

PS#5, Due Friday, February 16

1. **Climate Change and You:** Chris Jones, at Berkeley has created a spreadsheet-based tool for individuals to estimate all direct and indirect emissions of GHGs in CO₂ equivalent units resulting from their primary energy related choices: transportation, food, housing (including energy use), goods and services, and waste. Go to Chris' website: <http://consumerfootprint.org/> and spend some time exploring to understand the basic logic of what the site. Go to the CoolClimate Calculator page. Fill out the carbon calculator with your individual information or your living group's information for each sector. Please be as honest as possible (I won't publish your names). Go to the Summary tab and save your answers.
 - a) List the emissions of your different categories. Which ones are the most problematic and why?
 - b) What is the ratio of your total emissions to the national average of 16 tons CO₂ per person per year? Many sources quote the average USA emissions are 20 tons per person per year, but we have seen that in the last 5 years, this has dropped considerably without any change in the per capita income. What is the ratio of your total emissions to the global average of 4.5 tons CO₂ per person per year?
 - b) What do you find most surprising about your results? Please explain in a short paragraph.
 - c) Now do anything you can to bring down your carbon footprint... anything you'd be *willing* to do. What lifestyle changes would you have to make in order to emit no more than the global per capita average of 4.5 tons of CO₂? To do this, change the values you entered in the spreadsheet until your total emissions are below 4.5 tons CO₂. Try to make realistic choices. What do the results say about how your lifestyle compares to the lifestyles of the majority of people on the planet? Could you live at or below the global average? Please explain in one short paragraph.
 - d) What if, starting June 1, 2017, everyone suddenly started living like the average American (American per capita CO₂ emissions: http://en.wikipedia.org/wiki/List_of_countries_by_carbon_dioxide_emissions_per_capita)? How quickly would we reach what many climate scientists consider to be the dangerous level of 500 ppm (parts per million) of carbon dioxide in the atmosphere? Note that at present emission rates, the atmospheric concentration increases at a rate of 2.1 ppm each year.
2. Please start thinking about your Empathy Self-Intervention. Recognize when you've "otherized" someone – established them as "the other". Then endeavor to "walk a mile in their shoes", see their behavior as something that you do, see the world through their eyes. Recognize how they are the same as you. Be ready to describe your experience on the webpage (link on the main class website).