What is our personal and corporate impact on the earth? The carbon and ecological footprint tools have been developed to estimate this impact, to put that impact into terms that we can easily understand, and to raise awareness about how we live. Various organizations have developed ecological footprint tools, mostly as online exercises. These tools have different levels of complexity and accuracy. Below are some examples of footprinting which are good sources.

Read this article for a good introduction of footprint calculators.

- **1.** Cool climate at UC Berkeley is one good carbon calculator. Although there are many carbon calculators out there, this is the only one that is peer-reviewed (at least several years ago it was; I'm not aware of others since that time). That calculator is located at <a href="https://coolclimate.berkeley.edu/calculator">https://coolclimate.berkeley.edu/calculator</a>.
- a. Go through and calculate your carbon footprint. What do you observe about your carbon footprint? Where are the largest areas of emissions? How does your carbon footprint compare with the average US, and the carbon footprint needed to meet climate goals (look again in the introduction for what to compare this to)?
- b. If you were to imagine a single action that would have the largest impact on your carbon emissions, what would that be? Describe the effect that has on your carbon footprint (recalculate your footprint having made that change)
- c. Come up with a scenario where your footprint matches what is needed to meet climate goals. Is that possible? If so, what does that take to lower it that much?!
- **2.** Go to the Global Footprint Network to measure your <u>ecological</u> footprint. Note that an ecological footprint measures not just carbon emissions, but other impacts like water or land usage.

Note that you can click to "add details" for pages. This allows you to give more detail to your estimates (and presumably make them more accurate)

On the first results page, you can see the Earth overshoot date, and a number of earths. What do these measures mean?

Look at the ecological footprint, which will be in global hectares. If you hover over the "i" icon next to it, it will give you information on the global hectares per person that would be available if we were not degrading the earth. How does yours compare?

Now go to the following page to explore data for different countries. <a href="https://data.footprintnetwork.org/? ga=2.191869229.62964373.1678917707-163046791.1678917707#/">https://data.footprintnetwork.org/? ga=2.191869229.62964373.1678917707-163046791.1678917707#/</a> Click on the US. Look at the ecological footprint per person – how does that compare with your own ecological footprint?

Also look at the biocapacity per person – what does that mean? How does that compare with your ecological footprint?

3. Find out where your electricity comes from at https://www.epa.gov/egrid/power-profiler#/

Enter your zip code. What are the greatest sources of emissions for your electricity?

How clean is the grid? Look under "emission rates" for CO2, SO2, and NOx.

- **4.** Do this <u>quiz to test your knowledge</u> about how to best shrink your carbon footprint. Did the results surprise you?
- **5. What could be wrong with calculating personal footprints?** Although most would say there is some good uses for footprints, there are some problematic aspects to them. Read the following articles to learn more about those.

Read the article "<u>Big oil coined</u> 'carbon footprints' to blame us for their greed. Keep them on the hook". Why does Solnit not like carbon footprints?

Read the article "<u>FORGET YOUR CARBON FOOTPRINT</u>. <u>LET'S TALK ABOUT YOUR CLIMATE SHADOW</u>." What is a carbon shadow? How does consideration of the carbon shadow change (or not) your thinking about carbon footprints?