
120 Smart Ways to go “Green”

Tips To Help Prevent Pollution & Be Environmentally Sustainable (For Individuals and All Size Companies)



By Crystal Vaughan

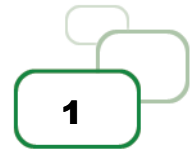
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“Join the Green Sustainability Wave”

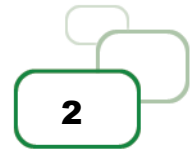


Foreword: “An overwhelming majority of consumers (92%) agree that businesses, government and consumers have an ***equal responsibility to reduce energy use***” (Alliance to Save Energy, 2003 Consumer Market Research). In today’s world, there are so many actions individuals, companies and communities can do to become environmentally sustainable and eco-friendly. In all of my research, I have come across countless ways to help prevent pollution...however, there are so many of these tips that it is utterly impossible for one individual to actually remember or even learn about unless researching on specific topics. Therefore, I have compiled all of my findings in this eBook about being environmentally sustainable. Each section provides useful tips for how an individual or company could become environmentally sustainable. Not only does each section list tips, it also gives the reader an explanation of what it does and why it is good for the environment. Many of the tips are cross-functional and can be used by businesses *and* individuals, so you may come across some that are repeated from a previous section. I hope this provides helpful guidance to many and educates on the importance of being environmentally sustainable for the future.

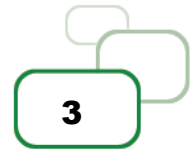
Businesses:

Very few businesses have any policies in place regarding their carbon footprint. However, by reading the below tips, businesses can take the necessary steps to reduce their carbon footprint and energy consumption. The advantages of going green for businesses include lower business costs, increased efficiency, creating brand differentiation, improving standings within the market and with customers, investors, and partners and building a reputation for genuine corporate social responsibility. Launch a green campaign whose initiative is to emphasize the specific course of actions that businesses can take to make an impact on preserving resources and the environment.

- Avoid purchasing products with excess packaging. Buy in bulk and look to use suppliers with a clear policy on energy reduction.
- Purchase products from local manufacturers in order to support the local economy as well as reduce the need for long-distance transport.
- Use environmentally friendly products at the office. Try recycled toilet paper, recycled Kleenex, eco-friendly hand soap, post-consumer paper towels, eco-friendly cleaning products, potato starch plates and utensils and ceramic cups.
- Purchase only Fair Trade coffee.
- Use staple-less staplers.
- Recycle, recycle, recycle. You could save 2,400 lbs. of CO2 every year by recycling just half of your businesses’ waste.



- Make sure to recycle all equipment as well. Company computers, cell phones, blackberry's and PDA's can all be recycled through the vendor you purchased them from. Sometimes they even have plans where you can exchange old items for a credit.
- Upgrade only what is needed and when you do upgrade equipment, make sure to purchase energy efficient technology products such as certain Dell processors. Many applications in the office environment would benefit more from additional memory than high-performance processors.
- Create a company policy regarding cell phone upgrades. Employees do not need to replace devices so often. Make sure they justify and understand the benefits a new phone can offer before the company purchases again. If everyone in the UK delayed upgrading their phone by a year, the energy saved would be equivalent to taking 213,000 cars off the road.
- Buy low flow toilets, showerheads and faucets for the restrooms in your buildings.
- Adjust your thermostat two degrees down in the winter and up two degrees in the summer. This could save about 2,000 lbs. of CO2 per year *and* saves money. Your heating costs can go up by around 8% every time the thermostat is increased by just one degree.
- Use compact fluorescent light bulbs instead of regular light bulbs. These use up to 75% less energy than a regular light bulb. This will save 150 lbs. of CO2 per year and also last around 10 times longer than regular ones.
- Go solar! For savings today, energy forever, use solar energy. It is clean energy that does not use up valuable resources such as fossil resources like coal and natural gas. It does not pollute and every kilowatt-hour produced by a solar system is one that does not have to be created by burning fossil fuels. Oh and by the way....There is also a \$2,000 federal investment tax credit businesses can get back just by installing solar panels. Solar electricity helps businesses reduce their monthly electric bills, increase employee satisfaction and increase the value of the property.
- Consider using motion sensors for offices and conference rooms. This way if someone leaves the room and forgets to turn off a light, it will go off automatically after five or so minutes. This also prevents lights from being on one system. If one employee is working alone in their office, there is no reason to turn the entire floor's lights on...the light will only come on in their specific office.
- Turn off all electric devices when not in use. This includes computer screens and printers. By doing so, you can make more of a difference than you think.
- Limit business air travel to essential trips only. Create a comprehensive company policy on business travel to avoid unnecessary business travel and reduce its negative impacts on the environment. Nowadays, modern technology provides a



variety of tools to collaborate virtually via the Internet. Make sure **all** employees justify any trip before making any bookings.

- If your company has a fleet of cars for employees, introduce more eco-friendly vehicles over time.
- Use remote access and allow employees to work from home to save on gas/commuting costs. Broadband connections and advanced internet technology mean that more and more meetings can take place over the internet and achieve the same results, only without travel expenses or excess carbon emissions. Modern web conferences also allow an unprecedented level of collaboration.
- Consult with new hires or employees leaving the company to use ‘green’ moving services. Partner with those companies to help employees. (Ex: MoveGreen in Santa Barbara).
- Deliver new hire packages electronically. This will save a minimum of 100 pieces of paper per new hire kit.
- Use or set the copier settings to automatic double-sided printing in order to save more paper.
- Use multifunctional devices to scan and email instead of paper copy and regular snail mail. This means scanning documents and eliminating paperwork using online form filling and switching to pdf documents instead of shipping printed manuals, catalogues or papers.
- Consider using an invoice management system. This is an efficient way for businesses to receive and process their invoices. The management system sends out one electronic invoice to the customer. Corporate customers can then pay directly through an e-system. This minimizes paper usage and maximizes efficiency.
- Strive to become paperless. Use electronic delivery for pay stubs and ESPP plans. The option to receive your pay stub or stock option agreements via e-mail will save an estimated 42,000 pieces of paper a year, in combined savings on postage and labor per year. If you have to use paper, use only recycled paper.
- If you have to print, use software that prevents unnecessary printing of extra paper. Save some trees. Use GreenPrint, software which eliminates wasteful pages in any printout automatically, saving the company time and money along with the environment. The average U.S. office employee prints 10,000 pages per year. On average, an employee prints six per day that are considered ‘wasted’ pages. That’s 1,410 wasted pages per year. Prevent ‘wasted pages’ from happening!
- Partner with an eco-friendly printing company that will use recycled paper and soy-based ink for all your marketing materials.
- For company events, do a ‘waste-free’ theme. Have only 2 bins: recycling bins and compost bins. Use potato starch plates and utensils (or other eco-friendly alternatives) that can be put into the compost bin. This way, the company has

no real waste with items such as plastic or paper plates. This cuts back on environmentally hazardous items and educates employees on the importance of being environmentally sustainable.

- Choose sustainable venues to hold company events and meetings.
- Introduce a written company policy and implement it. Communicate to all the employees what targeted goals and changes are being made within the organization to become “green” so that they know what the company should be collectively working towards.
- Create rewarding company policies. Nominate a ‘green’ employee of the month as incentive for being environmentally sustainable within the workplace and also outside the workplace.
- Create incentives for those who actively carpool. Perhaps even start a company car-pooling group to organize shifts and locations.
- Create a green committee. Allow the employees to have a voice in making a difference and get them involved. This creates a strong community within the company and promotes employee satisfaction.
- Allow employees the opportunity to go to sustainable conferences to keep up to date with new ideas and spur thought leadership.
- Allow employees volunteer days to get them out into the community and do environmentally sustainable activities.
- Make sure your company celebrates and draws attention to ‘Earth Day’. This is a great way to send out a reminder to employees that your company is environmentally sustainable.
- Partner with “green” companies and charities. Donating to charities that are dedicated to improving the environment showcase that you are truly aligning your goals and values with those companies you work with externally.
- Have an annual carbon emissions audit. It’s important to measure your business carbon footprint and identify ways to reduce/offset it. Make donations to a carbon-offsetting partner such as CarbonFund.org that uses donations to finance special projects that offset carbon emissions, such as windmill projects, etc.
- Install comprehensive metering systems to track and report building energy use and from this create a 50% reduction plan over a period of 3-5-10 years.
- LEED (Leadership in Energy and Environmental Design) certify your building. The LEED rating system acknowledges companies of sustainable green building and development practices. It recognizes performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.
- When replacing furniture, buy recycled/post-consumer office furniture. Make it a policy to buy furniture, carpeting and paint that are free of volatile organic compounds (VOCs) that won’t let off gas-toxic chemicals.

- Updating buildings or building a new one? How about installing bamboo hardwood flooring or recycled flooring? Bamboo is considered an environmentally friendly flooring material due to its high yield and the relatively fast rate at which it replenishes itself. It takes just four to six years for bamboo to mature, compared to 50-100 years for typical hardwoods. Just be sure to look for sources that use formaldehyde-free glues.
- Place plants around the workplace environment. Not only will they look nice, but they produce O₂ which offsets your personal carbon emissions, cools immediate environmental conditions when hot and provides a home for microbes which can also filter air.
- For smaller companies or even larger companies, grow an organic garden to feed employees. (See Pangea Organics).
- Bring lunches to work or create a lunch program that delivers for everyone, which is more efficient than several separate ones. Imagine how much emission is being released with each individual employee leaving for lunch time.
- Virtualization can help reduce network appliances and increase utilization of storage and servers, essentially having a major impact on all equipment. Virtualization works at the server level by allowing multiple applications and operating systems to share servers that were previously only used for single applications, freeing up underused server capacity so that it is available for use with as many applications as needed. This means the utilization of individual servers can be raised to 70% or more, which could equate to a reduction of up to 75% of the servers in the data center, freeing up space, power and cooling resources. Forrester Research also calculated that a relatively small data center with only 2,500 servers uses enough electricity in one month to power 420,000 homes for a year. Once you have the data center virtualized and under control, you can then consolidate the branch office technology where it makes sense, continuing the power and cost reduction through consolidation and virtualization. If you have to use a data center, check its green credentials. Those using architecture based virtualization techniques are most energy-efficient.
- Review the layout of your office to maximize the efficiency of heating and cooling IT.
- Purchase renewable energy and wind power for 100% of electricity use.

Fun, Interesting Business Facts:

- Under the Energy Policy Act of 2005, builders can earn a tax credit of \$2,000 for highly efficient new homes and **businesses** can earn **high tax deductions** for efficient new or retrofitted commercial buildings. For details, visit www.energytaxincentives.org.

Home Maintenance/Household:

Saving energy, money and the environment usually begins at the very heart of an individual’s life: home. When you use energy wisely at home, you will be saving the environment and promoting good habits that carry over into everyday life and work, creating and establishing an environmentally sustainable lifestyle, and if that’s not incentive enough, it pays to be eco-friendly now-a-days. By implementing certain property and equipment changes in your household now, you may qualify for several rebates and tax refunds.

- Recycle, recycle, recycle. Every little bit helps. Recycling just one glass bottle saves enough electricity to light a 100-watt bulb for four hours.
- Buy household products in bulk to reduce packaging and avoid products sold with excess packaging.
- Buy energy efficient appliances (washer/dryer/dishwasher/ refrigerators), which saves the home more money *AND* a 1,000 lbs* of CO₂ a year. *Depending on how energy efficient the appliance is. Look for the Energy Saving Recommended logo, which guarantees that appliances are the most energy efficient in their category. The average household spends \$1,400 each year on energy bills. By choosing Energy Star qualified products, consumers could cut this by 30%, saving about \$400 each year. Also, when buying new appliances, make sure to recycle your old appliances. Southern California Edison Company does this for free in California. (800-234-9722).
- Buy low flow toilets, showerheads and faucets. This can save up to 22,000 gallons of water per year for a family of four. Low flow toilets only use 1.6 gallons per flush, compared to the 3.5 gallons per flush for older models.
- Between 80-85% of the energy used to wash clothes comes from heating the water. So wash cold. Do two **full** loads of laundry per week in cold or warm water instead of hot and hang to dry. This can save up to 500 lbs. of CO₂.
- About 15% of an average home energy bill goes to heating water. To save more hot water, take five-minute showers instead of baths. If you do take baths, try to limit them per week.
- Start collecting the “warm-up” water to use on your garden. That 1-2 minute session that it takes for the shower to warm up can be put to good use.
- Add a water tank insulation wrap if you have an un-insulated tank. They cost about \$20 and help to hold the heat inside. Add pre-cut pipe insulation to exposed pipes going into your water heater—it is cheap and easy to install. The energy savings should pay for the improvements in just a few months.

- Replace your old water heater with a tankless water heater. Tankless water heaters provide hot water on demand at a preset temperature rather than storing it, which reduces or eliminates standby losses. Replacing an electric water heater with a solar model can reduce costs by up to 80% a year and over the 20-year lifespan of the appliance, will prevent more than 50 tons of CO₂ emissions.
- Switch to electronic billing. Save time and a lot of paper. Pay those bills online with the click of a button or automatic debit system. Approximately one billion trees-worth of paper are trashed each year in the U.S., and hard copy bills alone generate almost 700,000 tons of waste and almost two million tons of carbon dioxide. Both you and the planet will be happier without the excess paper garbage.
- Shed those extra 41 lbs. of junk mail the average American packs on each year by removing yourself from direct-mail mailing lists; companies such as GreenDimes and 41pounds.org can help. Save some old-growth forests by opting out of paper catalogues and browsing online or choosing to have them sent via e-mail. Deforestation is responsible for 25% of all carbon emissions released into the atmosphere, through the burning and cutting of 24 million acres of trees annually. Save the forest, opt out.
- Use glass fireplace doors. This helps stop heat from being lost up the chimney during the winter. Also, close the fireplace damper when not in use.
- Adjust your thermostat two degrees down in the winter and up two degrees in the summer. This could save about 2,000 lbs. of CO₂ per year *and* saves money. Your heating costs can go up by around 8% every time the thermostat is increased by just one degree.
- Insulate your home properly. Make sure the walls and ceilings are insulated. This could save 2,000 lbs. of CO₂ & \$245 per year. Switch to double pane windows, which keep more heat inside your home so you can use less energy. This could save 10,000 lbs. of CO₂ & \$436 per year. Caulk and weather strip your doorways and windows.
- Install a ‘Whole House Fan’. Heat rises. When you install a whole house fan in your attic, you can quickly and efficiently remove this hot, stuffy air and help cool your entire house. You’ll save money using the whole house fan in combination with your central air conditioner. Whole house fans typically use about 1/10 the electricity of comparably-sized air conditioners. You can even get a rebate back on the purchase and write the purchase off for your taxes as an environment upgrade to your property.
- Over an air conditioner’s lifetime, only ¼ of the total cost is for the purchase of the unit. The greater cost (3/4) is for the energy to run the unit. So instead of using your air conditioning, install individual room air conditioners (also known as window air conditioners). American households typically spend more than \$200

annually on air conditioning. Households in the South can easily spend twice as much. Using individual room air conditioners can cool a specific isolated room quickly and efficiently without wasting energy to spread throughout the entire house when you're not even in other rooms. Qualified room air conditioners help to save money by using less electricity and may even be qualified for rebates or tax write-offs. Newer Energy Star room air conditioners help prevent pollution because they don't use refrigerants with ozone-destroying chlorofluorocarbons (CFCs). Replacing old model air conditioners with Energy Star units can cut cooling bills by 20% or more. In arid climates, think about installing evaporative coolers. They are much more efficient (and less costly) than A/C's. They also add needed moisture to the air, while A/C units further dry the air.

- Close vents and doors of unused rooms. This prevents unnecessary excess waste of energy spreading to rooms you're not even occupying.
- During hot months, keep window coverings closed on the south, east and west windows. In winter, open the coverings and let the sun in to warm up rooms.
- Use area/space heaters to warm just the occupied rooms in your home. This will enable you to control the temperature more, saving money and conserving energy.
- Check the furnace or A/C filter each month, and clean and replace it as needed. Dirty filters block air flow through your heating and cooling ducts, increasing your energy bill and shortening the equipment's life.
- Remember to turn off all electronic devices and lights when not in use or in that specific part of the house.
- Unplug all cell phone chargers when not in use. There are an estimated 190 million cell phones in the U.S. A quick calculation says that the combined stand-by usage of all those cell phone chargers (each only drawing a mere watt by themselves) could add up to 190 megawatts per day. That's enough to power approximately 100,000 homes.
- Use compact fluorescent light bulbs instead of regular light bulbs. These use up to 75% less energy than a regular light bulb. This will save 150 lbs. of CO₂ per year and also last around 10 times longer than regular ones.
- Go solar! It is clean energy that does not use up valuable resources such as fossil resources like coal and natural gas. Using solar energy decreases oil demand (the average American uses 12 barrels of oil per year and by installing solar energy this offsets the equivalent of 600,000 barrels of oil), reduces acid rain causing emissions by 2.25 million lbs. (the average American home's electricity usage creates approximately 70 lbs. of these pollutants annually), and reduces greenhouse gas emissions by 425 million lbs. (the average American home creates approximately 13,000 lbs. of greenhouse gas emissions from electricity per year). These amounts are equivalent to: planting over 1 million mature trees that remove carbon dioxide from the atmosphere, not driving 530 million miles and not burning 10 million cubic feet of natural gas. Oh and by the

way.... There is also a \$2,000 federal investment tax credit home investors can get back by installing solar panels. Solar electricity helps individuals reduce their monthly electric bills, increase the value of the property, control their cost of electricity easier and allows the consumer to invest in clean, renewable energy.

- Think about installing skylights. Not only does this reduce heating and cooling costs, but it also blocks out harmful pollutants and disturbing sound while giving natural light. This also helps to cut back on electricity usage, since it is letting in more natural lights.
- Replace your regular stoves with an induction cooktop. Cooking with induction cooktops is faster than regular stoves and use far less energy/gas. Magnetic induction cooking uses electricity to produce a magnetic field that causes molecular movement in cookware. The movement produces heat which warms the pot and its contents.
- If you have a pool, switch to energy-efficient pool pumps and motors.
- Want hardwood floors? Opt for bamboo. Bamboo is considered an environmentally friendly flooring material due to its high yield and the relatively fast rate at which it replenishes itself. It takes just four to six years for bamboo to mature, compared to 50-100 years for typical hardwoods. Just be sure to look for sources that use formaldehyde-free glues.
- Use healthier paint. If you are doing upgrades to your household and decide to paint, use zero- or low-VOC paints. Conventional paints contain solvents, toxic metals and VOCs that can cause smog, ozone pollution and indoor air quality problems with negative health effects, according to the EPA. These unhealthy ingredients are released into the air while you're painting, while the paint dries and even after the paints are completely dried.
- Use eco-friendly alternatives for cleaning products. Petroleum-based household cleaners can contribute to air and water pollution during manufacturing and disposal as well as in our homes. Vegetable based detergents are based on renewable resources, can biodegrade quickly, and are gentle on the environment. **Check out the 'Clean & Green Home' found in the Green References section below which gives directions on how to make your own cleaning products from inexpensive and common house-hold ingredients.**
- Take those little bits of soap that you normally throw away, and heat them in a small saucepan. Add some essential oils and natural spices, which soothe and exfoliate the skin. When the soap is melted, shape it into a mold and let it dry for two days. Voila! You have recycled soap. A creative and fun idea for the family and also saves money and supplies.

Fun, Interesting Household Facts:

- According to estimates from the Energy Information Administration, in just two decades U.S. energy consumption will increase by almost 40% -- an amount

equivalent to the energy used today in California, Texas, New York, Ohio, Pennsylvania and Illinois.

- Many idle electronics—TVs, VCRs, DVD and CD players, cordless phones, microwaves—use energy even when switched off to keep display clocks lit and memory chips and remote controls working. Nationally, these energy “vampires” use 5% of our domestic energy and cost consumers more than \$3 billion annually.
- The average household in 2007 spent more than \$5,100 on all energy costs (includes home energy bills and gasoline).
- In 2008, the average household will spend more than \$5,500 on energy—**\$2,200** on home energy costs, and more than **\$3,300** on gasoline.
- If just 10% of U.S. households replaced their old heating & cooling equipment with an ENERGY STAR qualified model, it would **prevent** the equivalent emissions of **30 billion lbs. of greenhouse gasses**.
- Your home can be a greater source of pollution than that of your car. In fact, about 17% of U.S. greenhouse gas emissions are generated from the energy used in houses nationwide.

Lawn & Garden:

The steps we take for our lawns and gardens to keep them a manicured, growing and uniformed green leave them anything but green in the natural sense. Every year, Americans apply 70 million lbs. of pesticides to home lawns, trees and shrubs. The EPA estimates that gasoline-powered landscaping equipment (mowers, trimmers, blowers, etc.) account for more than 5% of urban air pollution. Finally, as much as two-thirds of urban freshwater is used to water lawns in some cities. There are steps, however, to be eco-friendly in your lawn and garden. A green lawn doesn't have to come at the expense of our green Earth. Taking care of the environment literally can begin in our own backyards.

- Grow your own food. Replace your lawn with a backyard organic garden. This cuts back on grocery costs and allows your family to eat healthy.
- Use a push mower. Use your muscles and get some extra exercise instead of using and burning fossil fuels. Save 80 lbs. of CO2 per year.
- If you don't do yard work yourself, think about hiring a professional company that does eco-friendly lawn care service and doesn't use gas-fueled equipment.
- Pick up animal waste and dispose of it in the toilet or trash can, so it does not go down a storm drain. Animal waste contains bacteria that can cause illness in aquatic life, wildlife and humans.
- Sweep driveways, patios and sidewalks rather than hosing them down into the gutters and storm drains. Hosing may pick up additional chemical residue. Put

lawn clippings and leaves in a compost pile or green waste can. Divert garden hoses and rain spouts away from paved surfaces to reduce water runoff from entering storm drains.

- Consider using a rain barrel to collect water for flower beds and lawn watering. This collects mineral-and chlorine-free water for all your plants and even could be used to wash your car.
- Use non-toxic alternatives to pesticides. If you have to use them, use herbicides, pesticides and fertilizers sparingly. Follow label instructions carefully. **DO NOT** apply products if rain is forecast. Never dump chemicals in ditches, gutters, storm drains or waterways. Never use motor oil to kill weeds along fences and in yards. Take unwanted toxic products to the local hazardous waste collections center.
- Control erosion by preventing dirt and debris from entering gutters and storm drains. Use hay bales as an alternative silt fence to prevent runoff from entering storm drains and waterways. Among other consequences, excess soil and debris from construction may increase sedimentation in our waterways, decrease available oxygen and result in death of aquatic life.
- Landscape as much of your property as possible. Planted areas absorb more rainwater and help percolate it into the ground. Bare soil promotes water runoff.
- As an alternative to concrete driveways, use paving bricks, which help reduce runoff.
- Create a compost waste bin for family use. This is a great way to educate the children on environment sustainability and provides fresh, fertile soil for planting indoor and outdoor plants. It also takes unnecessary waste away from landfills and allows us to help the environment by disposing of food and waste appropriately and naturally.
- Plant a tree. One tree will absorb one ton of carbon dioxide over its lifetime. Trees that lose their leaves in the fall give protection from the summer sun and permit winter sunlight to reach and warm your home later. Plant trees on the south, east and/or west sides of your home. Be sure to shade the A/C unit.
- Create a windbreak with evergreen trees and shrubs to stop chilling winds.
- Plant native species that need less water than imported varieties.
- Bring on the butterflies and bees by planting a variety of native flowers they are drawn to, such as wild lilac, goldenrod and lemon balm. (Gardens with 10 or more species of attractive plants have been found to entice the most bees). Since we are in the throes of a major bee-loss epidemic, we need to extend our help to encourage these little pollinators to do their job. Pollinators affect 35% of the world’s crop production and increase the output of 87 of the leading food crops worldwide.

- If you live in the country, ban backyard burning. In many areas of the countryside, families burn their yard waste as a way of disposing of it. Burning yard waste is both a safety and health hazard. It could create toxic fumes and potentially toxic ash. The air pollution it causes can aggravate respiratory conditions, such as asthma. Compost your yard waste even if you live in the country.

Fun, Interesting Lawn & Garden Facts:

- In the U.S. we have lost 95% of our old growth forests. Old growth forests make up 16% of the virgin tree fiber used each year to make paper products.
- 4,281 acres of rainforest are lost every hour worldwide.
- A single mature tree can release enough oxygen back into the atmosphere to support two human beings. If every American family planted just one tree, the amount of CO₂ in the atmosphere would be reduced by one-billion lbs. annually. This is almost 5% of the amount that human activity pumps into the atmosphere each year.
- According to the USDA Forest Service, a tree generates: \$31,250 worth of oxygen, recycles \$37,500 worth of water, provides \$62,000 worth of air pollution control and controls \$31,250 worth of soil erosion, over a 50-year life span.

Automotive Tips:

In the U.S., about 20% of all greenhouse gas emissions come from cars and SUVs, which contribute to climate change and air pollution. If you are trying to decrease your carbon footprint on the environment, a good place to start is by greening your main transportation “footprint”: your car.

- Use alternative transportation (carpooling, walking, riding your bike, skateboarding or using public transportation) to reduce automobile pollution. This could save 790 lbs. of CO₂ and hundreds of dollars per year.
- Recycle your car’s antifreeze. If you are changing your own car’s antifreeze or getting it done by a professional, make sure that it is not being drained directly onto the ground or into the street. It is poisonous to pets and wildlife who are attracted to its sweet smell and taste.
- Recycle used motor oil by taking it to an authorized auto parts store, gas station or hazardous waste collection center. When changing your car’s oil, prevent spills by placing cardboard under the oil pan. Use absorbent material like kitty litter to clean up any spills. Never pour motor oil down storm drains, on the ground or in driveways.
- Keep your tires adequately inflated. Every gallon of gasoline saved keeps 20 lbs. of CO₂ out of the atmosphere.

- Inspect and maintain your car regularly to prevent leakage of oil, antifreeze and other toxic fluids. Use a drip tray to catch leaks when your car is parked.
- Wash cars at a commercial car wash where water is collected and treated. If you wash your vehicle at home, wash cars on unpaved surfaces such as your lawn, use a shutoff nozzle on your hose, and do not let wash water reach the street. Do not dump excess water on the driveway, gutter or storm drain, which leads directly to the ocean without treatment. Leftover soapy water should be poured down a household sink or toilet to be treated by the wastewater treatment plant.
- Don't top off your gas tank. You see this reminder every time on the little sticker posted at the gas station. When you're refueling, stop when the gas pump automatically turns off. Overfilling can ruin your gasoline-vapor recovery equipment. The recovery canister is supposed to store gasoline vapors rather than release them into the atmosphere, but if you overfill the tank and gas gets into the canister, then it will stop working, contributing to the formation of ground-level ozone, smog, acid rain and airborne toxins.
- Don't use more octane than you need. Lots of drivers think that they're benefitting their engine or the environment by using premium gas. In reality, modern engines don't require premium gas and don't benefit from it anyway. And, in fact, most experts say excess octane actually creates more pollution. So unless your owner's manual specifically calls for the use of premium gas, don't use it.
- Don't idle in your car. Idling wastes money and gas and generates pollution and global warming causing emissions. Except when in traffic, turn your engine off if you must wait for more than 30 seconds.
- Even when it's hot, know the best times to use your air conditioning and roll down windows. When driving around town, conserve fuel and excess emissions by rolling down the windows and turning off the AC. In stop-and-go traffic, air conditioning can decrease fuel economy by up to 10%. When on the highway however, it does just the opposite; open windows can create drag on a fast-moving vehicle, dropping fuel economy by 20% or more. So know when it is better to have the AC on or to roll down your windows.
- Remove excess items from your trunk. Less weight means better mileage. Every pound counts, so get rid of that case of water you've been toting around with you. Better mileage=savings of money and excess emissions being released.
- Switch to a roadside assistance service that supports the environment. There are roadside assistance services now that are strong lobbying groups against public transit projects, fuel economy standards, alternative transportation and a cleaner environment. Check out BetterWorldClub.com for more information.
- Buy a hybrid car. The average driver could save up to 16,000 lbs. of CO2 & \$3,750 per year just by driving a hybrid.

- Planning a trip? If you don’t want to fly, then think about checking out the train schedule. According to the Nature Conservancy, on a cross-country trip, a train emits only about 4-15% of the carbon dioxide that a plane does (and an automobile is not much better). May 10th marks the first annual National Train Day, so it’s a good opportunity to give the railroad a try. Another plus is getting to see the countryside without having to worry about driving. Relax and look out your window. Let someone else do the driving for a change!

Fun, Interesting Automotive Facts:

- According to a recent national survey, 86% of U.S. consumers stated that a wider availability and selection of fuel-efficient cars and SUVs would be very effective or somewhat effective in getting them and their families to purchase them and reduce energy.
- Transportation accounts for more than 67% of the oil we consume in the U.S. and more than we produce. Today, our country imports more than 56% of its oil supply and imports are expected to reach 70% over the next two decades. 80% of American consumers agree that America needs to reduce oil imports.
- The United States consumes almost **9 million barrels of gasoline daily**—43% of total global daily gasoline consumption.
- If everyone purchased one of the four most efficient models in each vehicle class (sedans, sub-compacts, SUVs, light trucks), fuel economy would be 12% higher and Americans could save 13.1 billion gallons of gasoline annually.
- According to the Department of Energy projections, by the end of this decade, 750,000 hybrid vehicles will be sold annually—that means one in every 23 passenger vehicles sold will be a hybrid electric.

Individuals Tips:

With all the tips and guidelines above, it all comes down to what we as individuals do. Our actions have huge implications on the environment and can be global. Integrating sustainability into our daily lifestyles is a step in the right direction, even if it is in small steps. These small steps will lead to a **big** difference. “The difference between what we do and what we are capable of doing would suffice to solve most of the world’s problems (Mohandas Gandhi).”

- Ditch the plastic. 2.5 million individual plastic water bottles are thrown away every hour in the U.S. and take about 450 years to break down when disposed of in a landfill site. Start using a reusable water bottle or drink from the tap.
- Buy fresh, buy local.
- When purchasing at grocery stores, bring your own bags instead of using plastic or paper, which cuts back on waste.

- Shop wisely. Bookmark shopping sites that have green products or where a portion of the sales goes to good causes.
- Educate yourself. How can you solve the problem if you don't know what the problem is? Luckily, this guide provides you with lots of great environmental sustainability tips. But the Internet also offers a plethora of endless information that offer great tips, advice and different perspectives. Do a little research, expand your knowledge on the subject.
- Make it your business. Make your voice heard. Individual action is important and it is individuals who need to send clear and urgent signals to our governments and political representatives that we demand action for environmental sustainability.
- Sign a “green” petition you approve of or send a letter to the government urging them to do their part in being environmentally friendly.
- Donate money to your favorite green cause.
- Write a letter or email to your favorite green companies thanking them for doing their part for the environment and being a leader among companies in their industry.
- Buy organic clothing. Places like American Apparel and Patagonia offer several options of “sustainable edition” clothing. Even Simple Shoes, a division of Decker, offers stylish shoes that are sustainable. Wearing organic doesn't mean you have to sacrifice style...it just means you aren't sacrificing the environment.
- Go outside and take a hike. Get outdoors: One of the best motivations and education you can get for protecting the planet is to enjoy it.
- **Email this guide to your family, friends, colleagues, business partners, whomever. Spread the word!**

Fun, Interesting Individual Facts:

- Consumers garner information on saving and reducing energy from a variety of sources: 45% review brochures or utility company information, 40% by word-of-mouth and 39% look for the Energy Star label on new products.

Green References:

Business:

- Rec Solar: Martin Van Enoo, Solar Energy Consultant, www.recsolar.com, 888-657-6527.
- Citrix Online: Louise Andrews, Media Enquiries, www.citrixonline@wildfirepr.co.uk, 44 (0) 20 8339 4424

Household:

- Village Property Realtors: DeAnn Bauer & Elizabeth Wagner, Santa Barbara EcoBrokers www.SantaBarbaraEcoBroker.com ; www.GreenHomesSB.com
- National Cooperative Grocers Association, 2007
- City of Goleta
- Project Clean Water, County of Santa Barbara
- Clean Creeks healthy Beaches, City of Santa Barbara
- Southern California Edison: SCE Residential Savings Guide, 2007 www.sce.com/big savings

****Clean & Green Home Recipes:**

- Glass Cleaner: Add ¼ cup of vinegar to one quart warm water in a spray bottle. Spray windows, rub clean with a rag.
- Drains: For slow drains, pour one cup each of baking soda, salt and vinegar down the drain. Wait 15 minutes and flush drain with boiling water. Pour boiling water down the drain every two weeks to prevent build up.
- Scouring Powder: 1 cup baking soda, ¼ cup borax, drops of essential oil of your choice (optional)

Mix baking soda and borax together in a bowl or plastic tub with optional essential oil. You can also put the powder in a shaker and shake onto the surface to be cleaned.

- Wonder Spray: Use this recipe for sink, tub, toilet, tile and floors. ¼ cup white vinegar, 2 teaspoons borax, 32 ounces hot water, ¼ cup liquid dish soap (added last), 20 drops essential oil (optional)

Dissolve borax in hot water (otherwise the spray will be grainy). Add vinegar, borax and water to a 32-ounce spray bottle. Add the liquid dish soap and essential oil if desired. Shake ingredients to mix.

To Purchase pre-made quality non-toxic, biodegradable household items, see these product brands: Ecover, Dr. Bronner’s, Citra-Solv, Bi-O-Kleen, Seventh Generation, Earth Friendly, Country Save, Lifetree

Lawn & Garden:

- Environmental Protection Agency: EPA “Greenscaping Your Lawn & Garden”, April 2003. www.epa.gov
- GreenPrint: Eco Facts. <http://www.printgreener.com/earthday.html>

Automotive:

- Car Talk: 2007, <http://www.cartalk.com/content/eco/tips.html>

Individual:

- National Geographic, *Earth Day Tips 2008*. April 15, 2008. Mary Logan Barmeyer. <http://www.thegreenguide.com/doc/Mag1/earthday>

Miscellaneous:

- Alliance to Save Energy: *2003 Consumer Market Research*. www.energyhog.org or www.ase.org