

Energy Source Review

Fossil fuels and nuclear energy are nonrenewable resources.

List the three fossil fuels:

coal
oil
natural gas

What does "nonrenewable" mean?

Once we use up the supply, we cannot get any more.

What are two advantages and disadvantages of using fossil fuels?

advantages - inexpensive, easy to transport, easy to burn to release energy

disadvantages - will run out, gives off pollution, fluctuating prices

Write the type of each renewable resource described

hydroelectric - energy of flowing water

Where can you harvest this energy? near bodies of water / dams

geothermal - energy contained in the Earth's crust

Where can you harvest this energy? anywhere - you just need to dig deep enough

solar - energy from the sun

Where can you harvest this energy? places with a lot of sun ; desert

wind - energy from moving air

Where can you harvest this energy? open spaces, hills

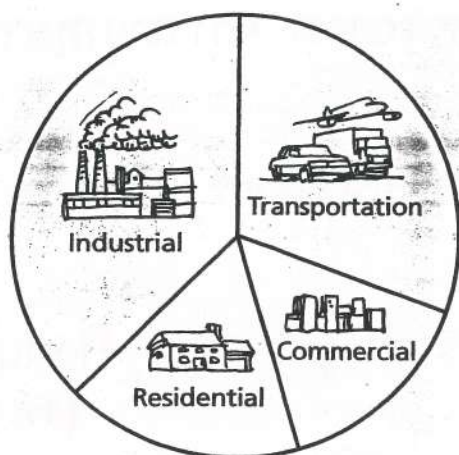
In a solar panel, a photovoltaic device converts the solar energy directly into electrical energy.

Nonrenewable Resources

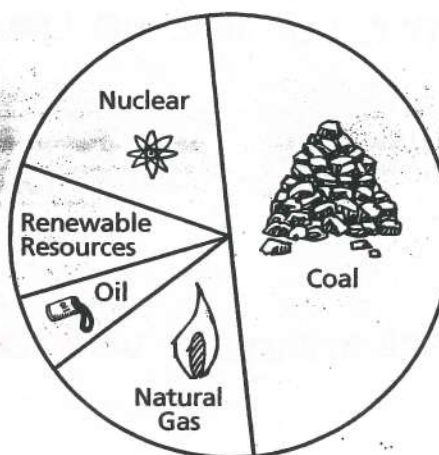
NATURAL RESOURCES

Nonrenewable resources are ones we have in limited supply. We need to use them wisely because they will not last forever. All of the fossil fuels—coal, oil, and natural gas—are nonrenewable fuels. Nuclear fuel is also nonrenewable. All nonrenewable resources cause some pollution to the environment. However, we use them for 92% of our energy needs.

Energy Use Areas in the U.S.



Major Sources of Electricity in the U.S.



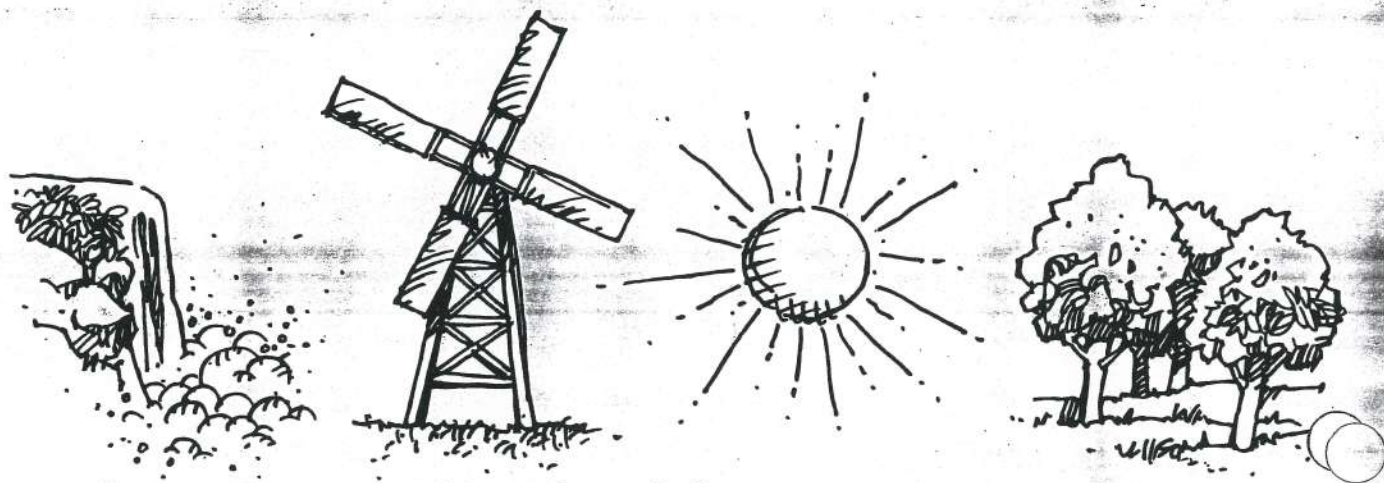
Use the two graphs to answer the questions.

- 1 What area of our society uses the most energy? industrial
- 2 In which two areas of energy use could you personally help by conserving and not wasting energy? residential and transportation
- 3 Which nonrenewable resource is used the most to generate electricity? coal
- 4 Which nonrenewable resource is used the most for transportation needs? oil (petroleum, gasoline)
- 5 Which nonrenewable resource is used the least to generate electricity? oil
- 6 Which two areas of society use more energy for lighting, heating, air-conditioning, and cooking? residential and commercial

Renewable Resources

NATURAL RESOURCES

Renewable resources are ones that we have in an unlimited amount, or are recycled by nature, or that we can replace. We have a continuous supply of sunlight and wind. Nature recycles the earth's water. We can plant new forests and crops. And we can raise new animals. The sun, the wind, and water can all be used to produce energy. We use plants and animals to give us energy through the food we eat.



Renewable Resources

Use the words in the box to complete the sentences.

renewable sun wind water wood expand electricity

- 1 In the U.S. today, about 8% of our energy is supplied from renewable resources.
- 2 A long time ago, our main energy resource was burning wood.
- 3 The sun and the wind are the cleanest renewable resources.
- 4 Dams have been built in many places to use the power of falling water to give us energy.
- 5 There are many places in the world where we can expand our use of renewable resources.
- 6 Most renewable resources are used to produce electricity.

