Wind Power — Green Technologies

Are you a big FAN of renewable energy? Then come explore the world of wind turbines! In this interactive program students breeze through an introduction of wind, engineer a pinwheel to harness mechanical energy, and explore wind turbine dynamics. This program will blow you away!

**Grade:** Elementary, Middle, High School

**Standards Supported**

**Next Generation Science Standards:**

**MS-ETS1-1. Engineering Design**
Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

**MS-ETS1-2. Engineering Design**
Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

**MS-ETS1-3. Engineering Design**
Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

**MS-PS3-5. Energy**
Construct, use, and present oral and written arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon that when the kinetic energy of an object changes, energy is transferred to or from the object.

**MS-ESS3-3 Earth and Human Activity**
Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

**Ocean Literacy Principles:**

**Principle 6 A.10.** The ocean and humans are inextricably connected. Humans obtain energy from the ocean via wind, wave, oil, and natural gas.