

Five interesting things about energy

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Water rushes through a dam in Georgia. Inside the dam is a hydropower plant. It turns the water's energy into electricity.
Photo by: U.S. Army Corps of Engineers.

Energy is the ability to do work. Another word for it is "power."

Energy is what makes things move, work and grow. It gives us light in our schools and homes. It fuels our cars and buses, too.

Most of our energy comes from materials deep in the earth. Examples are coal and oil. These are nonrenewable sources of energy. Once we use all of them, they will be gone forever.

There are other sources of energy, though. They are known as renewable energy sources. Wind, water and sunlight are examples. We can capture their energy. Then, we can turn that energy into heat and electricity.

Renewable energy sources will not run out. If we use them to power our lives, we will always have energy.

Here are five fun energy facts.

Coal Makes Almost Half Of All Electricity In The U.S.

Coal makes almost half of all electricity in the United States. There are three main steps in making power from coal. First, coal is burned in a power plant. The heat makes steam. The steam moves a turbine, which makes electricity.



Burning coal is harmful to the planet. Coal plants make a gas called carbon dioxide. It is one of the main causes of global warming. Global warming means the Earth is getting hotter. The change in temperature changes our planet forever. For example, the oceans warm up. Sea levels rise, too. These changes can be harmful. They make life difficult for animals, plants and people, too.

Flowing Water Has Energy

Rivers are powerful. Their flowing water can be used to make electricity. That is because the flowing water has energy.

Hydropower is electricity from the flow of water. Today, every state uses hydropower. Some states use it more than others. More than half of the electricity in Washington state comes from hydropower.

The U.S. Uses Wind To Make Lots Of Electricity

Wind is another source of energy. Using the wind for energy started thousands of years ago. Long ago, people used windmills to capture the wind's energy. Today, we use big wind turbines. Some of these turbines are hundreds of feet tall.



The United States uses wind to make lots of electricity. So do other countries, such as China, Germany and Spain.

The Sun Is A Powerful Source Of Energy

The sun provides more energy than the world uses. Every day, it hits us with thousands of times the total energy used across the world. That means the sun is a powerful source of energy. Solar power is another way to make electricity or heat.

The U.S. space program has used solar power for many years. In the 1960s, scientists launched a spacecraft called Vanguard 1. Its flight was powered by the sun. This spacecraft is still in orbit today.

Waste Can Be Reused

Believe it or not, a lot of waste can be reused. The waste we flush or throw away breaks down. It makes a gas called methane. Scientists can trap that gas. They can use it to make electricity.

Doing this helps the planet. Like carbon dioxide, methane adds to global warming. If we use methane instead of releasing it, we will keep it out of the air around Earth. This is better for the planet.