



Your Part for the Planet

How you can Save Money & the Planet
by Reducing your Carbon Footprint

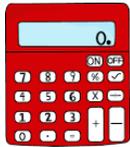
Small Actions Add up

350Deschutes.org

CUT YOUR CARBON and BE A CLIMATE CHAMPION

Pick and choose what's best for your lifestyle for 30 days...and see if you can make them a habit!

Set a goal: **20% is a good one**, but everyone is different



Calculate your footprint: (there are many calculators online if you don't like this one)

<http://coolclimate.berkeley.edu/calculator>

Union of Concerned Scientists also has an emission calculator for vehicles

<http://gas2.org/2016/02/18/check-out-this-emissions-calculator-from-union-of-concerned-scientists/>



**Want challenge ideas to inspire a group of friends or coworkers?
Go to carbonrally.com**

California Air Resources Board Pamphlet has 50 ways to Cut Pollution

http://www.arb.ca.gov/html/brochure/simple_solutions.pdf

Top Tips from Carbon Nation

<http://www.carbonnationmovie.com/take-action>



Cut Your Junk Mail

350deschutes.org

According to 41pounds.org, the energy used to produce, deliver and dispose of junk mail produces more greenhouse gas emissions than 2.8 million cars? **Contact 41pounds.org.** they will contact dozens of direct mail companies to remove your name from lists, including catalogs you specify. The cost is \$35 for everyone in your household for five years. For five years, they will update your service anytime you move, marry, change your name, or add new catalogs to your 'No, thank you' list. A **free option** that requires just a little bit more registering for everyone in your household, is at DMAchoice.org. This is a service of the direct marketing association which also will remove you from junk mail lists.

https://www.energystar.gov/ia/products/globalwarming/downloads/GoGreen_Activities%20508_compliant_small.pdf



Driving and Travel

- **Use Driveless Connect:** avoid single occupancy rides and earn REWARDS!
<http://www.drivelessconnect.com/>
- **Alternatives to driving.** When possible, walk or ride your bike in order to avoid carbon emissions completely
- **Drive a *low carbon* vehicle or an electric vehicle.** High mileage doesn't always mean low CO2 emissions. All vehicles have an [estimated miles-per-gallon rating](#). Electric cars emit no CO2 [if they're charged with clean electricity](#). [Here's why](#). After incentives and gas savings, it essentially costs nothing to switch to an electric car like the [the HYPERLINK "http://cotap.org/reduce-carbon-footprint/cotap.org/2014/10/california-hidden-gas-tax-advertisements/" Nissan Leaf](#). You can charge your electric vehicle off the grid if you set up your own solar panels. (depending on how much you drive, and the panels it would be and estimated 2 to 4 panels) The Union of concerned scientists say driving an electric vehicle costs \$3.41 per 100 miles (fuel only) Gas is \$12.61.

- **Electric vehicle incentives**

The Federal Tax Credit is \$7,500 and will stay until each carmaker sells a certain number of vehicles.

An Oregon bill passed in 2017 will offer \$2,500 in cash rebate. (different than a tax credit) A person of low income may also qualify for an addition \$2,500 if the car that is scrapped is 20 years or older.

In addition, there is likely to be an additional incentive coming out of the 2018 legislature as a result of the VW settlement. Its hoped that Oregon will set aside about 15% of this money for electric charging infrastructure.

- **Get a hitch-mounted cargo rack.** Don't buy a minivan or SUV if you don't need 4WD and/or will only occasionally need the extra space. A receiver hitch and a rack only cost a few hundred

bucks. Avoid roof-top boxes, which cost much more, increase aerodynamic drag, and decrease fuel economy.

- **Driving style.** Speeding and unnecessary acceleration [reduce mileage by up to 33%](#), waste gas and money, and increase your carbon footprint.
- **Tire inflation and other tuning.** Properly inflated tires improve your gas mileage by up to 3%. It also helps to use the correct grade of motor oil, and to keep your engine tuned, because [some maintenance fixes](#), like fixing faulty oxygen sensors, can increase fuel efficiency by up to 40%.
- **Avoid traffic.** Being stuck in traffic wastes gas and unnecessarily creates CO2. Use traffic websites and apps and go a different way or wait.
- **Misc.** Combine errands to make fewer trips. Remove excess weight from your car. Use cruise control. See more at: <http://cotap.org/reduce-carbon-footprint/#sthash.BpqQwTMS.dpuf>
- **General.** Avoid flying when possible, fly less frequently, fly shorter distances, and fly economy class.
- **Leisure Air Travel.** Take fewer and longer vacations that are far away, and more frequent and driveable “staycations” closer to home.
- **Work Air Travel.** Increase your use of video-conferencing tools like Skype and Facetime.



Computers

Shut it off instead of standby: Unplug your computer every night for one month. Unless it's unplugged, your idle PC still uses electricity. By unplugging your PC each night for a month, you will reduce your CO2 emissions by a total of 51 lbs. and your electric bill by estimated \$3.30. (depends on location/electricity cost) A SMART Powerstrip will help you do this. (\$30) Make sure you don't shut off your router and your virus protection scans are set to run when the computer is on.

Manage your PC power plan. Most PCs have power management features that allow users to configure electricity consumption by device. Typically, users are allowed to choose settings for when the equipment is fully operational and actively being used, and for inactive periods.

Depending on the manufacturer, a range of options are given, such as: - See more at: <http://www.ict-pulse.com/2011/04/5-ways-to-reduce-your-computing-carbon-footprint/#sthash.CzT23Bzl.dpuf>

Limit use of Screensavers

Monitor consumption. Get an app to monitor and manage the power consumption of PCs, with the aim of realising significantly lower electricity bills. Most are targeted at enterprise network environments, such as GreenTrac, Joulex and NightWatchman, but a few such as Granola are designed for the individual PC. - See more at: <http://www.ict-pulse.com/2011/04/5-ways-to-z>

There is also [Welectricit HYPERLINK "http://welectricity.com/home"](http://welectricity.com/home)y. Welectricity a social network that provides a free online service that helps its members track and reduce their electricity consumption at home. Welectricity is currently being used in 78 countries around the world. - See more at: <http://www.ict-pulse.com/2011/04/5-ways-to-reduce-your-computing-carbon-footprint/#sthash.CzT23Bzl.dpuf>

Buy Greener Electronics: Heres a Guide:

<http://www.greenpeace.org/international/en/campaigns/detox/electronics/Guide-to-Greener-Electronics/>



Reduce Your Home Energy Carbon Footprint

Homes and Commercial buildings each contribute about 20% to carbon emissions. Solarize if you can. Become more energy efficient and you'll save money and help the planet.

Oregon Solar incentives are listed here: <http://solaroregon.org/how-to-go-solar/solar-electricity-for-home-owners/tax-credits-and-incentives-to-go-solar-electric/>

- Schedule a Home Energy Inspection. Greensavers or Neil Kelly are those in our area.
- **Insulate and seal your home.** Reduce drafts and air leaks with caulk, insulation, and weather stripping. Oregon Energy Trust offers programs and incentives to help.
- **Do an energy "walk around"** **Do you need all those appliances plugged in all the time?** Unplug those and replug only when they need a charge.

Heating/Cooling

- Reduce your heat by no more than 3 degrees if you leave for a short period. Cut down to 58 degrees for an extended period. If you have a heat pump, more than a 3 degree increase really ramps up energy use.
- Convert to an electric heat pump. Oregon Energy Trust now has rebates. And when you Solarize, you'll save a lot of money.
- Open your shades and curtains in winter for solar heat, shut them during the summer to keep it cool. Use energy efficient window coverings.

Window work helps too. Keep them open when its cool, shut them as soon as the outside air warms up.

- Make sure your vents aren't obstructed by furniture, carpet or drapes.
- Lower your thermostat 2 degrees in winter, raise it 2 degrees in summer. You'll probably not notice the difference.
- Maintain your heat/cooling system. Replace air filters regularly so they're not a drag on the system.

Window Coverings

Keeping sun out in summer and “on” in winter can help your energy bills. Choose options that best meet your needs.

<http://energy.gov/energysaver/energy-efficient-window-treatments>

<http://www.consumerreports.org/cro/news/2013/07/how-to-use-your-shades-blinds-and-curtains-to-beat-the-heat/index.htm>

Cooling:

- If you have a AC unit with FREON, contact EnergyTrust to see about replacing it. Freon is a harmful CFC that has much more global warming potential than gasoline in our cars. Other appliances that have toxic CFC or HCFC’s are refrigerators, freezers, or chillers.
- Get ceiling fans. They reduce room temperatures up to 15 degrees and circulate heat better in winter too. This will save you money in all seasons.

Phantom Power

Minimize vampire gadgets that require a transformer that is always sucking power when its plugged in, even when “off”. Get a kilowatt meter and you’ll see how much they use.

Appliances. Make energy efficiency a primary consideration when choosing a new furnace, air conditioning unit, dishwasher, or refrigerator. Products bearing the [ENERGY STAR](#) label are recognized for having superior efficiency. Your Dryer is the least efficient appliance in the home. Use a rack dryer as much as possible.

- **Turn it OFF, or UNPLUG it.** Turn off lights you’re not using and when you leave the room. Replace incandescent light bulbs with compact florescent or [LED](#) lightbulbs. Get a **SMART power strip** that you can use to switch off several devices at one time. Get 16 Free LEDS installed by visiting BendEnergyChallenge.org
- **Thermostat.** Don’t set it too high or low. Install a programmable model to turn off the heat/air conditioning when you’re not home. Use power save switches on appliances.
- **Solar.** Add solar panels to the roof of your home. This costs a little more than the above options, but many providers offer financing options which minimize upfront costs. Go to solarpowerrocks.com for leasing options or Oregon Energy Trust for purchasing options. (it is usually better to buy your panels, but you can still save on your energy costs when leasing, along with no upfront costs on certain programs.)

Small Business? Watch the video

<https://energytrust.org/commercial/equipment-upgrades-remodels/evaluate-your-business/> Tips and Rebates from the Energy Trust.



Smartphone Use

Emarketer estimates that 2 billion people will have cellphones by 2016. Consider the energy reductions if many of these users start to reduce energy by just creating new habits of use.

- Use your cellphone instead of your laptop, internet TV, Xbox, or your desktop computer. The smartphone can do all of those things with less energy.
- Unplug your charger from the wall when the phone is fully charged. Don't leave it plugged in overnight. This is also hard on your battery.
- Power Off Your Phone Entirely
- If you're in a movie, an airplane or somewhere else you know you can't be reached, why not power off your phone? Just keeping it on vibrate uses its battery when you don't need it. Your voicemails and texts will come later. **DONATE** your phone so it can be recycled instead of ending up in the landfill where its toxic contents pollute our water supply. Someone probably needs it elsewhere. Two that accept phones are [Lifeline for Africa](#) and [Woodland Trust](#). Ask your local cellphone company to recycle to these nonprofit organizations instead of dumping phones into the landfill.
- Use Your Phone's Alarm Clock Unplug and retire your traditional alarm clock at home and use your cell phone for this function instead.
- Use Your Phone's Backlight at Night when you get up, instead of a night light.



How Food Choices Can Shrink your Footprint

<http://shrinkthatfootprint.com/shrink-your-food-footprint>

<http://www.greeneatz.com/foods-carbon-footprint.html>

- **Lamb, beef, pork, farmed salmon, and dairy generate the most greenhouse gases.** . It takes a lot of resources to raise cows. Some way that these food sources contribute as much carbon as automobiles.
- **Go Meatless two or more days weekly.** You will reduce your carbon dioxide emissions by 13.2 lbs.
- **Eat locally-produced and organic food.** It has been estimated that [13% of U.S. greenhouse gas emissions](#) result from the production and transport of food. Transporting food requires petroleum-based fuels, and many fertilizers are also fossil fuel-based. Heres

a chart showing various foods: <http://www.ewg.org/meateatersguide/a-meat-eaters-guide-to-climate-change-health-what-you-eat-matters/climate-and-environmental-impacts/>

- The United Nations states that eating meat is unsustainable. Try to modify your diet over time so that your food includes mostly low carbon choices.

At the Coffee shop

By using your own coffee cup, you will reduce your CO2 emissions by a total of 1.25 lbs weekly, by passing on plastic tops and paper cups. Buy a reusable mug.

Pack Waste-Free Lunches

By packing waste-free lunches for one month, you will reduce your CO2 emissions by 44.6 lbs and can save money too.

Avoid Bottled Drinks

Avoiding bottled soda, tea, and sports drinks will reduce your CO2 emissions by 25.7 lbs for the month.

At the Grocery Store

- Bring reusable bags and containers when shopping, traveling, or packing lunches or leftovers.
- Choose products that are returnable, reusable, or refillable over single-use items.
- Avoid individually wrapped items, extra packaging, snack packs, and single-serve containers. Buy large containers of items or from bulk bins whenever practical.
- Avoid buying at big box stores that encourage lot buying. Sometimes this means that you might purchase in large quantities that are likely to reach their expiration date before you get a chance to use them. Be aware of double-packaging - some "bulk packages" are just individually wrapped items packaged yet again and sold as a bulk item. Sometimes you'll fill up a small garbage can just from one bulk package, after it takes you three days to open it up!
- Purchase items such as dish soap, hand lotion, shampoo, and laundry detergents

Grow Your Own

There are so many easy to grow vegetables and herbs, even for shady areas. Reuse your plastic containers and plant them, hang them off your apartment balcony, or use a bed in your front or backyard.

Composting

If you do grow flowers or food, consider composting. Even a covered quart jar can be your "kitchen compost" that includes coffee grounds and chopped vegetable waste (no meats or fatty foods) Worms love coffee grounds and your soil will become very fertile.

<http://www.diynatural.com/kitchen-compost-bucket-diy-easy-and-frugal/>



All About Waste

Cut Your Plastic Use

Plastics are on par with the annual emissions of 19 million vehicles (Stanford) Worldwide, we consume approximately 100 million tons of plastic yearly. From the EPA's more conservative estimate to the more liberal one, that's 100 million-500million tons of carbon dioxide emitted For 5 plastic bags you get roughly 1 kg of CO₂, which includes the petroleum used in production and burning.

Plastic is made of petroleum it's full of chemicals, which leach into our soil and water, plus animals are eating it and dying, especially in the ocean. Get reuseable, washable bags to pack your produce and buy more from the bulk section at the store. (available at Central Oregon Locavore, and Whole Foods Market)

Recycling only accounts for about 30% of Plastics production emissions.It is better not to use plastic, period.

Move Towards Zero Waste

- Bring your own take home containers to the restaurant.
- At your own sponsored events, encourage people to bring their own flatware, cups, and dishes.

Your food choices determine emissions too. Buying local returns some 40% of proceeds back in the local economy. Avoid products that are shipped long distances.

Products You Purchase

- Buy items made of recycled content, and use and reuse them as much as you can. For instance, use both sides of every page of a notebook before moving on to the next clean notebook. Use unneeded, printed on printer paper for a scratch pad. These items
- Also, remember that **buying in bulk** rather than individual packages will save you lots of money and reduce waste! Packaging makes up 30% of the weight and 50% of trash by volume. Buy juice, snacks, and other lunch items in bulk and use those reusable containers each day.
- Avoid “multiple” packaging from big box stores.

Buy SecondUse Materials

Every item purchased has a carbon footprint. If you shop secondhand, you'll pay less and reduce carbon.



Water Use

Pumping water requires energy. Water scarcity may be a big part of our future.

- **Substitute Native Plants for Lawns**

Do you require a thirsty green lawn? Plant native plants and you'll find more birds flock to your yard and you'll cut your water bill at least 30-40%.

- **Reuse water:** install rain barrels to water your plants. Don't leave the water running while you wash.

More Links

Listen to CarbonFreeda's Powerup on KPOV Bend, 88.9, High Desert Community Radio. 1st and 3rd Fridays at 9:30am, or listen to the PODCAST. You'll learn new ways to save money while you help the planet, get Climate News,

Want more details on these cut your carbon challenges? Visit Treehugger.com, carbonrally.com, cotap.org

http://learning.blogs.nytimes.com/teaching-topics/global-warming/?_r=0#carbon

25 Ways to Reduce your Carbon Footprint <http://cotap.org/reduce-carbon-footprint/>

<http://cotap.org/reduce-carbon-footprint/#sthash.BpqQwTMS.dpuf>

Calculate Your Electricity Use: Micheal Bluejay has a great website for estimating:

<http://michaelbluejay.com/electricity/howmuch.html>

Strategy	Up front cost	Savings per year
(1) Use space heaters to heat only the rooms you're in (rather than a central system that heats the whole house), and turning off the heat when you're not home.	\$80	\$1023
(2) Use ceiling fans instead of the air conditioner	\$100 if you don't already have ceiling fans	\$438
(3) Turn off lights you're not using	\$0	\$274
(4) Use a clothesline or a laundry rack instead of a dryer	\$20	\$196

(5) Sleep your computer when you're not using it	\$0	\$178
(6) Wash laundry in cold water instead of hot or warm	none	\$152
(7) Turn off a single 100-watt light bulb, from running constantly	\$0	\$131
(8) Replace ten 60-watt light bulbs with compact fluorescents	\$32	\$123
Total	\$232 once	\$2515 every year

Businesses

Get the **Pacific Power Toolkit** to help you calculate your energy savings:

<http://members.questline.com/ToolsYouCanUse.aspx>