

Lappeenranta University of Technology

LUT School of Business and Management

CT10A7001, Green IT and Sustainable Computing

Jari Porras, Maria Victoria Palacin Silva

**Individual Assignment:
Personal CO2 footprint report**

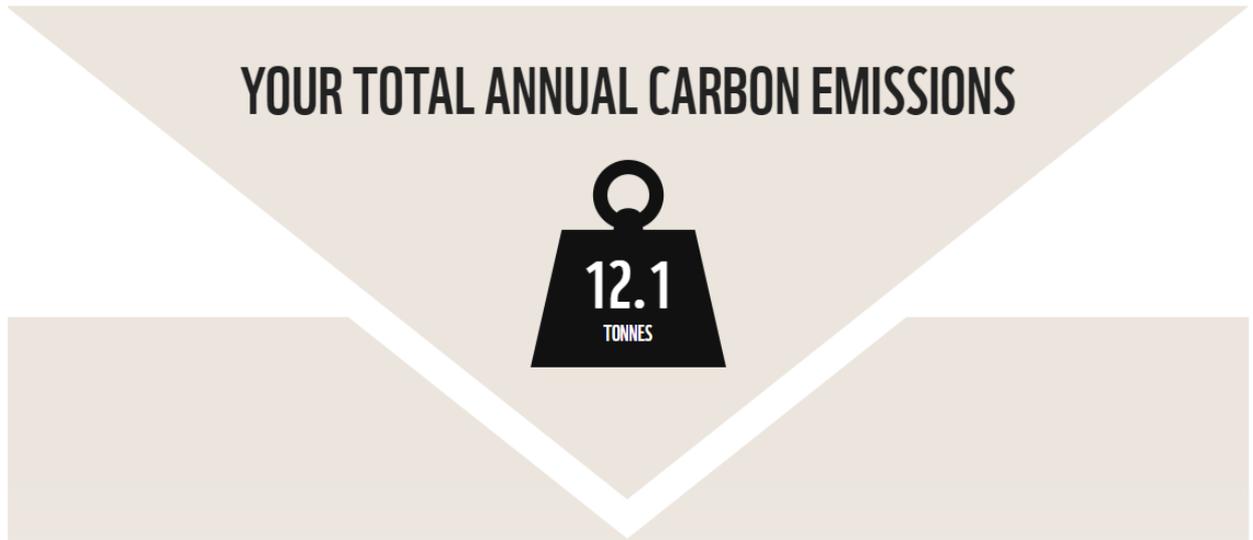
22.04.2016

0459418, Robert Davtyan

To calculate my carbon footprint, I have used two tools: WWF UK tool and Finnish Environmental Inst. Tool. Nature tool was not used, as it is strictly attached to certain US states and calculations are made in accordance with them. The results are, nevertheless, interestingly surprising.

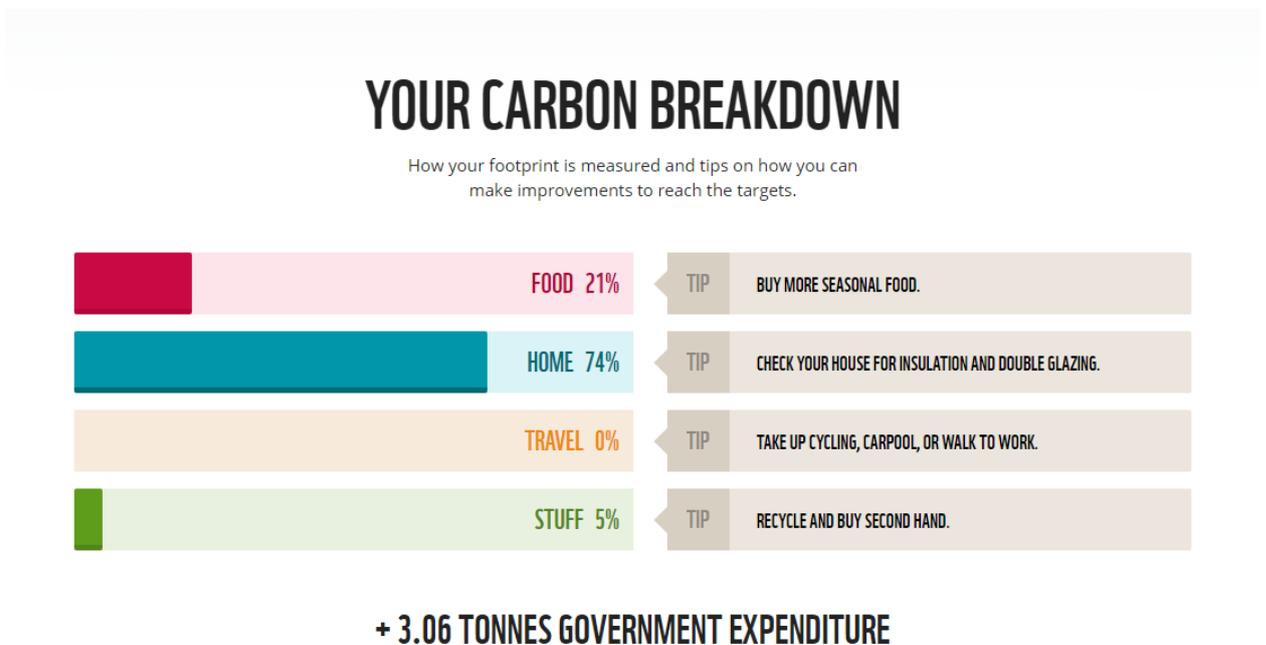
WWF tool

According to WWF, my carbon footprint is 118% of my share, with the total amount of 12.1 tones of annual CO2 emissions.



Picture 1. My annual carbon emissions (UK WWF website calculator)

At the same time, the carbon breakdown shows the main source of the emissions:



Picture 2. My annual carbon breakdown (UK WWF website calculator)

As it may be seen in the picture 2, the biggest amount of CO2 comes from the housing, which is LOAS apartment. Even though some questions were difficult to answer, considering unawareness of certain things and difference between UK and Finnish houses, it is still seen that my control over such CO2 emissions is little. Positively, as I live very closely to the university, I do not use any public transportation, and spend very little amount of money on different “stuff”, as called by this calculator. The food calculations are also surprising and, at some point, unfair for me. It appears that my spending in restaurants are supposed to cause significant amount of emissions. However, the fact is that I prefer eating in Aalef cafeterias instead of cooking at home. Nevertheless, considering all imperfections mentioned above, my annual CO2 emissions are less than annual in the UK:



Picture 3. Comparison of carbon emissions (UK WWF website calculator)

Finally, this calculator gives me interesting visualization of my CO2 emissions. Since everything in our world is relative, it might be helpful to estimate what 12 tones are equal to. 12 medium haul flights of 6 small cars seem to be not the worst option with the space for improvement.



Picture 4. Relative visualization of carbon emissions (UK WWF website calculator)

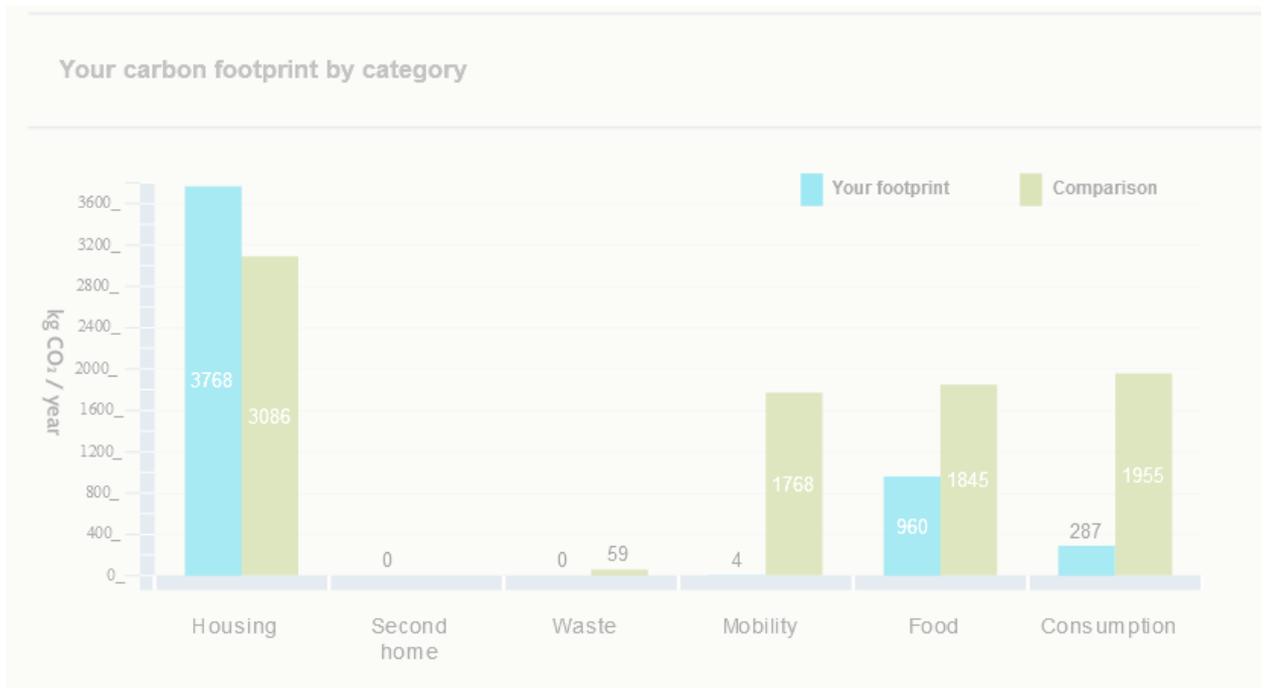
ilmastodieetti.fi tool

Whereas in the UK my CO₂ emissions would have been nearly equal to 12 tones, according to the carbon footprint calculator provided by the Finnish Environment Institute (SYKE), my annual carbon emissions are 5018 kg, which is more than two times less. To note, for some reasons export of the results was not able, even from various browsers, so the screen captures are less quality than they could be.



Picture 5. My annual carbon emissions (Finnish Environment Institute website calculator)

Within this calculator, using different average means was an extremely important tool, as it could allow get roughly real numbers instead of guessing which US state is more Finland-like. As it might be seen in the picture 6, many of my categorized CO₂ emissions are significantly lower than average in Finland.



Picture 6. My annual carbon breakdown (Finnish Environment Institute website calculator)

Conclusion

The results of my CO₂ emissions calculations are certainly controversial. Getting totally different numbers, however, may be explained by mainly regional attachments of various tools. The main idea is that none of them is fully correct; instead, they give an opportunity to see personal sustainability from different perceptions and, thus, analyze it. Moreover, while answering the questions, some results could obviously come to mind.

My personal results are very rough. Some of biggest pros for me is living very closely to the university campus, so no local transportation is used. At the same time, my preferences of having lunches at Aalef cafeterias allow me avoid buying extra food from shops. Nevertheless, sometimes it appears that my university meals are higher than I can take, so some of food is thrown out. I do not change different electronic gadgets frequently, so my e-waste is low as well.

Additionally, such calculators do not consider many other important issues. For instance, one of the ways towards more sustainable approach is philanthropy. Whilst limited opportunities of students underline low philanthropic opportunities, there are still a lot of ways it is possible. For instance, donations of used clothes, electronics or other stuff to second-hand shops or directly to people cannot be counted there, whereas

many of us (hopefully) do it. For example, my personal experience comes from small donations to animal shelters.

The bottom line is that carbon footprint results, in general, are very vague metrics, and can be extremely different from different calculators. Yet, it is vital to critically review them and try to apply improvements wherever it is possible.