

HELLO, MY NAME IS...

CARBON DIOXIDE!

In elementary school, children learn about the body's elemental exchange of inhaling oxygen and exhaling carbon dioxide into the atmosphere. Upon this knowledge, children continue to learn about the multitude of other, more profound contributors of carbon dioxide and come to understand the impact of its heightened existence in the atmosphere. Carbon dioxide, the most plentiful greenhouse gas, traps the sun's heat and leads to global climate change. The increasing focus on slowing global warming and reducing carbon emissions has reached the realm of everyday living and calls upon each of us to contribute towards a positive, carbon-neutral environmental change. The following segments briefly summarize the terms most frequently used in association to carbon dioxide and its environmental impact as it relates to everyday living.



CARBON OFFSETS & CARBON NEUTRALITY

Carbon offset is the act of reducing or avoiding CO2 emissions in one place in order to "offset" CO2 emissions occurring elsewhere. Generally speaking, CO2 mixes well in the atmosphere so technically, it doesn't matter where the original emissions occur. For instance, a wind farm in Texas (*renewable energy*) or a reforestation project in Nicaragua, are examples of projects that help balance out the emissions one cannot reduce through other measures. *Carbon Neutral* is a term used to explain the process whereby the carbon emissions associated with a business or activity are fully accounted for and eliminated to net zero through the utilization of carbon offsets or the reduction of targeted activities.

HOW DO I CALCULATE MY CARBON FOOTPRINT?

The internet offers a variety of carbon footprint calculators that individuals can use to enter in their daily activities, food purchases, and waste and recycling practices, in order to produce a measurable estimate of one's carbon footprint contribution. For example, The Nature Conservancy has a calculator on its website which measures your impact on our climate and estimates how many tons of carbon dioxide and other greenhouse gases that your choices create each year. *To calculate your impact, visit:*

<http://www.nature.org/initiatives/climatechange/calculator/>



WHAT IS A "CARBON FOOTPRINT?"

Most people have probably seen or heard the phrase *carbon footprint* in the media lately in relation to global warming, climate change and energy efficiency, but few people actually know what it means. The term *carbon footprint* is defined as the amount of *carbon dioxide* a person creates from everyday activities; the amount of *carbon dioxide* (CO2) emitted during an industrial or domestic process; a measure of how that process contributes toward global warming. Additional interchangeable terms for *carbon footprint* include *global footprint* or *ecological footprint*.



Lehigh Phoenix Employee, Jason Rahochik reducing his carbon footprint at the Lehigh Phoenix Employee Safety & Recycling Picnic

MISSION POSSIBLE: REDUCE YOUR CARBON FOOTPRINT

Your mission, if you choose to accept it, is to make changes in your everyday life that reduce your carbon footprint and contribute to the overall health and well-being of our planet. If you fail in this assignment, the world we leave our children will be greatly diminished. This message will continue with ways to make your mission a successful one!

Scientists report that over the last fifty years, the average global temperature has increased at the fastest rate in recorded history. Consequences such as reduced snow pack and drinking water shortages, forest fires, flooding, interrupted electricity supply, and severe impacts on marine ecosystems, will be experienced worldwide. As individuals, each of us can take up the challenge of changing some of our everyday activities to reduce our carbon footprint and become better stewards of our planet. Consider implementing some of the following tips for reducing your carbon footprint.

IN THE KITCHEN:

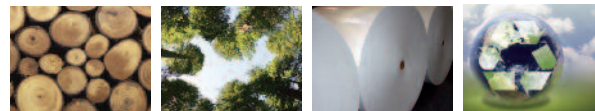
- Drink tap water instead of bottled. (Save 52 lbs of carbon dioxide per year or 2 lbs per gallon jug.)
- Reduce your garbage 10% by recycling. (Save 1,200 lbs of carbon dioxide per year.)
- Clean your refrigerator's coils defrost it regularly and keep the top clear of clutter. (Save over 700 lbs of carbon dioxide per year.)

IN THE LIVING ROOM:

- Replace frequently used incandescent light bulbs with compact fluorescent (CFL) bulbs. (Save 300 lbs of carbon dioxide per year.)
- Move the thermostat in the winter down from 70 degrees to 68 degrees and move it up from 70 degrees to 72 degrees in the summer. (Save 2,000 lbs of carbon dioxide per year.)
- Plug the living room electronics into a power strip and turn it off when not in use. (Save 240 lbs of carbon dioxide per year.)
- Use passive solar to capture heat in the home by opening curtains during the day and closing them at dusk, except in summer, when one should close the curtains during the hottest hours of the day. (Besides carbon, you'll save 25% to 75% on your heating and cooling bills. Save 2,700 lbs of carbon dioxide per year.)
- Run ceiling fans in the home instead of air-conditioning. (Save up to 2,700 lbs of carbon dioxide per year.)

IN THE HOME OFFICE:

- Use a power strip for the computer, monitor, fax, copier, iPod and cell-phone chargers and any other electronic equipment; then switch it off when they are not in use. (Save 2,000 lbs of carbon dioxide per year.)
- Consider making your next computer upgrade a laptop. (Save 400 lbs of carbon dioxide per year.)



IN THE BATHROOM:

- Install a water efficient showerhead which uses less hot water. (Save 350 lbs of carbon dioxide per year.)
- Take 2 minutes off your shower time. (Save 342 lbs of carbon dioxide per year.)
- Shave in the sink, not the shower. (Save 50 lbs of carbon dioxide per year.)
- Repair leaky faucets and toilets, which can leak up to 100 gallons of water per day.

GENERAL HOME CARE:

- Set aside a day to weatherize your home by caulking and weather stripping the doorways and windows. (Save 1,700 lbs of carbon dioxide per year.)
- Keep your water heater thermostat no higher than 120 degrees. (Save 550 lbs of carbon dioxide per year.)
- Change your furnace filter regularly (every 1-3 months). (Save up to 350 lbs of carbon dioxide per year.)
- Insulate your water heater. (Save 1,000 lbs of carbon dioxide per year.)
- Look into buying green power. (Save up to 22,000 lbs of carbon dioxide per year.)

IN THE YARD:

- Use a push mower instead of a gasoline or electric mower. (Save up to 80 lbs of carbon dioxide per year.)

IN THE GARAGE:

- Check & inflate your tires monthly. (Save 250 lbs of carbon dioxide per year.)
- Check your car's air filter monthly and replace every 2,200 miles. (Save 800 lbs of carbon dioxide per year.)
- Remove your roof rack, if you have one, when not in use. (Save 250 lbs of carbon dioxide per year.)
- Maintain your car with regular tune-ups and fix fluid leaks promptly.

PERSONAL TRANSPORTATION:

- Reduce your weekly car travel by biking, walking, skateboarding, busing or carpooling. (Save 1 lb of carbon dioxide for every mile you don't drive.)
- Use your air-conditioning sparingly, or not at all. (Save 100 lbs of carbon dioxide per year if you use it sparingly or 600 lbs of carbon dioxide per year if you never use it.)
- Accelerate gradually. (Save 100 lbs of carbon dioxide per year.)
- Use cruise control on the highway. (Save 100 lbs of carbon dioxide per year.)

Good Luck on your mission to reduce your carbon footprint and make an environmental difference!