** |
| 1. Divide again by the number of adults using the car | **……… kgs CO2 per DGSSDperson** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Flying** (**The impact of flying is worsened by the fact that the polluting emissions happen high up in the atmosphere where they do most damage)** | | | | | |
|  | **Approx.** | **CO2 in kgs** |  | **Approx.** | **CO2 in kgs** |
| **Destination** | **miles** | **for return trip** | **Destination** | **miles** | **for return trip** |
| **(from Bristol)** |  |  | **(from London)** |  |  |
| Edinburgh | 320 | 262 x 2 = 524 | Canary Isles | 1710 | 1231 x 2 = 2462 |
| Dublin | 200 | 164 x 2 = 328 | Turkey (Med) | 1850 | 1332 x 2 = 2664 |
| Paris | 290 | 238 x 2 = 476 | Cyprus | 2000 | 1440 x 2 = 2884 |
| **(from London)** |  |  | Dubai | 3400 | 2130 x 2 = 4260 |
| Holland | 220 | 180 x 2 = 360 | New York | 3470 | 2186 x 2 = 4372 |
| Switzerland | 470 | 385 x 2 = 770 | Toronto | 3790 | 2388 x 2 = 4776 |
| Germany | 570 | 467 x 2 = 934 | Florida | 4330 | 2728 x 2 = 5456 |
| Majorca & Ibiza | 820 | 472 x 2 = 944 | Los Angeles | 5450 | 3433 x 2 = 6866 |
|  |  |  |  |  |  |
| Italy & Spain (Med) | 900 | 738 x 2 = 1476 | Thailand | 5930 | 3736 x 2 = 7472 |
| Corfu | 1250 | 1025 x 2 = 2050 | South Africa | 5970 | 3761 x 2 = 7522 |
| Athens | 1490 | 1219 x 2 = 2438 | Australia | 10560 | 5434 x 2 = 10868 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Other flying destinations** | **Distance in miles** | **Multiply by** | **CO2 in kgs for return flight** |
|  | Up to 1500 | 1.64 |  |
|  | 1500-300 | 1.44 |  |
|  | 3000-6000 | 1.26 |  |
|  | 6000-12000 | 1.02 |  |
| **Total** | | | **……… kgs CO2** |

|  |  |  |
| --- | --- | --- |
| **Public Transport (bus, coach, train, boat)** | | |
| Moreton to Bovey 7 miles, to Exeter 13 miles, to Newton Abbot 13 miles, to Torquay 20 miles, to Plymouth 25 miles. Exeter to Bristol 85 miles, to London 200 miles. Plymouth to Roscoff 120 miles | | |
| **Miles per year …....** | **x 0.24 =** | **…….. kgs of CO2** |

|  |  |  |
| --- | --- | --- |
| **CONSUMPTION and LIFESTYLE** **(Responsible for 34% of average UK carbon footprint)** | | |
| This is the third that comes from the world of work – manufacturing and farming, retail and services – emissions generated by companies or individuals producing products (including food) for consumers like us. Every item we buy has an energy cost. This area is difficult to quantify in carbon footprint terms so the following rough guide is offered. | | |
| **Category** | **Description** | **Add** |
| **Top consumer** | Shopaholic, buys all the latest things, also packaged and convenience foods. Produces much landfill waste. | **3000** kilograms of CO2 |
| **Middle of the road** | Fairly thrifty but buys new gear and shops mostly from supermarkets. Recycles the obvious and easy. | **2000** kilograms of CO2 |
| **Committed**  **to minimum impact** | Mostly grows own organic food, wholly or partly vegetarian, otherwise only buys local food and limits purchase of consumer products as far as possible. Recycles most waste including making compost. | **600** kilograms of CO2 |

|  |  |
| --- | --- |
| **CARBON TOTAL** **Total** **the CO2 figures in boxes to find your personal annual CO2 emissions** | |
|  | **CO2 emissions in kilograms** |
| Energy use at home |  |
| Car use |  |
| Flying |  |
| Public transport |  |
| Consumption & Lifestyle |  |
| **Total** (divide by 1000 toshow as tonnes) |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **COMPARISIONS** **Average annual tonnes of CO2 per person.** | | | |
| USA 20 | UK 10 | China 3 | Tanzania 0.2 |

**It has been estimated that given the exponential growth of human populations, a sustainable level is 1 tonne each. Daunting but achievable – it is all about choices.**

***The information in this leaflet relies on data from Mark Lynas’s book “Carbon Counter.”***

***Grateful acknowledgements.***

***This leaflet is published jointly by the Moretonhampstead Parish Council and the Moretonhampstead Development Trust as part of their Climate Emergency commitments. Comments or suggestions would be welcome. For further information contact MDT on admin@moretonhampstead.com or tel. 01647 440775 JAN 2021***