

## Environmental Action Steps for Elkin Presbyterian



- 1. Adjust your thermostat**

The bad news: about 42 percent of your household energy costs go toward just two things - heating and cooling. The good news: you have a lot of room to make a difference and even small changes can make dramatic improvements in household fuel efficiency. Automatically lower your monthly energy bill by giving your heat and air conditioning a break while you are asleep or out.
- 2. More about your heating and cooling...**

Replacing older heating and cooling systems with new efficient models can cut your annual energy costs by 20 percent. If one in 10 households serviced heating and cooling systems annually, cleaned or replaced filters regularly, used a programmable thermostat and replaced old equipment with ENERGY STAR models it would prevent the emissions of more than 17 billion pounds of greenhouse gases.
- 3. More thermostat tips...**

Turn the thermostat down 3 degrees in the winter and up 3 degrees in the summer. You won't notice the change, but the earth will! In the summer a reasonable comfortable level for keeping the area is 76-80 degrees. For each degree that the thermostat is raised it can result in 3% savings on cooling. In the winter the comfortable level is 68-72 degrees. You can also save in the winter by setting it down even lower at night and use extra blankets when sleeping.
- 4. Another heating thought...**

Tune up your heating system. By keeping your furnace clean, lubricated and properly adjusted, you can save up to 5 percent in heating costs. Clean vents, close unused vents, and change filters in the vents. Again, just these simple things will save you up to 5 percent in costs.
- 5. Recycle**

This seems obvious, especially in Elkin where recycling is a piece of cake. However, we often forget the benefits. Recycling saves a huge amount of energy needed to make new products. Make an effort to fill your recycle bin more than your trash can!
- 6. Replace a worn-out refrigerator with an Energy Star model**

The US would need 30 less power plants if all Americans used the most efficient refrigerators. Visit EPA's Energy Star Website to see a list of energy efficient appliances. If your refrigerator is near a heating vent, or always in the sun, then change the location, cover up the heating vent near it or cover the window.
- 7. More refrigerator tips...**

Clean the condenser coil. This one, very simple thing can improve the efficiency of your refrigerator reducing your annual energy costs by \$20. After that, turn on your "energy saver" switch near the thermostat if you have one.
- 8. Turn your computer off overnight and put it into a power save mode**

A standard monitor left on overnight uses enough energy to print 5,300 copies (yes, even with a screensaver). While you're at it, turn off or unplug all your devices before bed; even your cell phone charger uses energy with or without a cell phone plugged into it. Also, FYI, some of the new, really big HD TVs can use two-to-three times the electricity of a regular TV. According to the Natural Resources Defense Council, these huge TVs use as much as 500 kilowatt hours per year and could cost you \$300-\$500 in electricity costs over 10 years.

9. **Efficient lighting**  
Install lighting controls to turn lights on only when needed and to provide the required amount of light. Sensors and computer-based dimming controls can provide significant savings in energy costs, up to 80 percent. LED and fluorescent lights are much more efficient than incandescent bulbs.
10. **Wash clothes in cold or warm water**  
Skip the hot water on 2 loads per week. You'll save energy and should have less wrinkled clothes. Ninety percent of the energy used in operating a washing machine goes toward heating the water that washes and rinses the clothes. The clothes will be just as clean, and you'll cut energy use.
11. **Dry your clothes the natural way**  
Don't over-dry your clothes, or don't dry them at all. Using free solar and wind energy instead of a dryer can prevent the emission of 1,500 pounds of greenhouse gases every year, while saving a family of four up to \$100 a year. The benefits don't end there. Line-dried clothing lasts longer because it's not repeatedly banging around in a tumbler, and, for the same reason, there's no static cling. Fresh air naturally sweetens clothing, towels and sheets -- no perfume necessary -- and the sunshine gently bleaches and whitens.
12. **Turn down the hot water heater**  
Either turn the hot water heater down to 120 degrees, or turn on the "energy conservation" setting. Some manufacturers set water heater thermostats at 140 degrees when most households only require them at 120 or 115 degrees. For each 10 degrees reduction in water temperature, you can save 3-5 percent in energy costs. Install a timer on your water heater to turn off at night and on just before you wake up in the morning.
13. **Insulate and seal.**  
Add an extra layer of insulation to your roof or walls, and use caulking, foam or weather stripping to seal cracks around windows, light fixtures or electrical outlets. If it's in the budget upgrade the windows. Old windows allow much more air to enter the house than new energy efficient insulated windows. Also, buy insulation at a local store and insulate your hot water heater and pipes.
14. **Cut down on dishwasher use**  
When possible, wash a few dishes by hand. Over time, that will save a few loads in the dishwasher, conserving energy. Don't pre-rinse dishes. Today's detergents are powerful enough to do the job. Finally, wait until you have a full load to run the dishwasher, and air dry instead of using the heated dry feature.
15. **Pack a "Waste-Free" lunch**  
Use a re-usable lunchbox, reusable containers, a thermos for your drink, cloth napkin, and real silverware. Compost all your organic waste. The best way to reduce garbage is to not create it!
16. **Become a smart water consumer.**  
Install low-flow showerheads and faucets and you'll use half the water without decreasing performance. Reuse household water to give your plants a drink. Please avoid bottled water. All those discarded bottles are unnecessary and a burden on the environment.
17. **Use compact fluorescent bulbs**  
It's a bright idea to replace 3 incandescent bulbs with fluorescent bulbs that last up to 10 times as long and use 1/4 of the energy. Although they are a little more expensive at the outset, 5 ENERGY STAR light bulbs will save your household at least \$150 over their lifetime. Here's the impact. If every household in the U.S. replaced a burned-out bulb with an energy-efficient, ENERGY STAR qualified compact fluorescent bulb, the cumulative effect is enormous. It would prevent greenhouse gas emissions equivalent to that from nearly 800,000 cars. It would also save enough energy to light 2.5 million homes for a year.
18. **Go organic**  
Even with our vast reservoir of scientific knowledge about farming, most American farmers still spray a billion pounds of pesticides to protect crops each year. Now here's the kicker: when chemical pesticides are used to kill pests, they can also kill microorganisms that keep carbon contained in the soil. When the microorganisms are gone, the carbon is released into the atmosphere as CO<sub>2</sub>. And when those organisms are gone, the soil is no longer naturally fertile and chemical fertilizers become a necessity, not a luxury.
19. **Other food tips**  
Eat locally grown food. If the food doesn't have to travel far, there's less CO<sub>2</sub> from the trucks that ship it.

There are a number of great farmer's markets in the area. Also, eat fruits and vegetables in season. That saves the enormous transportation costs too.

20. **Even more local produce**

Plant your own vegetable garden. It's not as hard as you might think. Composting all organic waste will help to reduce the greenhouse gas emissions (such as methane) associated with landfills, plus the soil is amazing.

21. **Plant a tree, protect a forest.**

Protecting forests is a big step on the road to curbing global warming. Trees "breathe in" carbon dioxide, but slash-and-burn farming practices, intensive livestock production, and logging have destroyed 90 percent of the native forests in the United States. And you can take action in your own backyard — planting shade trees around your house will absorb CO<sub>2</sub>, and slash your summer air-conditioning bills.

22. **Eat less meat**

A plant-based diet generally requires less land, energy, and other resources. It takes 78 calories of fossil fuel to produce 1 calorie of beef protein, 22 calories for 1 of poultry, and only 1 calorie of fossil fuel for 1 calorie of soybeans. It also takes 3 to 15 times more water and 3 to 15 times as much grain to eat meat rather than plants. Our soil and forests also suffer greatly because of meat consumption.

23. **Buy recycled products**

This may sound simple, but it takes less energy to manufacture a recycled product than a brand new one. Producing new paper, glass, and metal products from recycled materials saves 70 to 90 percent of the energy and pollution, including CO<sub>2</sub> that would result if the product came from virgin materials. So if you and every other consumer buy recycled products, you'll help create a market, and conserve energy along the way. Because many manufacturers don't go out of their way to tout their recycled products, you should know that aluminum and tin cans, glass containers, and pulp cardboard have a fair amount of recycled content. So buy away!

24. **More about recycled products...**

Recycled products can often be considerably cheaper than non-recycled products. Most recycled paper products are of comparable quality and cost competitive with virgin paper products. Finally, before you buy, check to see if the product or its packaging can be recycled. The recyclable logo (three arrows forming a triangle) is fairly common now. Recycling a stack of newspapers only 4 feet high will save a good-sized tree.

25. **Set climate change goals with your family**

Aim to reduce your impact on the earth in measurable ways. Choose goals that are realistic, statistical, specific, and time-bound. Maybe you can reduce your electricity, gas, or gallons of fuel by 20% next month!

26. **Build friendly**

If you are building or remodeling your home, consider using some of the following earth-friendly materials in the process: straw bale/adobe, bamboo, natural linoleum, previously used wood, cob, composite decking, green roofs, and/or sustainably harvested wood. There are many resources at the library and online about sustainable building; it's almost trendy even!

27. **Be a minimalist**

It may be difficult, but in today's consumer economy, an easy way to conserve energy is to simply use - and buy -- less. Every time you buy something, energy has gone into getting that product to you. So the less you buy, the more you save energy-wise. It's a simple equation. This may, in fact, be the single biggest way to make a dent in the global warming problem. Again, we know it sounds obvious, but buying less things - some of which you just don't need - changes the energy equation across the board, on every single consumer product. If everyone used less, the impact would be large indeed.

28. **More about being a minimalist...**

Buy in bulk. In short, bulk items use less packaging, which translates into less energy. Always try to avoid disposable products with lots of packaging. Also, you can reuse and recycle many packing materials. For example, call the Plastic Loose Fill Council's "peanut hotline" at 1-800-828-2214 to find out the nearest place to recycle your packing peanuts!

29. **More about being a minimalist...**  
Buy one of something, not 21 of something. You don't need 21 pairs of shoes if one pair works just as well. Go through your closet. Donate or recycle what you really don't need, then make a pledge not to replace everything you just got rid of.
30. **More about being a minimalist...**  
Buy quality products that will last longer. Over time, you'll obviously buy fewer products that way. Be a conscientious consumer: [www.gaiam.com/greenmarketplace](http://www.gaiam.com/greenmarketplace) and [www.buygreen.com](http://www.buygreen.com) can help. Stores like the Food Conspiracy Food Co-Op on 4<sup>th</sup> avenue, Wild Oats, Trader Joes, and many local stores are also great.
31. **More about being a minimalist...**  
Be creative in what you use for work, play and leisure. You don't always have to buy new products for activities. Re-use in creative ways. Check out the book *Choose to Reuse* by Nikki and David Goldbeck for over 2000 ideas. A few examples: buy used books instead of new, bring your own shopping bags to the store.
32. **Reduce paper usage**  
Share magazines and catalogs by donating them to hospitals, clinics and doctors' offices or by creating an informal program in which you rotate magazines and catalogs among your neighbors. Also, you can save trees by freeing yourself from junk mail in three basic steps! See [www.newdream.org/junkmail](http://www.newdream.org/junkmail).
33. **Drive a hybrid or fuel efficient car**  
Save the environment and money by driving a car that gets at least 32 MPG. The sad truth is that a gas guzzler emits as much CO<sub>2</sub> as some homes! That's the bad news. The good news is that anything you can do to improve the fuel efficiency of your car will have an impact. On average, a passenger car emits 11,400 pounds of CO<sub>2</sub> each year while a home emits 9,000 pounds of CO<sub>2</sub> per person each year in the United States. Horribly inefficient SUVs, minivans and pickup trucks now make up more than half of the cars on American roads. Even improving fuel economy from 20 miles-per-gallon to 25 miles-per-gallon would prevent 10 tons of CO<sub>2</sub> from being released over a vehicle's lifetime.
34. **Drive 15 miles less each week.. BIKE!**  
Shrink your gas costs and your waistline by walking, biking and taking public transportation. Drive less. Every year, Americans as a whole drive more miles than they did the year before. Stop this trend. Telecommuting and public transportation are great options. Leaving your car at home two days a week will reduce your CO<sub>2</sub> emissions by 1,590 pounds a year. Even piling multiple errands into one trip helps and if you can walk instead of drive, even better. Tucson is one of the best biking cities in the country; there's no excuse not to try it!
35. **Avoid idling and drive smooth**  
Give your engine and the climate a break by turning off your car when you aren't moving... except in traffic or at a stop light of course. Try to cut out 10 minutes of daily idling. Also, avoid unnecessary acceleration and braking. Plan your routes to avoid sitting in traffic.
36. **Other fuel efficiency tips**  
Keep your tires filled. Your ride will be smoother and you'll save up to 5% on your fuel tab. Run your AC less. Replace your air filter. Get your car tuned up. Drive under 60 mph. Remove excess weight from your car, and don't pack things on top.
37. **Have car-free days**  
Encourage family, friends, and colleagues to commit to taking alternative modes of transportation for their daily commute at least once a month. This can include options such as car-pooling, cycling, taking public transit or walking where possible. Visit Go Green ([www.gogreen.com/choices](http://www.gogreen.com/choices)) to help reduce vehicle trips to the workplace and around town.
38. **Travel less for work**  
Reduce your workplace's environmental impacts from air travel by using video-conferences for meetings. Your family will thank you for staying home!
39. **Recycle at work and schools**  
Create a recycling program and decrease paper use. Since Tucson's recycling is great, this shouldn't be difficult. Encourage the people around you to recycle and make sure recycle bins are as convenient and plentiful as trash cans, and that they have lists of recyclable materials posted on them. [www.tucsonrecycles.org](http://www.tucsonrecycles.org) has those lists for you.

40. **Make your workplace more environmentally friendly**  
 Visit Cool Companies (<http://www.cool-companies.org>) or Power Smart for businesses (<http://www.bchydro.com/business>) to find out how your company can cut pollution and save money with clean, efficient energy technology. One idea includes buying energy-saving models of office appliances and equipment.
41. **About air travel...**  
 Although aviation is a relatively small industry, it has a disproportionately large impact on the climate system. It presently accounts for 4-9% of the total climate change impact of human activity. But at a time when we urgently need to reduce our greenhouse gas emissions, emissions from aviation continue to grow. For example, since 1990, CO<sub>2</sub> emissions from international aviation have increased 83%. The aviation industry is expanding rapidly in part due to regulatory and taxing policies that do not reflect the true environmental costs of flying. 'Cheap' fares may turn out to be costly in terms of climate change.
42. **Earth-friendly travel tips**  
 Consider taking a vacation closer to home. You'll save money and avoid the stress of airport security, travelling to and from the airport, and sitting in those tiny seats. Most of us live in places that tourists from elsewhere visit, so take a holiday in your hometown or region and find out what it has to offer.
43. **More travel tips...**  
 Use other modes of transport where possible. Trains and buses, for example, are much more energy efficient than airplanes, and for regional trips can even be faster when airports are factored in. Even cars can be more efficient than planes --especially with more than one passenger.
44. **More travel tips...**  
 Take advantage of technology! Use video-conferences for meetings. Companies like Swiss Re and IKEA are using video-conferencing to reduce business air travel. Companies benefit from reduced costs, and more efficient decision-making about travel. Employees avoid the stress of travelling and time away from home and family. Use webcams to keep in touch with family and friends who live far away.
45. **Flying friendly...**  
 Try to minimize the number of flights you take by combining trips. For example, book more than one meeting in your destination city, so you don't need to fly there several times. Combine business trips with vacations (but make sure to split your time... don't work and play simultaneously!)
46. **Flying friendly...**  
 Fly during the daytime, because studies have shown that flights taken at night have a greater impact on the climate. Fly economy, because more people per plane mean fewer emissions per person. Pack light, because lighter planes mean less fuel is burned.
47. **Flying friendly...**  
 Purchase carbon offsets to account for the emissions from your flight. If the airline or travel agent you are using doesn't currently offer its customers the option of offsetting their flights, ask them to consider it. For example, when you book flights with Expedia, there is an option to buy a carbon offset "Terrapass" for as little as \$5.99. Definitely worth it.

**Sources:**

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