

Understanding the Language of Climate Change

As concern over climate change and its impacts continues to grow, a number of new phrases have entered our everyday vocabulary. Some phrases we all know – like greenhouse gas, fossil fuels, and sea level rise – are heard today more than ever. But newer, less familiar phrases like carbon footprint, emissions trading, and carbon neutral have now become so common they've even found their way into dictionaries.

What Is a Carbon Footprint? A carbon footprint is one way of measuring the impact our activities have on the environment based on the amount of greenhouse gases they produce, as expressed in units of carbon dioxide (CO₂). Scientists agree that concentrations of greenhouse gases in the atmosphere are increasing and that this is causing global climate change. Human-caused emissions of carbon dioxide and other greenhouse gases are primary contributors to this increase.

Measuring Your Carbon Footprint. The first step toward reducing your carbon footprint is to figure out how big it is. One way to do this is by using a carbon calculator. A carbon calculator estimates your carbon emissions based on how many miles you drive per year; how many air miles you travel; how many kilowatt-hours of electricity you use; and how much natural gas, propane, or other energy sources you consume; it then calculates your emissions based on certain general assumptions. Although there are a number of online carbon calculators available, the results they produce can vary widely. What they all have in common, however, is their focus on the two biggest sources of carbon emissions – energy use and transportation.

The average U.S. resident produces about 23 tons of CO₂ per year; roughly one-third of that total is from transportation, and about two-thirds is from energy use. In the Pacific Northwest, the majority of our electric power is produced by hydroelectric plants rather than by burning fossil fuels. Therefore, our footprint is much more heavily impacted by our transportation choices.

Reducing Your Carbon Footprint. Understanding the size of your carbon footprint – and understanding what contributes to it – can help you make better decisions, take better actions, and reduce your climate impact. The Internet offers a number of resources that suggest a variety of actions individuals and organizations can take to reduce the size of their footprints. The U.S. Environmental Protection Agency's Climate Change webpage (<http://www.epa.gov/climatechange/wycd/index.html>) suggests things you can do at home, at the office, and on the road to reduce your footprint.

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One key to making better decisions is to always think: Avoid, Minimize, and Compensate. First, consider avoiding actions such as unnecessary car or air travel. Next, try to minimize the impacts of actions you can't avoid. For example, use energy-efficient lighting, appliances, and electronics at home and at the office, and use more fuel-efficient transportation or alternative fuels. Finally, after you've minimized what you can, consider compensating for your remaining impacts. One way to do this is to purchase carbon offsets from organizations that mitigate carbon impacts by planting trees or investing in renewable energy projects. This is an area where you should do a little homework, and there are a number of resources available to help, including A Consumer's Guide to Retail Carbon Offset Providers (<http://www.cleanair-coolplanet.org/ConsumersGuidetoCarbonOffsets.pdf>).

Reducing your carbon footprint not only reduces your greenhouse gas emissions, but also reduces overall air pollution, increases our energy security and independence, and saves money. Using energy-efficient lighting and appliances and driving fuel-efficient vehicles will result in lower energy bills and big savings at the gas pump.

To help in your efforts to reduce your carbon footprint, RIDOLFI is providing up to ten compact fluorescent lights at no charge to Newsbrief recipients who request them. Send an email to info@ridolfi.com for more information. Compact fluorescent lights use 75 percent less energy, produce 75 percent less heat, and last ten times longer than standard light bulbs. Even Thomas Edison would agree, that's a smart improvement.

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