24.7 Global Connections

This map shows the distribution of one renewable energy resource, sunlight. The circle graphs show energy produced by renewable and nonrenewable resources in two years. Renewable resources include sunlight, wind, and the power of moving water. They also include plants that can become fuel. Corn, for example, is used to produce a fuel called *ethanol*, which is mixed with gasoline to burn in cars and trucks that have been designed to run on this alternative fuel.

What energy sources is the world using to meet most of its energy needs? What do they have in common? The world is relying mainly on nonrenewable resources to meet its energy needs. All of these energy sources will someday run out.

Why isn't the world getting more of its energy from renewable resources? In the past, generating energy from renewable resources has cost more than burning oil or gas. Hydroelectric power was the only renewable resource that could compete with fossil

fuels. However, building hydroelectric dams on rivers has been costly and can also harm the environment. Recently the cost of generating electricity from wind has dropped. As a result, many countries are now using wind power to meet some of their energy needs.

How might having renewable energy resources affect a region in the future? In the future, sunlight and wind may become key resources. Regions that have daily sunshine or steady winds could become major energy producers. Deserts in the U.S. Southwest are already home to solar power plants. Wind farms are sprouting up across the breezy Great Plains. On these farms, large windmills generate electricity as their blades spin in the wind.

Solar Energy Availability Around the Work



One kilowatt hour is enough energy to power sixteen 60-watt lightbulbs for one hour.

World Energy Production



Solar