

“How Energy Powers the Planet”
By Kayli Hall

Does energy use affect you? Are there ways to conserve energy without dramatically altering your lifestyle? The answer to both of these questions is yes. Let us examine how the Earth’s natural processes create energy, how their use effects the environment, and how we can be efficient stewards of our energy resources.

First, how do natural processes create the energy that powers your world? Wind, an atmospheric process, turns the blades of turbines driving an electricity-producing generator. Hydropower, a hydrosphere process, often uses hydroelectric dams capturing the gravitational energy of falling water for electricity. Geothermal energy uses molten rocks coming into contact with water, producing steam and hot water that generates electricity. Ethanol, a plant from the biosphere, is burned to create energy.

Next, how can energy use effect our environment? Though wind, water, rocks and plants are part of the Earth’s natural processes, using them still affects the environment. Wind turbines can kill birds that fly into them. Hydroelectric dams change the ecosystem in the rivers where they are located. Geothermal energy alters the atmosphere by releasing heat and gases. Ethanol has emissions that contribute to air pollution. Although using these natural processes affects the environment, they have a significantly smaller environmental impact when compared to other, non-renewable energy sources.

Finally, how can we be efficient stewards of our energy resources? An important way to be a responsible steward is to conserve energy. Conserving energy does not have to mean purchasing solar panels or driving a battery-powered car. Even small changes can make a difference, such as minimizing your travel by combining trips and carpooling with friends. Other options include recycling, turning off lights in unoccupied rooms, or buying energy efficient light bulbs. These ideas are easily implemented, but make a real difference in energy consumption.