

Energy Action Challenge

The Ecology Club would like to challenge you to be more “Earth-friendly”. Using energy wisely is a learned behavior. It begins with the efforts of each individual at home, at work, and around the world. The way each person uses energy today will impact the availability of natural resources necessary for energy production in the future. Everyone is concerned about the environment, natural resources, and what the future of the Earth will be if prudent and wise choices are not made today. Through education, individuals will learn to modify their behavior, and consider energy alternatives that will result in greater energy efficiency and greater awareness of responsibility.

“Waste Not – Want Not!”

- ❑ It takes 20 times more energy to make an aluminum can from new materials than from recycled materials.
- ❑ Making an aluminum can from recycled materials creates 95% less air pollution than making it from raw materials.
- ❑ For every ton (2,000 pounds) of paper we recycle, we save 7,000 gallons of water from requiring chemical treatment.
- ❑ Half the garbage that is thrown out each day could be recycled. That is enough to fill a football stadium from the playing field to the top row of spectator seats.
- ❑ More than 4 million plastic bottles are used every hour. But only one bottle out of four is recycled.
- ❑ More than 4 million tons of office paper is discarded each year. That’s enough to build a 12 foot high wall of paper from the Atlantic to the Pacific Ocean.
- ❑ The junk mail delivered to households every day could produce enough energy to heat 250,000 homes for one day.
- ❑ Making glass out of recycled materials cuts air pollution by 14-20%.
- ❑ Every year enough energy is saved by recycling steel to supply Los Angeles with nearly a decade’s worth of electricity.
- ❑ For every \$1000 of fast food sales, 200 pounds of trash is created.
- ❑ As much as 90% of the energy consumed by washing machines goes to heating the water.
- ❑ Dust on a light bulb or dirt on a glass fixture can reduce the light it gives off by 10% and make it seem that you need a brighter, higher wattage light.
- ❑ A quart of motor oil can pollute 250,000 gallons of water.
- ❑ The world will need twice the raw materials in 2020 to maintain the same level of oil use that we consume today, and that will require discovering as much oil in the next 10 years as has been found in all of history!!

Easy Ways to Save the Earth

1. Turn down your water heater. For every 10 degrees, you save 6% of the energy used. The recommended setting is 140° Fahrenheit.
2. Fill a milk jug with rocks and place it in your toilet tank. You can save between 3,000 and 5,000 gallons of water a year. Don't use a brick—bricks can dissolve and clog up the water system.
3. Keep your car's tires properly inflated. You will increase gas efficiency by up to 5%. About 50% of cars have under-inflated tires. If they were all inflated properly, we could save up to 2 billion gallons of gasoline a year and prevent up to 40 billion pounds of carbon dioxide—the primary greenhouse gas—from entering the atmosphere.
4. Eliminate waste before you buy. Packaging accounts for about one-third of all the garbage sent to landfills. Buy eggs in cardboard containers. Buy beverages in recyclable containers. Glass and aluminum is recyclable, but not all plastics, so look for the recycling symbol.
5. Always recycle cans, glass, and paper. The energy saved from one recycled aluminum can will operate a television set for three hours.
6. Replace a regular incandescent light bulb with a compact fluorescent light bulb. It uses a quarter of the energy and will last ten times longer. And it will keep a half-ton of carbon dioxide out of the atmosphere over the life of the bulb.
7. Buy rechargeable batteries for household use. Two billion disposable batteries are used every year and 75% of them contain mercury, a highly toxic substance that can leak from landfills into soil and ground water.
8. Set the blades higher on your lawn mower and cut grass two or three inches high. This encourages the roots to grow deeper and helps to retain moisture in the soil, requiring less water.
9. Take reusable grocery bags to the store. It takes a 15-year old tree to produce 700 plastic grocery bags, and grocery shoppers use billions of bags each year.
10. Install a low-flow shower head. A family of four can save 17,000 gallons of water a year.
11. Return expired and unused medication to your local police/fire department—no questions asked. The medication SHOULD NOT be flushed down the toilet. Put the pills or liquid in a Ziploc bag. Recycle the plastic container/bottle the medication came in.
12. When replacing old smoke detectors, return them to the company that made the device. Don't recycle them or put them in the garbage. Smoke detectors have a small amount of hazardous radioactive material called Americium. Let the company handle the disposal of this chemical.