The LOW CARBON Diet



A Consumer's Guide to Fight Global Warming



ENVIRONMENTAL DEFENSE

finding the ways that work

Introduction

Most people have heard of global warming. But few people understand that if we don't do something about it soon, it could be too late to reverse serious consequences.

Global warming happens because gases emitted chiefly by power plants and cars trap heat inside our atmosphere. Large-scale solutions are necessary, such as switching to cleaner energy sources. But there are also dozens of things each one of us can do, right now, to begin making a difference. This consumer guide is full of positive, practical advice.

Government and business each have crucial roles to play. But individual Americans must also start taking positive action, or else our

children and grandchildren will surely pay the price.

COUNTING "CARBS"

Any serious dieter knows that you've got to count calories. If we're serious about fighting global warming, we have to start counting "carbs," as in carbon dioxide. That's one of the main ingredients causing global warming.

So here is your chance to start on a "low carbon" diet. And remember: saving energy isn't just good for the planet. It's also good for your pocketbook.



Environmental Defense is a leading national nonprofit organization representing more than 400,000 members. Since 1967, we have linked science, economics and law to create innovative, equitable and cost-effective solutions to society's most urgent environmental problems.

Inside the House

These six hot spots top the charts when it comes to potential household energy savings.

Air Leaks

Check for places where air may be leaking out of your home, causing drafts. You can increase your energy efficiency as much as 30 percent simply by plugging air leaks.

Inadequate Insulation

Check in attics, around pipes and ductwork, and under the flooring on the ground floor if you have an unheated basement.

LOW CARBON DIET TIP

If everyone in Memphis,
Tennessee, replaced just two
regular 60-watt bulbs with
compact fluorescents, the
savings would power
Hartford, Connecticut, for
three weeks.

Hot Water Heaters

Insulate the pipes that carry hot water throughout your home. If your water heater is more than five years old, wrap it in an insulating jacket.

And turn down the thermostat if it's set higher than 120 degrees.

Cooking

Microwave ovens reduce energy use by about 2/3 compared with conventional ovens, because they cook foods faster. Crock pots and pressure cookers are also efficient. And don't use a full-size oven to do the work of a toaster oven.

Light Bulbs

Perhaps the quickest and easiest way to begin saving energy at home is by replacing standard light bulbs with new compact fluorescent bulbs. They cost slightly more than regular light bulbs, but they save money over time because they last up to 13 times longer.

Appliances and Electronics

Run full loads when washing clothes. Wash in cold or warm water, not hot. Only run the dishwasher when there is a full load. Turn off your computer monitor when you won't be using it for at least 20 minutes. Finally, look for that Energy Star® label on many types of appliances.

LOW CARBON DIET TIP

Buying a new, energy-efficient refrigerator to replace one that's 20 years old will cut your home's CO₂ output by a ton a year (and trim your annual electric bill up to \$65).



"OFFSET" YOUR EMISSIONS

Virtually all Americans share responsibility for greenhouse gas emissions, whether driving their cars or powering their homes. At www.fightglobalwarming.com, you can find a carbon calculator to help you estimate your personal contribution to global warming.

But even if you've already reduced your driving and electricity use, there's still more you can do. One way is to buy "offsets," which are purchases of "credits" from projects that either reduce greenhouse gases in the atmosphere or result in fewer greenhouse gas emissions. An example of an offset project might include reforestation projects, since trees will "capture" the greenhouse gas carbon dioxide from the air.

Shopping for offsets is a little complicated. If you're not an expert, it can be hard to tell how much pollution is really being offset. Several retailers that sell offsets can be found at www.fightglobalwarming.com. All the offsets listed here have been evaluated by a team of experts and meet our high standards for credible, high-quality offsets.

Out in the Yard

Some of the biggest steps you can take to fight global warming are right outside your door. But it depends on where in America you live.

Temperate Climates

Don't plant deciduous trees to the south of your home. In winter, even bare branches can block the sun from warming your home. Do plant shrubs, bushes and vines about a foot away from the wall of your home to create "dead air" insulating spaces.

If you get a lot of wind near your home in the winter, plant evergreen trees and shrubs close together on the northern side of your home. If you get a lot of snowdrifts, plant low shrubs to stop them from drifting up against your home.

Hot-Arid Climates

Plant trees and shrubs that provide shade to cool roofs, walls and windows. Make sure your air conditioning unit is also shaded — doing so can increase its efficiency by up to 10 percent. If you don't use air conditioning, make sure summer

Cool Climates

Plant dense evergreen trees and shrubs to the north and northwest of your home, to protect it from cold winter winds. You can also combine evergreens with a wall, fence or berm to lift winds

If you get a lot of snowdrifts, plant low shrubs on the side of your home where the winds originate. Don't plant trees too close to your home's south side or you'll lose the heating benefits of the winter sun. Make sure not to block the sun from south-facing windows.

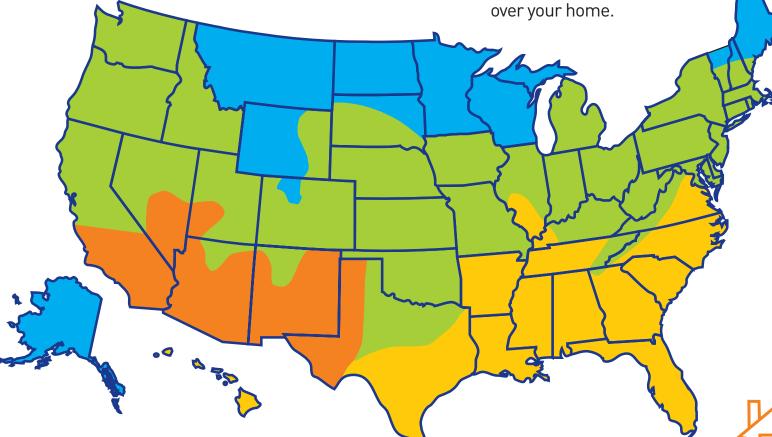
Hot-Humid Climates

Plant shrubs a few feet away from the house to direct cool summer breezes toward your home. These can also provide extra shade. Plant deciduous (leafy) trees on the northeast-to-southeast and northwest-to-southwest sides of the house.

Vegetation planted too close to a home will trap summer heat and make your house feel even hotter.
Flowerbeds that require a lot of

watering also should not be planted close to the home.

Plant low ground cover, including grasses, around your driveway or patio to cool these areas and prevent glare.



winds aren't blocked from your home by landscaping. Place trellises away from the wall to allow air to circulate. Vegetation planted too close to a home will trap summer heat and make your house feel even hotter.

On the Road

Today's passenger vehicles get <u>worse</u> gas mileage than they did 20 years ago, largely due to the popularity of SUVs.

One of the biggest ways to reduce global warming as an individual is by choosing to drive more fuel-efficient vehicles. Driving a high-mileage car not only saves you money, it makes a real difference in reducing emissions.

And once you have bought that fuel-efficient vehicle, there are still many other "low carbon" ways to improve your fuel economy through better driving habits.

Behind the Wheel

Aggressive driving not only reduces fuel economy, it increases stress and causes accidents too. So slow down and drive less aggressively.

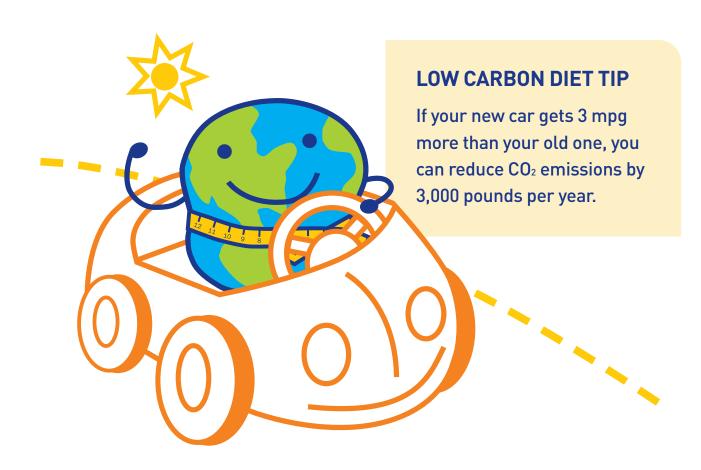
Also, try to accelerate and decelerate smoothly and gradually. A jack-rabbit start consumes up to 50 percent more fuel than slow, steady acceleration.

Parking

Just park it. And keep it there. If you're going to several stores in the same strip mall, don't move your car. Walk. In summer, park in the shade. Use windshield shades to keep summer heat from baking your car and to help keep frost away in the winter.

LOW CARBON DIET TIP

An estimated 32 million U.S. cars and trucks ride on at least two under-inflated tires, wasting 500 million gallons of gas annually.



Shopping Trips

For starters, walk, ride a bike or take the train when your car isn't needed. Combine trips to the store with other errands. Plan trips to avoid rush hour. Or try buying in bulk when shopping, instead of making frequent smaller trips. You'll save time, energy and money.

Maintenance

Check your tires. Keep wheels aligned and tires properly inflated. And keep that engine tuned. You'll save up to 165 gallons of gas per year by minding those spark plugs, oxygen sensors, air filters, hoses and belts.

On Vacation

Don't go off your energy diet just because you're heading out of town.

Put your lights on a timer when you go out of town. Your house will still look like someone is home, but you won't waste energy by leaving lights on all day long.

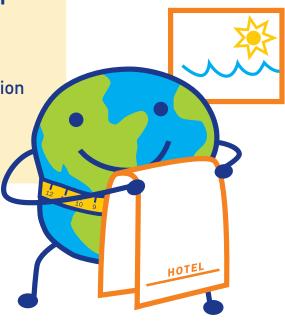
Set your heat to 55 degrees and your air conditioning to 85 while you're away. Turn off your electric water heater. If you have a pool or hot tub, turn off its heater and reduce pump operating times.

When staying at hotels and motels, use the same good energy practices you use at home. Don't leave the lights and TV on when you leave the room. And do you really change your sheets and towels every day at home?

Finally, when visiting a new city or town take a walking tour or use public transportation to see the sites. You'll save money, conserve energy and see your destination the way locals do.

LOW CARBON DIET TIP

Many hotels offer environmentally friendly towel service and the option not to have your sheets changed every day.



Don't Stop Now

Visit www.fightglobalwarming.com to learn more about how you can help.

Some of the information in this report was also drawn from the following web sites:

www.eere.energy.gov

www.aceee.org

www.ceert.org

www.cool-companies.org

www.consumerenergycenter.org

www.greenercars.com/drivinggreen

www.greenhotels.com

www.undoit.org

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