

# Going Green With



September 2009

## What is a Carbon Footprint?

Most people have probably heard the term carbon footprint, but how many of us really understand what a carbon footprint is, how it is determined, or how it applies to our lives?

A carbon footprint is used to measure the amount of greenhouse gasses produced as a result of the activities of an individual, city, town, or country, and is usually measured in tons or pounds of carbon dioxide equivalent. At the individual level, the total carbon footprint is the sum of the primary and secondary footprints. The primary footprint is a measure of direct emissions of CO<sub>2</sub> from the burning of fossil fuels for transportation and energy consumption. This is the portion of the carbon footprint over which we have direct control. The secondary footprint is a measure of indirect CO<sub>2</sub> emissions associated with the products we use- including their manufacture, shipping, and eventual breakdown. Basically, the more we buy the more emissions will be caused on our behalf.

Let's take a look at the role of carbon in the atmosphere to help understand why so much attention is focused in that direction. Life processes are fueled by carbon compounds that generate CO<sub>2</sub>. Plants assimilate some of the CO<sub>2</sub> during photosynthesis, and the atmosphere is continuously exchanging CO<sub>2</sub> with the oceans. CO<sub>2</sub> is also generated by burning fossil fuels which are essentially the preserved products of ancient photosynthesis. Regions or processes that produce CO<sub>2</sub> are called sources of atmospheric CO<sub>2</sub>, while those that absorb CO<sub>2</sub> are called sinks.

CO<sub>2</sub> only makes up 0.04% of Earth's atmosphere, but it is believed to have a large effect on our energy balance. Heat that would normally radiate away from the planet can be trapped by atmospheric CO<sub>2</sub>- this is commonly referred to as the greenhouse effect. Scientists suggest that as the amount of CO<sub>2</sub> and other long-lived gases increases, so will this warming effect. Of all the long lived gases in the atmosphere, CO<sub>2</sub> is the largest contributor at 63% and its role is increasing each year.

Whether or not you believe global warming is happening, it is still important to live in a responsible manner. Knowing and trying to reduce your carbon footprint is one way you can take more responsibility for your impact on the environment. In the next installment of Going Green with SCI REMC, we will explore some ways to reduce your carbon footprint. In the meantime check out this Household Emission Calculator at [http://epa.gov/climatechange/emissions/ind\\_calculator.html](http://epa.gov/climatechange/emissions/ind_calculator.html) and see what size your carbon footprint is.

If you have questions or comments please send them to: [askus@sciremc.com](mailto:askus@sciremc.com).

## Sources

Carbon Footprint. (n.d.). What is a Carbon Footprint? Retrieved September 27, 2009, from Carbon Footprint: <http://www.carbonfootprint.com/carbonfootprint.html>

Time for Change. (n.d.). Global Carbon Cycle and Climate Change. Retrieved September 27, 2009, from Time for Change: <http://timeforchange.org/global-carbon-cycle-climate-change>