

Steps for Reducing Energy Use, Costs, and Carbon Footprint at Individual and Community Levels

Step 1 – ENERGY CONSCIOUSNESS

Monitor utility bills; compare your util \$ to neighbors; notice hot water use, lighting, hot and cold rooms, cooking and cleaning habits, lawn care; Calculate Online your Carbon Footprint, Do Home Energy Audits Online; Community lighting and services,; Calculate your mileage; Think about \$ for commuting and extra trips, consider other travel methods, support public transportation, consider hybrid or biodiesel fueled car when replacing yours.

Step 2 – ENERGY CONSERVATION

Modify habits: cold wash, water saver shower heads, fix leaky toilets and faucets, CFL lights in most used fixtures; line dry clothes when possible, change furnace filters regularly, use programmable thermostat; consolidate car trips, carpool, bike, walk; recycle paper and cans, fix windows, storm doors and add door weatherstripping. Notice drafty air in house, use insulated curtains and shades; maintain furnace and do efficiency testing. Plant shade trees at south, west, and east exposures; plant evergreen s, wind breaks north west exposures.

Step 3 -- ENERGY EFFICIENCY MEASURES

Tighten Up, Stop leaks, & Decrease Energy at home and at workplace: do-your-own energy audit to find leaks, do weatherstripping and caulking; windows may or may not be the major problem and can promote healthy indoor air; light with Compact Florescent Lightbulbs's and LED's; reduce indoor water usage. Possibly have professional energy audit for home and/or workplace with professional air sealing, duct sealing, increased insulation.

Step 4 --HIGHER EFFICIENCY EQUIPMENT

Higher efficiency heating and cooling units (need smaller HVAC units after taking efficiency measures). Buy Energy-Star Appliances when current appliances need replacement.

Step 5 -- RENEWABLE ENERGY

AFTER IConservation and Efficiency upgrades (best return for \$ and effort), then consider corn/biomass stoves, photovoltaic solar panels, solar hot water panels, wind turbines, geothermal options. On and off the electricity grid with net metering (surplus energy contributes to grid).

Plus

- * permaculture practices –
 - vegetable gardening – both individual and community gardens; healthy green lawn care; lawns to gardens
 - composting as much as possible and using the resulting soil for gardens, plants, landscaping
 - recycling everything we can
 - rain barrels for outdoor water collection – for car washing, watering yards, and outdoor plants
 - local food: support community supported agriculture, farmers markets
- * “embodied energy” -- use of full life of products/ recycling

Resources:

More Energy Information:

- Energy Star website Lots of information about all the ways we use energy. Standards for appliances, home improvements, new homes, links to all else. www.energystar.gov
- Home Energy Saver - A great self home audit. Start with just your Zip code. Gets as detailed as you choose. Save your session and track your improvements over time. <http://hes.lbl.gov/>
- US Department of Energy: Energy Efficiency and Renewable Energy site – amazingly good; includes much information on resources, tax credits, Weatherization Assistance Program, assistance for low income, etc. www.eere.energy.gov/consumer
- DOE site for insulation per climate -- www.ornl.gov/~roofs/zip/zipHome.html

“ How to” guide for home weatherization

Build Like a Pro: Insulate and Weatherize - Bruce Harley Taunton Press

Consumer Guide to Home Energy Savings 9th ed. - Jennifer Thorne, Smith Amann and Alex Wilson.

- Rocky Mountain Institute – Amory and Hunter Lovins – www.rmi.org click Home Energy Briefs. Home Resource Efficiency <http://www.rmi.org/sitepages/pid186.php>
- TerraLogos Green Home Services: diagnose your home's energy leaks and get a treatment plan. Solve cold and hot rooms and reduce bills at the same time. Get referrals to dependable Sustainable Contractors and support to complete your retrofits. www.TerraLogos.com
- Mill Valley Garden Center and Farmers' Market -- 28th and Sisson Sts. www.mill-valley.net
(Friday night dinners \$10 from 5:30-8, and Sunday brunches 11-3)
Mill Valley hosts the following orgs:
 - Baltimore Biodiesel Fuel Coop -- www.BaltimoreBioDiesel.org , Mill Valley Center
Drive a diesel car, clean the air, and get off petroleum fuel.
 - Baltimore Corn/BioMass Heat Coop – Mill Valley Center, 28th & Sisson Sts.
Low cost way to heat AND reduce carbon footprint.
to subscribe to listserve: balticornheat-subscribe@yahoo.com
to learn more, www.marylandcornstoves.com, www.saveoursky.com
 - One Straw Farm Organic food. Community Supported Agriculture (CSA)
Distributes member's food shares at Mill Valley Center. www.onestrawfarm.com

Solar Info

Green Building Institute, Jessup, MD – workshops on Green topics www.greenbuildinginstitute.org

Energy Tax Credits, Grants, Rebates - Complete Listings <http://www.dsireusa.org/>

National Renewable Energy Laboratory – research www.nrel.gov

Sandia National Laboratory – solar research www.sandia.gov

Solar Installers – Residential and Commercial::

Chesapeake Solar Jessup, MD www.chesapeakesolar.net

Standard Solar, Inc. MD, D.C. www.standardsolar.com