



STEM Committee
Michigan Crossroads Council

Name:

Supernova Activity Topic: Technology
Energy Technology

Troop:

Date:

Supernova Activity Topic: Technology

From the energy that keeps our homes comfortable and our lights on, to the communication that lets us talk to people around the world, to the special effects used in the movies, we depend on technology. Choose any one of the following projects and you will have fun while learning about today's technology.

Energy Technology

This activity can be done individually or in a group. The technology to harness energy has always been a significant factor in human progress. The harnessing of energy from wind, sun, water, biomass, fossil fuels, and other sources has evolved dramatically over time.

Part 1: Field Trip

Arrange and go on a field trip to a site where you can learn about innovative and/ or historical examples of energy production, storage, and use and the ways people are making such processes sustainable. Possible sites include power plants, fuel manufacturers or refineries, power generation sites, energy- or resource-efficient buildings, historical sites of energy use or production, educational centers, museums, and so on.

Part 2: Analysis and Report

1. Create a report that describes your field trip and what you learned.

- A. For the energy production and/or use that you chose, find out about the current state of technology, its course in historical that led to today's technology, and future directions for this technology. Discuss the following with your mentor.

- B. The effect on the environment, our natural resources, and our economy of our current methods



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C. Whether current methods are sustainable over the long term

Resources

John Perlin. *From Space to Earth: The Story of Solar Electricity*. Harvard University Press, 2002.

Terry S. Reynolds. *Stronger than a Hundred Men: A History of the Vertical Water Wheel*. The Johns Hopkins University Press, 2002.

Robert W. Righter. *Wind Energy in America: A History*. University of Oklahoma Press, 2008.