



Everyday Environmental Stewardship

Carbon Offsetting

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Key issue:

Reducing Carbon Footprint

Stewardship Opportunity

Offsetting

A **carbon footprint** is the measure of your life/behavior/choice on the environment, measured in the amount of CO₂ produced. Reducing each person's carbon footprint is the way to reverse global warming, and ensure a healthy planet. Basically, each of us must be **carbon neutral**, at home, at school, at work, at play, at worship, everywhere!

Actions such as buying green electricity, efficient appliances, and reducing fossil fuel use from cars all contribute in lowering a person's total carbon footprint. While it is important to reduce your carbon footprint through using less carbon, it is virtually impossible to reach "0" by your actions alone. So you have to find ways to make up for the CO₂ you cause to be produced. This is **offsetting**. Offsetting is finding ways other than your direct personal actions to reduce CO₂.

What Is Your Carbon Footprint?

You can determine your carbon footprint by using MIP&L's *Utility Use and Cost* worksheet. Go to www.MIPandL.org, then click on the *Home Energy Use & Efficiency* link at the middle left. Follow the 4 steps, including downloading the worksheet. When you have filled in the worksheet, you'll know your CF, how you compare to others in the US and the world, what makes up your carbon footprint and the areas in which you can start to reduce. Then continue to use the worksheet to monitor your monthly carbon-generating activities. This is a good way to know just how much your personal actions are contributing to improving the world!

Reduce Before You Offset

First, **reduce!** Reducing carbon use is the first step, essential as well as offsetting. Reducing consumption and getting a home energy audit are all ways to lower consumption. There are many ways to reduce, using the information in MIP&L's *Everyday Environmental Stewardship briefs*. Click on the *Everyday Stewardship* link (upper right) on MIP&L's home page.

Carbon Offsetting - What it Is

Carbon offsetting is a way to make up for one's carbon footprint. Trees consume CO₂. So planting a tree (or paying for somebody else to do so) is one example of a carbon offset. There are many ways to offset. The key is to be sure to offset at least as much CO₂ as you create. Even better, offset more!

Carbon Offsetting - How To Do It

Around the Home

One of the easiest ways to offset carbon use is to replace home appliances with high efficiency, *Energy Star* certified models thus reducing electricity consumption. CFLs and green electricity are an easy way to begin. Energy saving equipment does more with less. See the CFL and Appliances *EES* briefs for more information.

If you have access to free land, planting trees is a way to ensure long term offsetting. A tree will absorb CO₂ out of the air as long as it is alive. Hedges can serve as alternative attractive fencing for front and back yards while also being environmentally friendly. Softwood trees such as evergreens will grow faster and absorb CO₂ at a faster rate and can provide shade for hot summer days. Although planting trees is effective in offsetting, restrictions in land availability can be a problem.

Through Programs and Companies

Offsetting companies provide offsetting opportunities unavailable to individuals, families and congregations. These companies accept donations that contribute to their environmental programs. These environmental efforts include such significant programs as reforestation, renewable electricity, and energy efficiency.

CarbonFund



is a non profit organization dedicated to carbon offsetting. Their motto — *Reduce when you can, offset when you can't* — and mantra *Because we're tired of waiting around for someone else to solve the problem*— fully explain what they do. CarbonFund provides easy ways for both the individuals and congregation to offset some, or all of their carbon footprint.

CarbonFund has a simple online carbon footprint calculator. Since you will already have the information needed from MIP&L's *Utility Use & Cost* sheet, you'll complete it quickly. It then calculates the cost to donate in order to be carbon neutral.

CarbonFund projects fall into three categories: renewable energy, energy efficiency, and reforestation. Donations towards renewable energy are used to purchase *renewable energy certificates* ("RECs"), putting green electricity into the nation's electricity grid. Energy efficiency donations go towards the IdleAir project for 18 wheeler trucks, a small device in trucker cabins that eliminates the need to keep the engine running for power during rest stops. Energy efficiency donations also go to the Chicago Climate Exchange, North America's largest carbon trading market. Nearly 300 companies, cities, states and universities participate in a "cap-and-trade" program to reduce carbon dioxide emissions. Reforestation programs are in Nicaragua, Louisiana, China, and Kansas.

95% of donations go to offsetting, education, and outreach while only 5% goes to administration. For more information call 240.293.2700 or visit the web site, www.CarbonFund.org

ZeroFootPrint



Here you will find an amazingly comprehensive carbon footprint calculator. It allows you to include not only vehicles, air planes, and electricity, but also boats, trains, walking , food (local, organic, fast food etc.) and paper use. You must register with ZeroFootPrint in order to use this calculator. ZeroFootPrint is based in Canada, so be prepared to translate km to miles! Your annual carbon consumption will also be in metric tons (1 metric ton = 1.1 U.S. ton). The book *Everything You Wanted To Know About Offsetting But Were Afraid To Ask* is also available to buy or download free. This is a great resource.

ZeroFootPrint supports offsets in reforestation in Maple Ridge, British Columbia. It reforests a temperate rain forest logged and clear cut in the 1950's and 1960's by planting indigenous Douglas firs, Sitka spruces, Western red cedars, Western hemlocks and Cotton Woods. Other offsetting projects are available including recycling used car and truck tires, building a hydro electric dam, and landfill gas recovery.

90% of donated money goes towards projects and 10% towards administration. For more information call 1.416.365.7557 or visit the web site, www.zerofootprint.net

Las Gaviotas Marion Institute Carbon Offset Initiative

The Marion Institute, based in Massachusetts, funds the project Las Gaviotas. Located in eastern Columbia, Las Gaviotas restores the region's rain forest. This not only offsets, but also increases local biodiversity, provides drinking water, and creates jobs for the local community. Due to their latitude, tropical rain forest trees grow three times faster and end up much larger than the temperate forests of New England and North America. As a result, each tree has a higher capacity for storing carbon than many other reforestation projects. This means that more carbon is offset for each tree planted.



Las Gaviotas region before



Las Gaviotas region today

As of 2008, Las Gaviotas has planted over 20,000 acres of rain forest. For more information call 1.508.748.0816 or visit the web site www.gaviotasoffsets.org

LiveCooler



LiveCooler is a Massachusetts-based non-profit, focusing its work on carbon reduction by a program installing CFLs in homes of low-income families. This serves not only environmental objectives but also broader objectives of social justice. Donating just 8 CFLs would save \$100 of electricity costs every year in Massachusetts, with money saved able to be used for other essentials, such as on clothes and food!

LiveCooler works a little differently than other offset programs because you do not stop in donating money. LiveCooler asks that you follow seven guidelines including installing the CFLs yourself (or proof of installation by the resident) and filling out a one page form after installation. This ensures that the CFLs go where they are supposed to go. The Massachusetts Democratic Party delegates offset their trip to the 2008 national convention in Denver using LiveCooler charitable carbon offsets to benefit low-income families in Massachusetts. For more information call 1.866.787.6630 or visit the web site, www.livecooler.org

Just The Beginning

These four *offset* options are just the beginning of the ways you can expand your *offsetting*. Go looking on the web for other options. And of course you will have taken the steps for your own home first.

Once you have offset your own Carbon Footprint, tell your story to your friends, co-workers, everyone. Doing the right thing is not only right, it's easy!

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