Renewable Energy

It is hard to imagine going one day without **electricity** or gasoline. However, much of the power produced and consumed throughout the world comes from sources that will soon run out. **Renewable energy sources** can never be used up. The world is starting to use renewable power instead.

Non-renewable vs. Renewable

Energy can be produced from two different categories of sources. Some energy sources are **non-renewable**. They are limited and will eventually be used up. Non-renewable resources include **coal**, **oil**, **natural gas**, and **uranium**. Renewable energy sources include wind, sunlight, and water.

Benefits of Renewable Energy Sources

Renewable energy sources will not run out. We can get enough energy from the sun to power all our buildings and cars forever.

Renewable energy is also better for the environment. Non-renewable resources release gases called **greenhouse gases** into the air. Greenhouse gases make the earth hotter. Renewable energy sources do not produce greenhouse gases.

Wind Power

Anyone who has been outside in a storm knows the power of the wind. **Wind turbines** have blades that spin around in the wind. When they spin, it makes electricity.

Solar Power

The sun's rays can also be turned into electricity. Devices called **solar cells** can make electricity any time the sun is shining on them. Many cells collected together can provide enough electricity to power an entire building.

Power Generated from Water

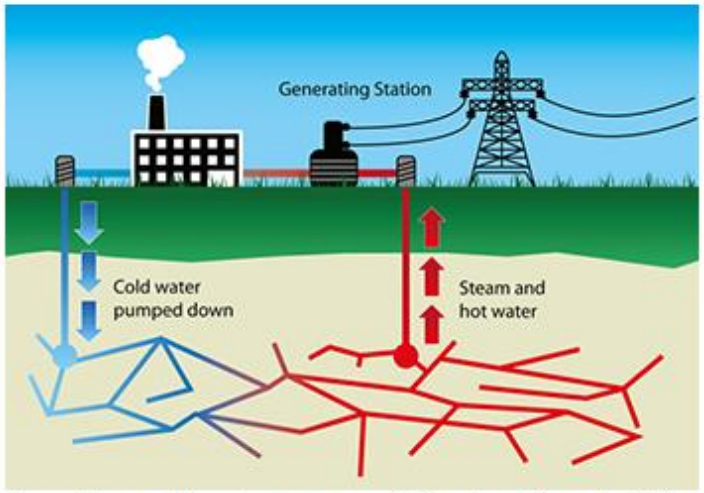
Another natural force that can create electricity is water. There are two different forms of power using water. The first and most common is **hydropower**. It uses the energy in flowing water to create electricity. You need to have a large river to make hydropower.

Hydroelectric plant generating power from the energy of rushing water

Another way to create electricity using water is **tidal power**. The ocean's waves are used to produce energy. This can only be done in cities that are by the ocean.

Geothermal Power

Geothermal means "Earth's heat." **Geothermal power** uses natural heat made by the earth's core to generate energy. This works best in certain places where there is a lot of hot magma near the surface.



A geothermal heat pump providing heat for a building

Many hope advancing technology and lowering the costs of equipment will make people use renewable energy in the future. This will ensure we enough energy to support generations to come.

NJSLSA.RI2: Main Ideas & Themes

What is the main idea of the text?

- Solar energy is easier for us to create than geothermal energy.
- Renewable energy sources help the planet and will not run out.
- Renewable energy is costly due to expensive technology and taxes.
- Only some of the energy used in the U.S comes from renewable energy sources.

NJSLSA.RI2: Main Ideas & Themes

What is the section 'Geothermal' mostly about?

- How the sun can be used to create energy
- How the U.S. uses non-renewable energy resources
- How we can get energy from inside the earth
- How hydropower gets energy from water

NJSLSA.RI2: Main Ideas & Themes

Which detail is most important to include in a summary of the text?

- Wind farms can be set up areas where the winds are fast.
- Renewable energy sources can never be used up and do not harm the environment.
- There is heat underground that can make energy.
- Uranium is a non-renewable resource.