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Why Bother Going Green?

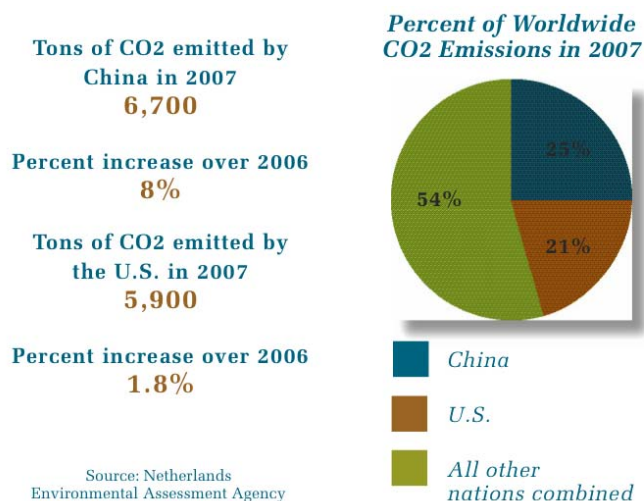
Beginning with this issue, *Cascade* launches an "Ask the Expert" column, wherein we pose a topical question to a faculty expert in the College of Arts and Sciences. **Got a question? Send it to cascade@uoregon.edu.**

Faculty Expert: **Ronald Mitchell** (<http://www.uoregon.edu/%7ErmitcheI/>) , a professor of political science and a core faculty member of the **Environmental Studies Program** (<http://envs.uoregon.edu/>) , specializes in international relations and environmental politics.

Q: Why "live green" -- drive less, buy local, change light bulbs, etc. -- if China is now the leading producer of carbon emissions?

A: China has now surpassed the United States as the world's leading emitter of carbon dioxide (CO2).

China now generates slightly more of this global warming gas than the United States. And as China continues to grow economically, its emissions are likely to grow, too.



(<http://cascade.uoregon.edu/photos/WorldwideEmissions.html>) Many people have concluded from this that China, and not the U.S., is now the major source of the climate change problem and, therefore, that it is pointless for the U.S. as a country or Americans as individuals to reduce their emissions. But that view misunderstands both the problem and its solution.

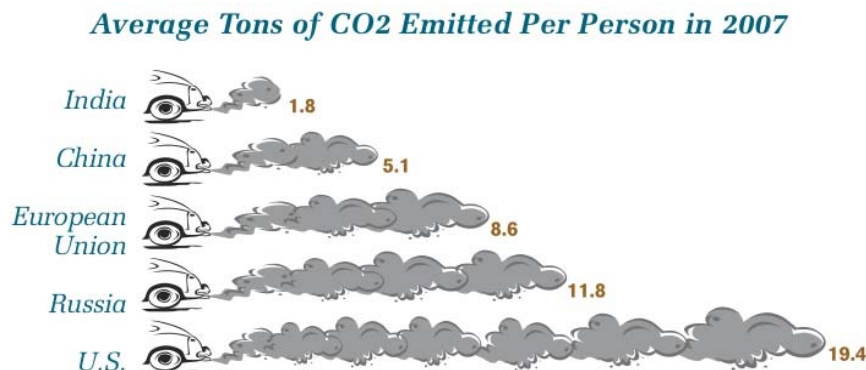
Before pointing the finger at China as the major country causing climate change -- and therefore responsible for fixing it -- we should remember a few facts. First, Chinese emissions are only slightly higher than American emissions and American

emissions have been at that level for far longer.

Second, China's large emissions are generated by a population of 1,300 million compared to the U.S.'s 300

million. On a per capita basis, the average American's emissions are almost four times that of the average Chinese.

(<http://cascade.uoregon.edu/photos/TonsPerPerson.html>) Third, when one considers the economic status of most Chinese compared to most Americans, it is clear that much of the CO2 an average Chinese emits are "necessary" emissions but much of the CO2 an average American emits are "luxury" emissions.



Source: Netherlands Environmental Assessment Agency

Finally, if we want to identify the countries causing climate change to induce them to bear the costs of addressing it, we should remember that the CO2 humans emit stays in the atmosphere for many decades. The harms that scientists are predicting from climate change will result from a long history of large American (and European) emissions and a much shorter history of much smaller Chinese emissions.

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Indeed, between 1900 and 1999, Americans generated about 30 percent of total CO2 emissions while China, India and other developing Asian countries combined were responsible for only 12 percent (World Resources Institute).

This perspective suggests that Americans have at least some responsibility for causing climate change and for taking action to avert it. But it also highlights our ability to do so. Precisely because many of our emissions are "luxury" emissions, we have many options for reducing our "carbon footprint" (our personal CO2 emissions) before it really begins to hurt.

Easy emission reductions can come from using compact fluorescent lightbulbs (and turning them off), turning down the thermostat and driving the speed limit (or slower). More costly changes involve insulating our homes (and downsizing them), buying more fuel-efficient cars (or bikes) and consuming fewer things in our lives.

As the cartoon character Pogo so famously said: *We have met the enemy and he is us.*

But taking such steps often seems futile. Why make sacrifices to stop climate change that might, in the end, not be matched by others -- whether other Americans or Chinese?

I think about reducing my carbon footprint like saving for my retirement. Financial planners say you need \$1.5 million to retire comfortably. I know I won't get there. But I don't throw up my hands in despair. Just because I can't save "enough" doesn't mean I don't save as much as I can. And that involves giving up some comfort today to be more comfortable when I retire.

Likewise, scientists have shown that past emissions of CO2 mean that some global warming and climate change will occur, regardless of what we do. Our best efforts will not be "enough" to achieve the ideal of

maintaining today's comfort -- i.e., today's global temperature.

Life on Earth will be warmer 100 years from now, even if we do everything we can. Sea levels will rise and glaciers will melt. There will be less snowpack, lower streamflow, and larger forest fires. Many species will go extinct and many habitats will be destroyed. But it will be even warmer if we don't begin to act now -- and all the problems scientists predict, and many more, will be much worse.

Every single person's actions -- yours and mine -- that reduce emissions help prevent even larger, and more perilous, increases in temperature.

"Living green" is a vital component of the overall solution to climate change -- necessary, but not sufficient. We need effective national and international policy that encourages changes in how we generate energy, produce our goods, grow our food and get from place to place. But those large-scale changes can't stand alone and will take time.

Individuals can act to address climate change today. They can make both big and small changes in the way they live their lives and those changes will become the solutions we need. Maybe if America takes the lead -- as a country and as individuals -- China and other countries will follow.

- Ronald Mitchell, Professor of Political Science

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