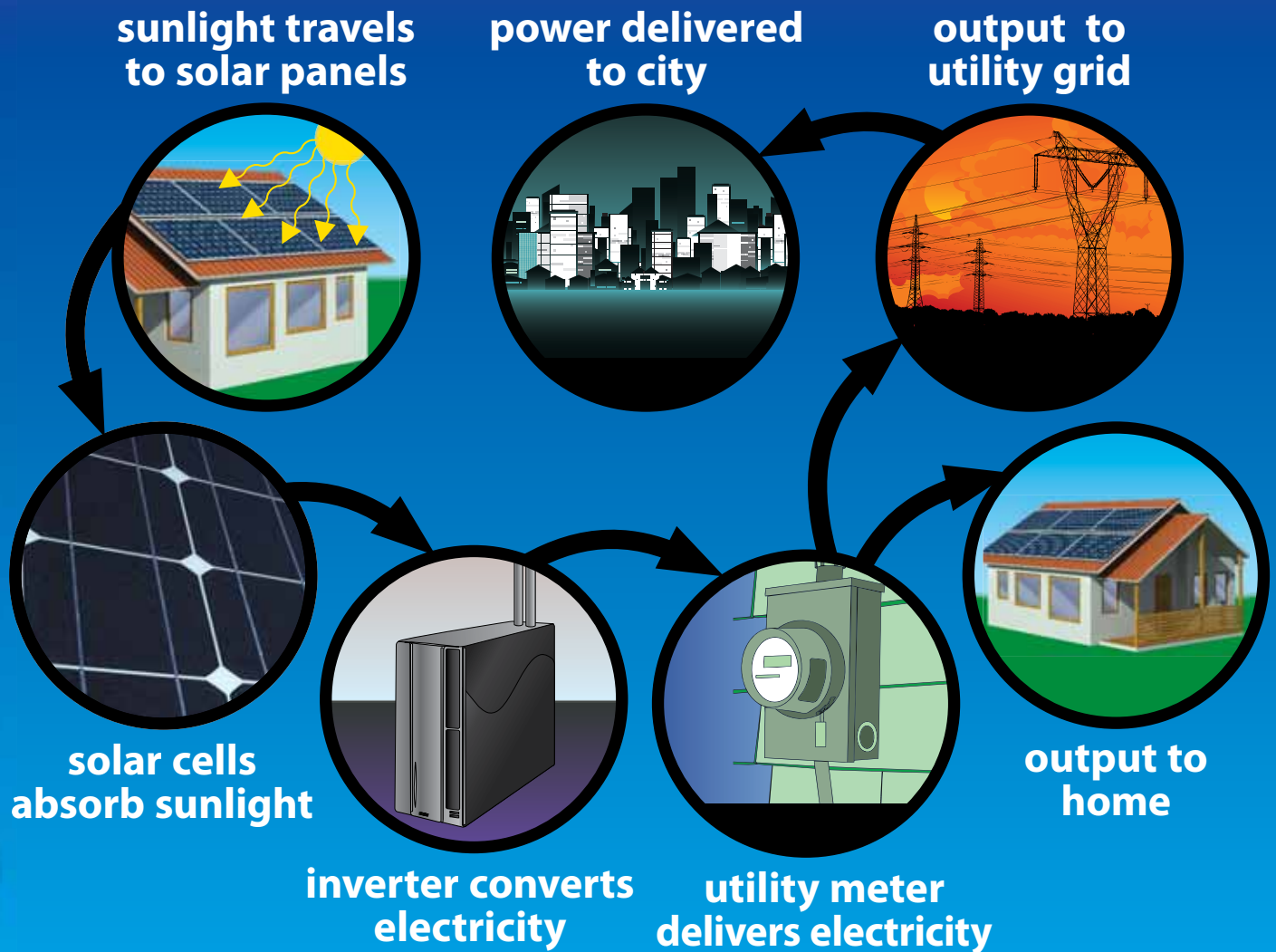




OXFORDSQUARE/SHUTTERSTOCK

POWERED BY SOLAR ENERGY



SHUTTERSTOCK



Renewable Solar Energy

Background Information

Renewable resources will not run out. They can be made over again in nature. They can be used to make energy. One example is sunlight.

Solar panels are used to make energy from sunlight. They can be put on top of houses. They can also be put on top of buildings. They can even stand alone in the ground. Here are the steps it takes to make solar energy:

1. Light from the sun hits the solar panel.
2. There are *solar cells* inside the panel. They turn light into *direct current* (DC) electricity.
3. This electricity goes through wires. It goes into a *converter*. Then it is changed from DC electricity into *alternating current* (AC) electricity. This is the type that light bulbs use. Household items, like toasters, use this, too. Even TVs use this.
4. This electricity goes through wires. It goes to the *utility meter*.
5. The meter sends electricity to the home first. The things in the home get all that they need. Leftover electricity goes to the *utility grid*. It gets sent to other homes. It also gets sent to other businesses.

Analyzing Science

- What are some things that solar energy is used for?
- Why is sunlight used to make energy?
- ▲ Is using renewable resources to make energy a good idea? Why or why not?

Nonfiction Writing Prompt

Some countries in the world have more homes with solar panels than others. Write a letter to your state official. Explain the benefits of using solar energy. Persuade the official to put solar panels on the roofs of all the houses in your neighborhood. Include facts and details in your letter.

Fiction Writing Prompt

Write an acrostic poem using the word *renewable*. Include ideas about renewable resources and energy in your poem.

Scientific Challenge

Research how a different renewable resource is used to make energy. You can find information on the Internet or at the library. Create a presentation with the information you find. Include pictures and diagrams in your presentation.