Energy: Discovering Alternatives to Fossil Fuel Usage

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As a result of years of burning fossil fuels, our planet is facing an energy crisis in which the amount of carbon dioxide in our atmosphere has increased at an alarming rate leading to devastating consequences on our environment. Climate change is not a myth or a problem than can be easily be solved by planting more trees. Focus should be placed on developing alternative methods of clean energy.

This unit will explain the concept of energy in a tangible sense. An energy audit of the school library is performed to conceptualize how much energy is used on a regular basis and the amount of carbon dioxide emitted as a result of this energy. Students will gain a better understanding of the types of renewable energy: geothermal, solar, wind, hydroelectric, biofuels, and nuclear through research and experimentation. Students will then present their findings on their clean energy source to the entire class and a class discussion will ensue to actively determine how the energy crisis can be solved. The unit will commence with two laboratory activities, one highlighting a multiple energy sources and the other focusing on biofuels.