

Calculate Your Carbon Footprint and Then Take Steps to Reduce it

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The subject of global warming is the focus of considerable national and international attention of late. Taking action, however, does not have to be so distant or dependent on governments. There is a lot an individual or household can do, such as measure its "carbon footprint." This concept was created to measure the amount of carbon dioxide (CO₂) that an activity releases into the atmosphere, thereby contributing to global warming. Once your footprint is calculated, you can make changes to your behavior or lifestyle to reduce that footprint. Carbon footprinting can be undertaken at various scales: the units of measure are usually in pounds or kilograms of CO₂ per year for the smaller scale or metric tons of CO₂ for the larger scale. Value through the use of offsets has also been placed on CO₂. Carbon offsets can be purchased from \$6 to \$30 per metric ton of CO₂ per year from a seller who promises to use that money to neutralize or offset your CO₂ emissions.

For an individual or household, measuring a carbon footprint is relatively easy. Reducing your footprint is much more of a challenge. Lifestyle factors such as a vegetarian vs. meat eating diet or enjoying water skiing vs. hiking, all contribute to an individual's carbon footprint, but factors such as home energy use and transportation usually dominate the calculation. A number of Web sites offer user-friendly worksheets that simplify the process. Behind these calculations are agreed-upon emission factors, most of which have been generated by the U.S. Department of Energy.

Several Web sites also contain much educational material (for example, comparative information on the carbon impacts of new products such as appliances and cars). However, caution should be exercised if the

Take the Challenge

Estimate your carbon emissions and see the difference you can make by making a few simple changes. Go to <http://green.azcentral.com> to use the interactive calculator.

Carbon Footprint Calculator

Here is an example using the SafeClimate's carbon footprint calculator for a household that:

- Consists of three people living in Arizona.
- Drives 15,000 miles per year in a car that gets 25 mpg.
- Travels 6,000 miles by air per year.
- Consumes 15,000 kwh of electricity per year.
- Consumes 450 therms of natural gas per year.

Results from the calculation find that this household's carbon footprint is 37,185 pounds of CO₂ per year, of which 58% is caused by home energy use and 42% by transportation.

The legend on the calculator suggests that this carbon footprint is approximately equal to the national average for a household this size.

site suggests that the purchase of carbon offsets is the easiest way to reduce one's footprint. Although this option may make someone with a large footprint feel better, most experts in this field believe that behavioral or lifestyle changes are the most effective way of reducing your footprint.

The purchase of carbon offsets is an option of the last resort and usually needs to be researched, because not all carbon offsets are the same. For example, planting trees in the tropics may not be valued as highly as installing solar panels on a local school. Like many new markets, the carbon market is still maturing and has had its share of abuses. International protocols and auditing practices have been established and quality carbon-offset programs should adhere to these conventions.

Performing a carbon-footprint calculation can be a revealing exercise for individuals or families. Armed with this information fosters accountability and encourage us to be better stewards of our planet.

Carbon Footprints Resources Recommended Calculators

- www.epa.gov/climatechange/emissions/ind_calculator.html
- www.carbonfootprint.com
- www.carbonfund.org/site/pages/carbon_calculators
- www.safeclimate.net/calculator

Recommended Books

- *How to Live a Low-Carbon Life: The Individual's Guide to Stopping Climate Change.* Chris Goodall, 2007.
- *Carbon Counter: Calculate Your Carbon Footprint.* Mark Lynas, 2007.
- *Low Carbon Diet: A 30 Day Program to Lose 5,000 Pounds.* David Gershon, 2006.
- *The Consumer's Guide to Effective*

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