e-Edition Plus

A current events feature for teaching with electronic editions.

By Sara Shahriari

With more people, renewable energy gets added attention

The Earth's population keeps growing.

Right now there are nearly 7 billion people on the planet, and some experts estimate that by 2025 there will be more than 8 billion.

What does a bigger population mean? For one thing, it means that demand for energy is going to rise. More people means more energy will be needed to light schools, heat homes and run factories.

As Earth Month celebrations wind up this April, more and more people are thinking about new ways the world can provide the energy that will be needed in the future.

Currently, coal and natural gas are used to create the majority of the electricity used in the United States and other nations. But supplies of coal, natural gas and oil are not unlimited. There is not enough for people to continue using them forever, and because they take millions of years to form from "fossilized" plant materials, nations cannot simply make more when supplies run out.

Renewable energy

Because the Earth's "fossil fuels" will some day run out, political leaders and energy experts from the U.S. and other nations are pushing for ways to produce energy without using them.

Some countries use nuclear energy as an alternative, but nuclear reactors can be dangerous if they are damaged as those in Japan were in this spring's earthquake disaster.

Another alternative that is gaining attention is renewable energy.

Renewable energy comes from sources like wind, water and sunlight, and is called renewable because it doesn't use up Earth resources until there are no more left. These energies can also be cleaner and less damaging to the air and the environment than coal or oil.

Wind power is a form of renewable energy with a lot of potential, according to many energy experts. Wind turbines, which look like windmills, are turned by the wind. That turning uses the wind's energy to produce electricity.

Water & the sun

Water can also be used to produce electricity. The Hoover Dam in the United States makes enough electricity for over a million people every year with electric turbines turned by water. Many countries are now investing in big dams to produce hydroelectric energy from water resources. But dams worry some people because they change rivers, can damage the habitats of animals and plants and affect people who live by rivers.

The sun is another renewable resource that interests energy experts. The sun is the source of much of the energy on Earth. Its energy is used by plants, which are eaten by animals including people.

Sunlight also can be used to heat homes and create electricity.

Through modern planning, houses can be built so that they use the sun's rays to heat the home, gather the energy of sunlight in solar panels on roofs and convert it into electricity to power lights, televisions and other electric appliances.

As the world's population continues to grow, one of the greatest challenges will be to find the best ways to provide energy for all those people.

Tohankoku/AFLO/Newscom; Inset: iStock

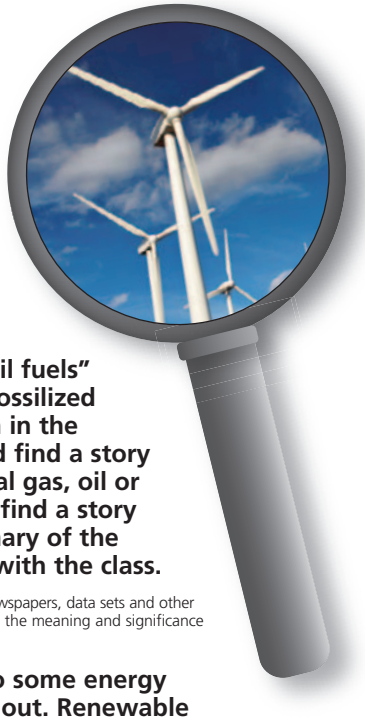
Many energy experts feel wind power has a lot of potential to reduce the world's dependence on oil, which requires huge storage sites and refineries in many countries.

Talk About the News

- **As the nations around the world work to develop new sources of energy, many families are looking for ways to use less energy in their homes. Imagine that you are building your own house. What are some things you would do to make sure your house is energy efficient so that it uses less electricity, oil and natural gas? As a class, make a list of 10 things a homeowner could do to create an energy-efficient home.**

Learning Standards: Responding to a variety of visual, written, oral and electronic texts by making connections to students' personal lives and the lives of others; engaging peers in constructive conversations about topics of interest or importance; writing fluently for multiple purposes.

Explore Your e-Edition



- **Oil, coal and natural gas are all "fossil fuels" formed over millions of years from fossilized plant materials. Fossil fuels are often in the news. Look through the eEdition and find a story about fossil fuels such as coal, natural gas, oil or gasoline, which is made from oil. Or find a story online. Write a one-paragraph summary of the major points of the story and share with the class.**

Learning Standards: Acquiring information from books, maps, newspapers, data sets and other sources; organizing and presenting the information; interpreting the meaning and significance of the information; writing fluently for multiple purposes.

- **Renewable energy sources appeal to some energy experts because they will never run out. Renewable energies are not equally suited to every place, however. Some places are sunnier, windier or have more rivers than others. As a class, discuss which renewable energy source would be best for your state or community. Write a letter to the editor of the eEdition explaining why.**

Learning Standard: Evaluating alternative long range plans for resource use and byproduct disposal in terms of environmental and economic impact; writing fluently for multiple purposes; employing the persuasive power of text.

- **Most businesses get their power from oil, natural gas or coal. Find a story in the eEdition about a business important to your community. Write a paragraph detailing how that business might benefit from using renewable energy. Remember that benefits can include how the public feels about the business, as well as costs.**

Learning Standards: Explaining how energy is distributed to living things in an ecosystem; describing how materials cycle through an ecosystem and get reused in the environment; analyzing how humans and the environment interact.

How Well Did You Read?

Understanding what you read is a skill that will help you all through life. Review the story about renewable energy by answering the questions below.

1. How many people are there living on Earth today?

A. Almost 8 billion
B. Almost 7 billion
C. More than 8 billion
D. More than 7 billion

2. According to the story, what are some examples of fossil fuels?

A. Oil, natural gas and water
B. Water, sunlight and coal
C. Coal, oil and natural gas
D. Wind, coal and oil

3. Which of the following is a reason that the United States is investing in renewable energy?

A. There are no more fossil fuels left on Earth today
B. The U.S. government wants to only use wind farms
C. There is too much electricity in the country
D. There is a limited amount of fossil fuels on the planet

4. According to the story, what is one of the problems with hydroelectric dams?

A. The dams use too much fossil fuel
B. The dams can damage plant and animal life
C. The dams cannot produce electricity
D. The dams do not produce renewable energy

5. For how many people does the Hoover Dam produce electricity each year?

A. More than 1 million
B. More than 2 million
C. Almost 7 million
D. More than 8 million

ANSWERS: 1-B. 2-C. 3-D. 4-B. 5-A.