

Green Living



The Importance of Saving Water

Conserving water is one of the most important — but also one of the easiest — things you can do to protect our planet.

It's a cost-conscious idea, as you'll be saving a significant amount on your monthly bills by limiting usage. More crucially, you'll be making a big difference in the fight against overdrawing on this natural resource. Here are three smart and easy strategies for water conservation at home, with details on how they make a positive impact on our wider environment.

BRUSHING YOUR TEETH

A commonly used strategy is turning off the faucet while brushing your teeth, and it saves a surprising amount of water. In fact, gallons of unused liquid can swirl down the drain as you scrub. The U.S. Environmental Protection Agency estimates that turning off the tap during your morning and bedtime routines can save up to 8 gallons of water a day. That adds up to more than 200 gallons per person per month.

Also consider adding an aerator to the bathroom faucet, another cost-effective way to save water. It produces tiny bubbles into the stream so you use less water while the tap is on. Standard faucets are usually set at 1.5 gallons per minute, or higher. Aerators reduce



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the rate to one gallon or less.

WATERING YOUR LAWN

As much as half of local drinking water is used to maintain yards and gardens in some areas, and too much is wasted through evaporation, over-watering or misdirected sprinkler heads aimed at hard surfaces. Experts suggest watering your lawn in the early morning or evening. Cooler temperatures will inhibit evaporation, a critical issue since as much as 14% is lost during mid-day sprinkler sessions. That stat could be even higher, depending on where you live. Installing rain

sensors on lawn-irrigation systems also reduces unneeded watering. You might consider placing a rain barrel for use as an additional outdoor resource.

EVERYDAY CONSERVATION

Slight alterations to daily routines can have a huge impact on the environment. Reuse your towels, switching them out only after every fourth or fifth use. Water is wasted by washing them too much, since you're already clean when you come out of the shower. Only sparingly use the garbage disposal, which

requires a lot of water. Compost food waste instead. You can also limit water use while washing your hands. Briefly turn on the water to encourage lathering, then turn it off until you're ready to rinse. The opportunity for conservation is huge: Washing your hands for 15 seconds seven times a day uses almost 8 gallons of water.

GOING MEATLESS

You might not think your diet has anything to do with water conservation, but it takes a lot of water to grow the grain that feeds chickens and cows. They drink it too, of

course. All told, beef has a water footprint of roughly 4 million gallons per ton, according to PETA. They report that the water footprint for vegetables is only about 85,000 gallons per ton. That's why National Geographic says that a vegan indirectly consumes nearly 600 fewer gallons of water per day than someone on the average American diet. At the same time, runoff from livestock and factory farms is a leading contributor to pollution in our lakes and rivers. It can also contaminate freshwater sources with bacteria and viruses.

Inside Energy Star Ratings

You've likely seen the blue logo while browsing at a local home improvement store or appliance outlet.

Ever wondered what an Energy Star label actually means? Here's a look at how products earn this coveted rating, the history of the program, and how much impact buying an Energy Star-approved product can have on your wallet and the world around us.

ENERGY STAR HISTORY

Energy Star provides everyday tools in the fight against climate change, with a focus on protecting our health and improving our air. A joint effort between the Environmental Protection Agency and Department of Energy, the program was designed to help reduce pollutants and greenhouse emissions by making it easy for us to identify energy-efficient products. Computers and computer monitors were the first products to be labeled.

Thousands of companies have since partnered with the program, including nearly 40% of the Fortune 500s, to create cost-saving, energy-efficient solutions for our changing world. The EPA says Americans bought more than 300 million Energy Star-certified products in 2019 like major appliances, lighting,



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office equipment and electronics. Officials estimate that more than 7 billion items have been sold since the program began in 1992, including some 300 million certified light bulbs every day in 2019.

GETTING THE LABEL

The Energy Star label is meant to easily identify earth-friendly products — and not just for in-home use. The EPA and Department of Energy have also coordinated a national building rating system. The most common daily interaction with the program, however, is through the certification labels found on appli-

ances, commercial equipment and electronics. They're earned by meeting previously set specifications, testing and verification requirements.

These rules begin with the obvious goal of creating significant energy savings, but they don't end there. For instance, if a certified product costs more than another less-efficient counterpart, customers must be able to recover the difference through saved energy costs. Manufacturers sign a formal agreement with the EPA to participate, and their products are then certified against these strict requirements by a third party.

The agency continually updates its standards, including a 2021 adjustment to heat pumps, central air and electric water heaters that's estimated to save about \$11 billion and 255 billion pounds of greenhouse gases per year.

SWEEPING IMPACTS

Officials report that Energy Star-certified products and buildings saved nearly 500 billion kilowatt-hours of electricity — and some \$39 billion in energy costs — in 2019. Nearly 90% of America's largest homebuilders now construct certified homes, which are at least 10% more efficient than

other new builds.

The EPA says Americans have saved \$350 for every one dollar the agency spent on the program, and a total of more than \$450 billion in energy costs since the Energy Star program was established in 1992.

Energy Star-approved builders are also focused on creating affordable housing, including partnerships with Habitat for Humanity and in the manufactured-home industry. The result is an associated reduction of nearly 390 million metric tons in emissions for 2019 alone, equivalent to about 5% of the nation's total in greenhouse gases.

Green Investing Takes Off

Green investing is another way to take part in an Earth-focused lifestyle.

There's a newfound interest in supporting environmentally sound initiatives through the purchase of stock in like-minded businesses, mutual funds with green stocks or green-aligned exchange-traded funds. As a subset of the broader strategy known as socially responsible investing, this allows stockholders to support innovative new ideas that will sustain and support our planet.

For many, the idea is of pressing concern: "Evidence on climate risk is compelling investors to reassess core assumptions about modern finance," BlackRock chairman Larry Fink acknowledged in 2020. As such, profit isn't always the principal motive in these trades, but returns from green investing can be similar to those from more traditional assets. Ready to get a little more green? Here's how to make these companies part of your investment portfolio.

GREEN COMPANIES

The easiest entry point into the market is to focus on companies that manufacture products which help us conserve resources and use less energy. Begin your research by looking into purchase options for businesses involved with organic products, low emissions or renewable energy, and



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green building, among other things. There are many exciting new initiatives, as startups try to develop alternative pathways and sustainable products. Rely on the expertise of trusted professionals to help you make the right choice for your portfolio, a process that also involves balancing risk.

GREEN VALUES

Along the way, take into account that not every product labeled as green is produced by a company with an actual commitment to pro-environmental values. For instance, some have simply purchased offsets in order to

reduce their carbon footprints, while actually making no measurable changes. (This larger process has been dubbed "greenwashing.") But not everyone chooses to exclusively back green companies.

Rather than conduct so-called "pure-play" investing, you might recognize and reward companies that have created green-based product lines, even if they have other interests that do not align with yours. There are also businesses that don't specifically manufacture green products, but could nevertheless garner support because they have taken needed steps to save energy or

reduce waste. Even more traditional market figures are starting to bet on low-carbon options, so they may also be of interest to investors. These kind of values-based investments could encourage other businesses to follow suit.

A GROWING TREND

In a 2020 study, the Morningstar Inc. research firm found "no performance trade-off" between the general market and environmentally conscious options, adding that "a majority of sustainable funds have outperformed their traditional peers over multiple time horizons." In turn, \$51 million

of new money flooded into the market in 2020 under the umbrella of environmental, social and governance investing — double from the previous year, according to the study.

The downside, obviously, is that many green companies are still in the developmental stage, as compared to more established investment opportunities. High earnings projections can be paired with low revenues in the near term; some businesses might go bust. But if being eco-friendly is a way of life for you, green investing might be the next logical step.

Try Green Cleaning

Green cleaning can have many definitions, but the term in general refers to using methods that limit or eliminate toxins and waste in our home and environment.

Chemicals can damage the earth's water, air and ecosystem — to say nothing of our bodies. To avoid them, we might purchase a specifically designed green-cleaning product, or find a new way to use a naturally occurring item — like baking soda, lemons or vinegar.

Some of the easiest ways to make a positive environmental impact, however, don't involve buying anything at all: Efforts to reduce, repurpose and replace help limit the amount of waste going into local landfills. All of it works in tandem to focus on environmental responsibility, sustainability, safety and health. If you're interested in a less wasteful, safer and more efficient way of cleaning, here's a look at how you can make the process a little greener.

REPURPOSE

It's better to do stuff than to own stuff, so why not make fun projects out of green cleaning? Toothpaste can be produced with coconut oil, baking soda and a few drops of peppermint. Of course, you don't have to be crafty to



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repurpose. Try boiling cloves, cinnamon or other herbs instead of using air fresheners from the store. (Plants with broad green leaves also help filter interior air.) Start composting for a garden full of nutrients that also lessens our impact on the planet. If the idea of tossing paper towels — even the recycled kind — bothers you, try reusable bamboo towels. They're washable and rated for use literally thousands of times. Vinegar can be repurposed as a natural disinfectant, baking soda is an earth-friendly anti-fungal option and

anti-bacterial lemon juice is also a natural bleaching agent.

REPLACE

Energy Star-rated appliances are far more efficient than earlier models. LEDs use much less electricity than old-fashioned light bulbs. Tankless water heaters also save energy, since they only operate on demand. Even switching out regular soap and water for antibacterial cleaners is both a cost saving and green choice. Bacteria that survive the chemicals in those cleaners can become

so-called super germs.

REDUCE

Buy refills or concentrated versions of everyday products. It's often cheaper, of course, but you're also saving on packaging waste and the emissions from transport. Switch to low-flow shower heads, and run dishwashers on shorter cycles to save water. A big part of green living is lowering energy consumption — and much of it doesn't require a trip to any store. Turning off lights, unplugging appliances that are not in use, and limiting use of air conditioning

(especially when not at home) can make a notable impact.

Air inside your home or office can be more toxic than it is outside, especially when using chemical-based over-the-counter cleaners. (Modern insulation is great from an energy perspective, but also traps these substances in the room.) Keeping windows open as often as you can allows fresh air to circulate while pushing potential toxins out. Also consider making donations to charitable organizations that accept things you don't use, or sell them through online websites.

Keeping our World Clean

It's hard to imagine now, but littering is actually a very modern problem.

Manufacturers didn't start producing such a high volume of disposable material until the 1950s. Only then did packaging with plastic materials begin to become so widespread. Nevertheless, the impact was swift over a few short decades. Today, about 8 million tons of plastic waste is deposited into our oceans annually.

Arsenic from cigarette butts taints water and soil. Decomposing trash creates atmosphere-damaging emissions including the greenhouse gas methane, which is 28 times more potent than carbon dioxide, according to Ensia. The worst part: Littering is a personal choice.



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THE MOST COMMON LITTER

A culture of littering has grown as many underestimate the impact on our fragile environment. They may believe that these individual actions don't have broader implications, or that someone else will clean it all up later. But discarded rubbish is more than eyesore. It's an added expense for taxpayers through their local governments, and a threat to our planet's well-being.

Over time, some trash has become more common along the roadways and sidewalks of our nation than others. Keep America Beautiful, a non-profit

anti-litter organization, commissioned a study that found the most littered items included cigarette butts, food wrappers, plastic bottles, disposable cups, grocery bags, straws, beverage cans and tire and vehicle debris.

Litter is also produced at industrial and construction sites, but most of it comes from everyday activities. Motorists (53%) and pedestrians (23%) are the worst individual offenders, as they go about their busy lives.

WHY IT'S A PROBLEM

Chemicals and micro-parti-

cles escape as litter decomposes, damaging our air. Burning trash at local dumps can also release dangerous emissions. Respiratory issues and other health problems may follow, and this toxic stew can form the basis for acid rain. Litter can spread viruses, diseases and parasites. As much as 60% of water pollution has been blamed on trash.

Arsenic isn't the only danger from discarded cigarettes; they also contain deadly formaldehyde.

Animals are often the innocent victims in all of this. Researchers have said that as

many as 1 million animals die every year after eating or becoming trapped in trash. Plastic is the most common issue with marine life, as tens of thousands of dolphins, turtles, whales and fish drown. Floating particles can be eaten by birds, creating a lethal chemical concentration in their tissues.

SOLUTIONS FOR THE FUTURE

Taking a proactive stance on littering begins with making good personal choices. Properly dispose of all litter, while recycling and reusing all

that you can. Attend organized cleanup events, which help the environment and beautify local communities. Encourage leaders to increase the number of public garbage bins, and also to strengthen anti-litter regulations.

Everyone is more likely to follow the laws if there are serious consequences, both legal and financial. The risk in doing nothing is obvious, both to our world and to our pocketbooks: The EPA reports that some West Coast communities are spending more than \$520 million a year in the fight against litter and marine debris.

How to Start Composting

Consider composting like recycling, but for food and organic matter.

Create a similar routine, where you regularly gather and disperse leftover items, and you can quickly build and maintain a compost pile that will have a huge impact on your personal garden — and the planet. Here's a look at composting, including a definition, its impact and — most importantly — how to get started.

WHAT IS COMPOST

Basically, it's the green stuff and the brown stuff that you'd normally put down the disposal, toss in the trash, or rake to the curb. Green items would include vegetables, fruit and grass clippings. All of that provides needed nitrogen. Brown material, which provides carbon, includes dead leaves, branches and twigs. Finally, you'll need some water to help break everything down. Alternate brown and green items in layers for best results. Together, the pile will produce fungi and bacteria that transforms organic matter into a material that's nutrient rich and eco-conscious. Always start a new pile with a 6-to-8-inch layer of brown material on the bottom, since this will absorb moisture and keep everything well-aerated.

WHY COMPOST?

It provides an earth-friendly



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spot for excess waste, rather than adding to our already overburdened landfills. Composting helps reduce methane emissions, a key element in global warming. It helps enrich soil, minimizes diseases associated with plants, and can improve the productivity and general health of your garden.

Composters also don't rely on chemical fertilizers, which can have serious health impacts.

Keep in a mind that a good rule of thumb is to add roughly four times as much carbon-rich brown ingredients, in volume rather than weight, for each batch of nitrogen-rich green material.

GETTING STARTED

Find a dry, shady space near water to begin your pile. Add green and brown material as it's collected, making sure everything is chopped or shredded so that it breaks down more easily. Moisten anything that's dry, as the pile grows. Mix yard waste and grass clippings into the general pile. Establishing an

effective composting project can take anywhere from a couple of months to a couple of years, since leftover vegetables and fruit must be buried under 10 inches of material. Cover everything with a tarp in order to preserve moisture. The composting material is ready for use when it's dark in color from top to bottom.



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Greenest U.S. Cities

Sometimes, living green comes down to location, location, location.

It's often more difficult to recycle, for instance, in rural areas since they are not as likely to have municipal services. Even in larger metropolitan areas, some places are just greener than others. Here's a look at the greenest U.S. cities — and why.

ORLANDO

Think solar: Orlando decided to take advantage of an abundance of sunny days — a smart move, considering this Florida city averages more than 230 a

year. That's allowed the Orlando Utilities Commission, which manages the sprawling Ksionek Solar Farm, to set a goal for Net Zero carbon emissions by 2050. The city launched its second solar co-op in 2020, expanding a program that helps residents form groups to get bulk pricing on home installation of solar systems. A solar loan fund also offers cost-effective options for people in low-income areas who want to make earth-friendly improvements to their homes.

SAN DIEGO

This Southern California city is taking clean energy to the next level. San Diego has leveraged its abundance of sun, wind and water to a ranking of No.

2 on WalletHub's greenest cities list. This is the first U.S. city to pledge a 100% shift to renewable energy, and they intend to get there by 2035. San Diego has also made one of the nation's most impressive commitments to electric within its city fleet, installing more vehicle charging stations and reducing municipal power usage.

SEATTLE

There may not be an easier place to recycle. The fast-growing Seattle has long had a mandatory recycling ordinance, but they've taken the program one step further by operating a stand-alone composting facility for food scraps, grass clippings and leaves. Recycling tops 50% in the city, which

began requiring shoppers to bring their own reusable bags in early 2021.

WASHINGTON, DC

If you pack up to move here, don't worry about the car. The nation's capital has one of America's lowest percentage of commuters, and that was before they helped launch the bike-share movement. (The League of American Bicyclists now calls D.C. the most bike-friendly community in the U.S.) This is also one of the Top 10 most walkable large cities in the country, and offers some really cool destinations along the way: Besides the monuments and museums, Washington D.C. also has more farmers markets per 100,000 residents than any other city.