

To our teachers:

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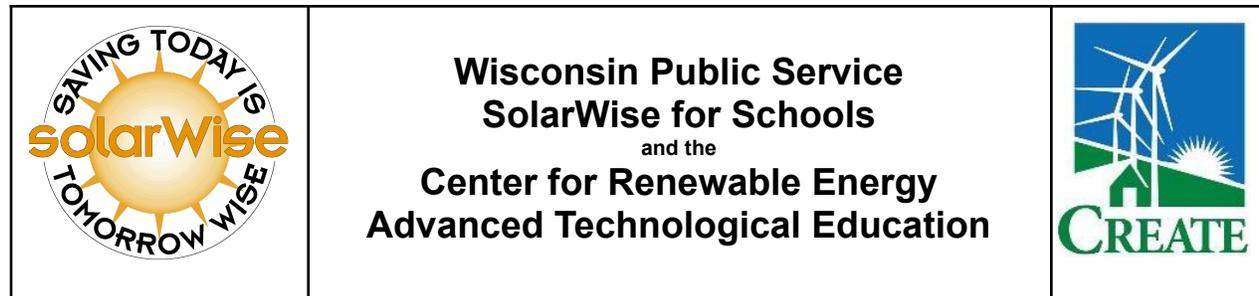
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BY THE NUMBERS

INSTRUCTOR'S GUIDE

Grade Level:	High School, Technical College, Community College
Lesson Length:	This depends entirely on how the lesson is used
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Created:	October, 2023

Objectives:

- Students practice interpreting graphical information.
- Students will learn basic dynamics and facts about the American energy economy today.
- Students will understand:
 - ✓ the primary sources of energy used today in the United States
 - ✓ how each source of energy is provided by nature
 - ✓ whether each source is nonrenewable or renewable
 - ✓ the percent of total energy use each source supplies
 - ✓ the primary uses of each source of energy

The Main Thing:

Used by itself, this activity is a basic, graphically visual introduction to American energy dynamics. The idea behind the lesson is to present big picture information about how we use our energy in America. If this information isn't well understood, poor decisions about energy are often made, many times by people who should know better. Make sure your students know better!

Activity and Teacher Notes:

The activity is presented here as a stand-alone lesson. However, it can be used many different ways. It can be used as a stand-alone lesson to introduce students to basic American energy dynamics. It can be used to supplement a lesson about all of the energy resources used in America (**Our Energy Resources**), or a lesson about renewable energy resources used in America. It could be used as a “question of the day” activity, or it could be used as a visual quiz or test with some modification.

To decide how to use the activity, view the slide presentations first. Though the activity can be used to cooperate and coordinate with other lessons, it may certainly be used by itself. It is presented to you that way here, as a basic, graphically visual introduction to American energy dynamics.

The presentation was created and updated with the best information available from the **United States Energy Information Administration** in December, 2022. It was supplemented with information from the **National Energy Education Development Project**.

The easiest way to use the activity as a stand-alone activity would be for the teacher to lead students through the slides live. The slides can be easily used to quiz, teach, and will provide a platform for good questions, discussion, and further research.

Look over and edit the slide presentation to fit how and what you want to teach. Do the same with the student materials. Then make this visually rich lesson work in your classroom!