Footprint calculations

Emil Hedemalm, 2016-04-20

WWF

111% of my share

Carbon breakdown
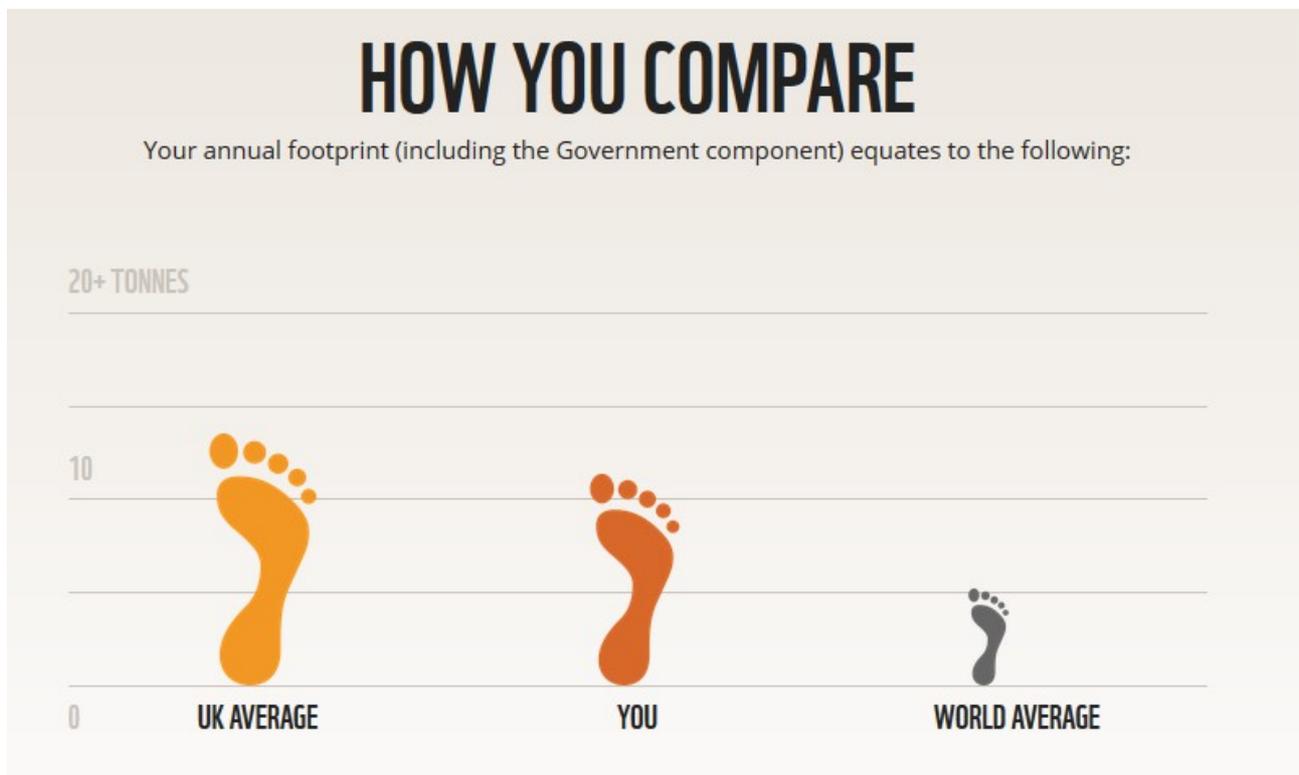30% food – eat more seasonal food
28% home – Check your home for insulation and double glazing
38% travel – take up cycling, car pooling, or walk to work
4% stuff – recycle or buy second hand

+3.06 tonnes of government expenditure

Total annual carbon emissions: 11.5 tonnes

HOW YOU COMPARE

Your annual footprint (including the Government component) equates to the following:

20+ TONNES

10

0   UK AVERAGE   YOU   WORLD AVERAGE

12 medium haul flights
6 small cars based on annual uk car emissions

Reflection:
All tips mostly redundant or not taking question answers into account.
Forgot/didn't understand the glazing, but that is probably double for Finland and Sweden at least.

The Nature Conservancy

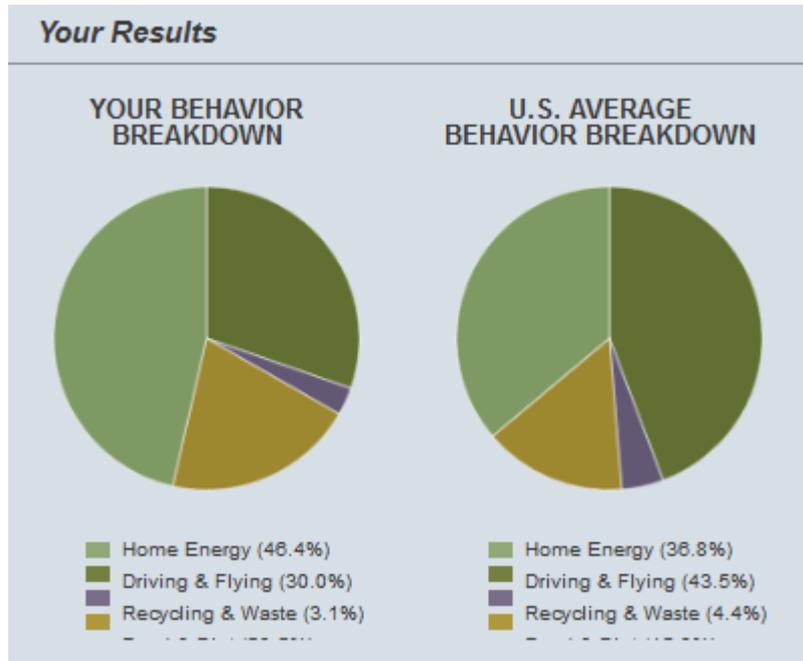Chose to calculate for me only.
Home energy: Alaska. 3 bedrooms. In some areas. In some lights. Rarely. Not yet.
Driving: No vehicle. 2 long flights, 2 short.
Food: Most days, not every meal. Sometimes organic.
Waste: All materials locally recyclable. Whenever possible.

17 tons of CO_2 per year. US average per person 27 tons. World average 5.5.


Reflection:
Also many questions again on the home, which I am not in charge of as a student. Also many flights seem to be causing relatively high CO_2 output for me.

Ilmastodieetti.fi

Yo. Using averages for most statistics. Reducing expenditures (furniture etc.)

Carbon footprint of housing per year per person 2 482 kg CO_2

Typically, housing accounts for more than a third of the personal carbon footprint in Finland.. Typically, a third of the heating energy is used for water heating. Most of the hot water is used in the shower. Therefore, when using water sparingly while showering you also save heating energy.
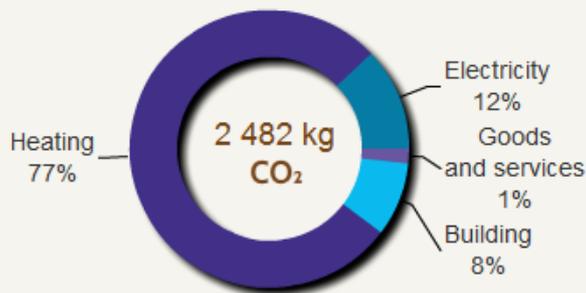
Do you already have an energy expert in your housing company? Active energy experts have helped achieve up to 10 % savings in heating energy, electricity or water consumption.

More tips:

- Information about water management in secondary homes in wintertime (in Finnish).
- Korjaustieto.fi Information about renovation for house owners and housing companies (in Finnish)
- Ekoenergy.org Ecolabel for electricity

2 482 kg CO_2

- Heating 77%
- Electricity 12%
- Goods and services 1%
- Building 8%

Carbon footprint of waste per year 41 kg CO_2

440km bus, 1200km train, 400 km car, 2 ppl, 2 domestic, 2 european flights

887 kg CO_2

- Public transport 2%
- Flights 79%
- Car 17%
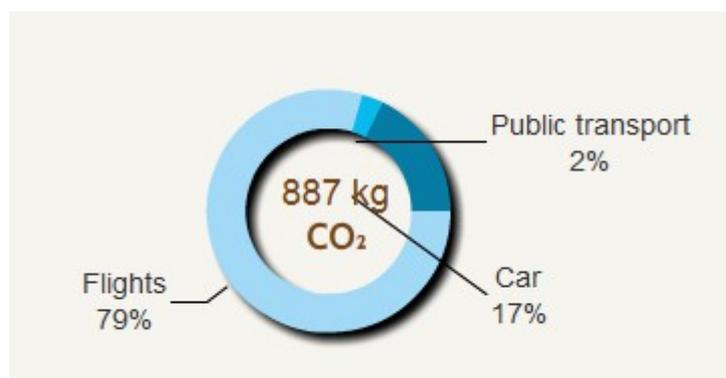
Average omnivore food. 69 euro per month default for cafe restaurant.
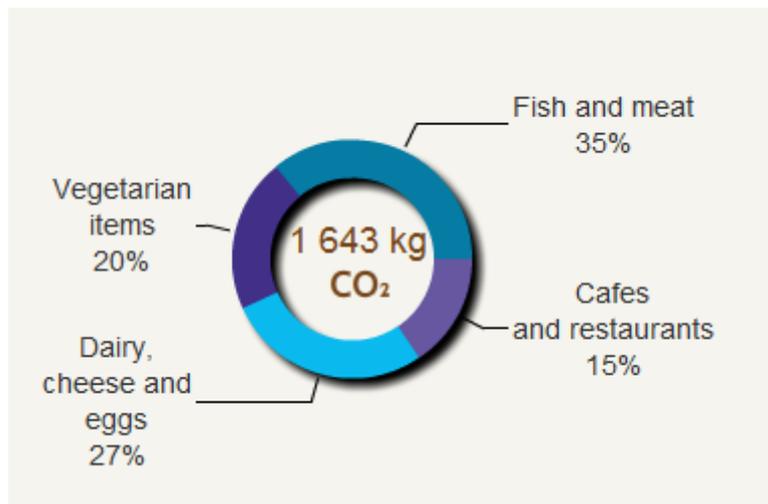
Consumption heavily decreased, 2 clothes, 2 magazines, 0 footwear, 25 communication, 20 other goods, 15 recreation, 5 home electronics.
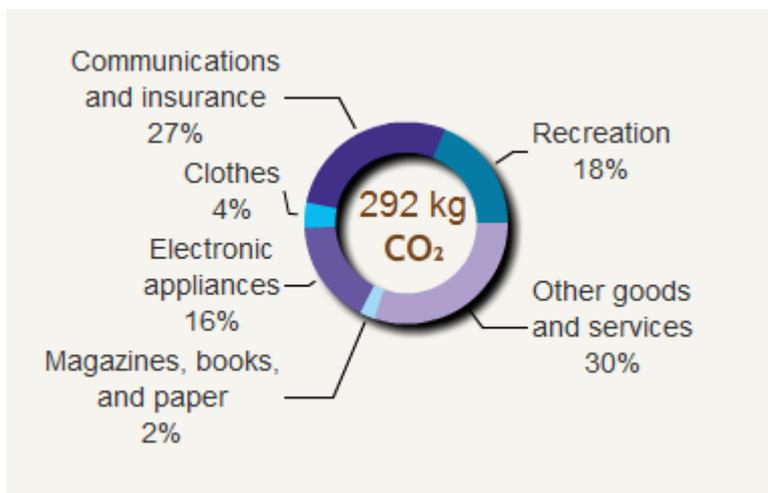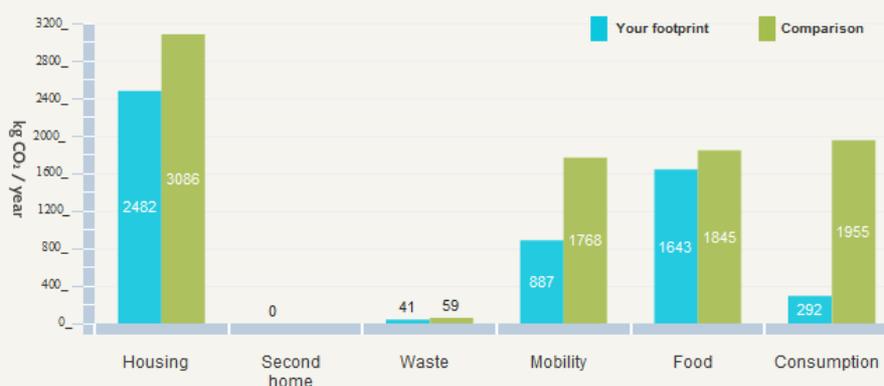
Overall reflection

It makes sense that the finnish study gave a much lower estimate in total, but it also is discouraging that the 3 tools yield so different results.

The first one gave 11.5 tonnes, the second one 17, and the Finnish one only 5.345 tonnes of CO_2.

The first one with 38% of travel would make the travel of flights there consume 4.37 tonnes, and while trying to input similar statistics + train and car statistics for the Finnish one it only yielded 887 kg. I think I wrote only 2+2 air travels in the finnish one vs the first study, but even so, a +50% increase to 1.35 tonnes would still make it far from the value the first study gave of consuming 4.37 tonnes of CO_2 for travel. Similarly, the nature study of 30% out of 17 tonnes would yield 5.1 tonnes of emissions – also far from the Finnish result.

The finnish study felt overall better, as it featured more detailed inputs and one could enter exact numbers for all kinds of travels. Even if it might not be the most accurate one, it felt like it, and perhaps the 2 first studies could learn something from giving the user more input fields. It would probably make it easier to find faults in the studies/estimations too.

There is also a wide discrepancy between how the results are presented. The first study tried to blame housing, food and transport all equally high, and only 4% on stuff (consumption-recycling), the second study put most weight on the housing and transport, with some on food, and the Finnish study put Housing on 1st place, Food on 2nd, travel/mobility on 3rd and Consumption on 4th (at least for me).

I really liked the comparison on the finnish end result too, as it is much easier to compare straight quantities on the bar-graphs than looking at total-numbers and trying to compare pie-charts (starting to hate pie-charts when used inappropriately).