

National Science Bowl® Energy Category

The energy category of the National Science Bowl® focuses on energy in its many manifestations: sources of energy, energy applications, energy production, energy efficiency, and other areas related to this field. Energy is a cross-disciplinary category, integrating topics from physical sciences, life sciences, earth and space sciences, and environmental sciences.

Sources of Information about Energy

Because energy topics are interdisciplinary, teams can study for the energy category while studying physics, chemistry, biology, and earth and space science. It may be beneficial to supplement those content areas by reviewing Department of Energy resources.

For example, the Energy Efficiency and Renewable Energy site is a great source of information:

<http://www1.eere.energy.gov/femp/>.

The Energy Information Administration has very interesting statistics and analysis:

<http://www.eia.doe.gov/>.

Teams can also go to the Basic Energy Sciences web page: <http://www.er.doe.gov/bes/BES.html/> to explore the subcategories of the basic energy sciences topics.

Disciplinary Overlap

When studying other disciplines, focus on certain strands that apply to energy. For example, biology contains energy when examining: chemical reactions in cells, cellular functions, photosynthesis, and food energy. Earth and space sciences include energy sources as well as environmental science topics, such as: human usage of energy, finite resources, and natural systems as resources. Physical sciences are chock full of energy topics, including: atomic and nuclear energy, motion and forces, electricity, conservation of energy, potential and kinetic energy, heat and temperature, and interactions of energy and matter.