

# NASHVILLE CIVIC DESIGN CENTER

## GREEN YOUR HOME AND COMMUNITY

The Nashville Civic Design Center compiled a list of suggestions to help people assess and improve their ecological footprint. The tips fall under six categories of sustainability: energy and water use, consumption, waste, transportation, retrofitting and new purchases, and influencing your community.

### ENERGY AND WATER USE

The residential sector accounts for 21% of the country's energy consumption of which single-family dwellings account for 80% of energy. The largest uses of household energy are heating (47%), appliances (29%), water heating (17%), and air conditioning (6%). (*Energy Information Administration, eia.doe.gov*). Changing individual behavior within the residential sector will greatly reduce overall energy use.

Visit the websites of your utility and energy providers to determine the type of energy your home utilizes. Research the provider's alternative energy sources and/or the green energy offset options. Look at your electric, gas, and water bills to determine where you are using the most energy and spending the most money.

*The Tennessee Valley Authority (TVA) produces energy using coal-burning plants (60%), nuclear plants (30%), and hydroelectric (5-10%). Less than one percent is produced by green power (solar or wind). TVA offers the green power offset purchase with the Green Power Switch option.*

### SIMPLE WAYS TO CUT-BACK ON ENERGY AND SPENDING

- Turn off lights when leaving the room. Can you install dimmers and adjust the lights for different times of day? Can electric lighting be substituted with more natural or reflected light?
- Unplug appliances when not in use.
- Turn down temperature control when the house is empty. Can you program your thermostat to accommodate your habits? Can you adjust the thermostat to be a few degrees cooler in the winter and warmer in the summer? Dress accordingly--use layers in the winter months.
- Do your sinks have faucet aerators with less than 2.75 gpm (gallons per minute)?
- Get to know your dishwasher--you live with it! Experiment to figure out what it will get clean and what it won't. If you don't have to rinse before washing, don't! And if you do, then just wash the dish.
- It is not necessary to wash hands with hot water--cold water and soap is substantial.

- Invest in compact fluorescent light bulbs (CFL). These use 66-75% less electricity than an incandescent bulb and last 8-15 times longer. *It is important to properly recycle CFL bulbs as they contain trace amounts of mercury. The Metro Recycling Facility in Nashville (off Trinity Lane) accepts CFLs. For questions call 615-880-1000.*
- Make the Green Power Switch. TVA and NES created a program to provide electricity generated from clean, renewable resources such as solar, wind, and methane gas. Each \$4 blocks is each equivalent to 150-kilowatt-hour of energy. A green power investment of \$8 per billing cycle is equivalent to not driving your car for four months. For more information, visit: [http://www.nespower.com/green\\_power\\_switch.aspx](http://www.nespower.com/green_power_switch.aspx)
- Tune up your heating and cooling system. Plug air leaks--you don't need to heat and cool outside your windows.
- Plant a tree. In addition to the fact that trees absorb carbon dioxide and produce oxygen, they can drastically reduce your home's air-conditioning needs. Research the best place to plant a tree and consider planting a native tree to support the local ecosystem and increasing the chance of survival. For additional information visit: [www.treesaregood.com](http://www.treesaregood.com)

## **CHOOSE GREEN PRODUCTS OR GROW YOUR OWN**

One of the most effective ways to influence society is as consumers. Consumerism presents an opportunity for individuals to indirectly influence existing commercial and industrial practices. It is important to consider the message that is communicated when you purchase an item. As a general rule of thumb, pick products that use fewer resources and whose production is the least harmful to the environment.

- When possible, buy used items. This is the most efficient and usually cheapest option.
- Think about the longevity of the products. Avoid single-use (disposable) items.
- Look at the packaging. Is it recyclable? Is there an abundance of packaging?
- EAT LESS MEAT. Livestock consumes 70% of American grain production and it can take up to 840 gallons of water to produce a single serving of beef. If you are not yet willing to make the switch to a vegetarian lifestyle, then cut down on your consumption and purchase local, pasture-fed sustainable meat whenever possible.
- Start a garden or join a community garden. This is the most local food source and it is a wonderful educational tool for you and your family.
- Buy organic produce. It does not contribute to the soil and water contamination caused by the use of pesticides and herbicides.
- Use low VOC-products (volatile organic compounds) for home-improvement projects.
- Use nontoxic lawn care and gardening techniques.
- Join a CSA. Not only do local products require less transportation (emitting fewer greenhouse gases), but you can support local businesses who have a vested interest in protecting the local ecology.

## **CONTROL YOUR WASTE**

Recycling and composting are responsible methods to deal with your waste. However, it is equally, if not more, important to consider ways that you can reduce waste production. For example, is it necessary to use paper towels to clean up spills or dry your hands? Do you have to get coffee in a paper cup every morning--why not use a reusable mug? Those are just two examples, but there are many more minor changes that can greatly reduce waste production.

## **RECYCLE**

Whether you use official recycling bins, paper bags, or boxes, find a place in your home to designate the recycling area. Depending on whether your neighborhood is part of a collection service or you take the recycling to a drop-off center, sort the recyclables into paper/ cardboard, aluminum and tin, glass (sometimes requires sorting by color), and plastic.

For information about the Nashville Metropolitan Government Recycling Program, including Curbside Program and recycling drop-off locations, visit [www.nashville.gov/recycle](http://www.nashville.gov/recycle).

## **DONATE**

Do not throw out old clothing, books, shoes, furniture, electronics, or household items. Although these items are no longer useful to you, there are people who are in need and cannot afford to purchase new products. Contact a local thrift store, church, civic center to find out where you can drop-off your much needed donations.

## **COMPOST**

There is no reason not to compost--it is easy and the benefits are many including enriching soil, remediating contaminated soil, preventing pollution, and saving money. Composting transforms organic waste matter (vegetable scraps, yard trimmings, leaves, chicken poop) into new soil. If you have a backyard or just a patch of bare ground space, simply place a garbage can on the ground (metal or plastic) and punch some holes in the sides for air circulation. If the bin will sit directly on the soil, punch holes in the bottom to allow worms to help decompose the compost. And, if you don't feel like having a compost on your property, find a community garden that accepts compost. There are several ways to compost--just do it! For additional information, visit [www.epa.gov/osw/conserves/rrr/composting](http://www.epa.gov/osw/conserves/rrr/composting).

## **TRANSPORTATION**

"In 2006, transportation sources accounted for 29% of total U.S. greenhouse gas (GHG) emissions. Transportation is the fastest-growing source of GHGs in the U.S., accounting for 47 percent of the net increase in total U.S. emissions since 1990. Transportation is also the largest end-use source of CO<sub>2</sub>, which is the most prevalent greenhouse gas. These estimates of transportation GHGs do not include emissions from additional lifecycle processes, such as the extraction and refining of fuel and the manufacture of vehicles, which are also a significant source of domestic and international GHG emissions." ([www.epa.gov/oms/climate](http://www.epa.gov/oms/climate))

With these facts in mind, it is important to consider ways that to reduce your households greenhouse gas emissions from transportation.

## **TAKE THE BUS**

The Nashville Metropolitan Transit Authority (MTA) runs an efficient bus system throughout Nashville. Visit [www.nashvillemta.org](http://www.nashvillemta.org) for routes, schedules, and more! As well, check out the

TransitNow website for additional guidance on using the bus system:  
[www.transitnashville.org](http://www.transitnashville.org).

### **WALK AND BIKE**

If you are going somewhere in the neighborhood, opt to walk or bike. It is better for you and for the environment. Once you start biking within the neighborhood, you might decide to bike to work or to the grocery store.

### **CARPOOL**

Coordinate with family, friends, and neighbors who work in the same area or on the way. Save money and make new friends.

## **RETROFITTING AND GREEN RENOVATIONS**

There is a good chance that your spending extra money on heating and cooling your home. Many old homes have major air drafts which allow hot and cold air to escape. Below is a list of basic procedures that can increase your home's energy efficiency.

- Add new insulation to the walls or underneath the house to prevent cold air from entering and hot air from escaping.
- Install high energy efficient windows. A lot of heat is lost from cracks in windows. If new windows are not an option, install storm windows and/or seal the cracks.
- Insert a foam insulator behind outlets.
- Add a seal to door frames to prevent air from entering and exiting.
- Install low flow shower heads, toilets, and faucets. Place a brick (inside a plastic bag) or a plastic bottle with water (capped) inside the back of the toilet.
- When purchasing new appliances, choose ENERGY STAR appliances. These greatly reduce energy use and save money.

If you are interested in seeking professional assistance, visit [www.e3innovate.com](http://www.e3innovate.com). This is a Nashville company that conducts home assessments and is available for renovations that will greatly increase your home's energy efficiency, save money, and most importantly, help improve the environment.

## **INFLUENCE YOUR COMMUNITY**

As you begin to make changes that reflect a more sustainable lifestyle, it is important to include your family members, friends, and neighbors. Perhaps you can form a community group to discuss ways to make the neighborhood more energy efficient or host workshops with different sustainability themes. The community connection is an effective vehicle to spread information and it also creates a safer and more pleasant environment for all.