Project Snapshot:
Alaska Wind for Schools Program

Teaching Alaska’s youth about sustainable energy

Program Summary

The Alaska Center for Energy and Power has partnered with the Renewable Energy Alaska Project to implement the national Wind for Schools program in Alaska. Wind for Schools was launched in 2005 by the U.S. Department of Energy’s Wind Powering America program and the National Renewable Energy Laboratory (NREL). Alaska is one of 11 states with a Wind for Schools program.

Alaska Wind for Schools provides teacher trainings, helps implement hands-on curricula and holds a wind turbine design competition for students in grades 6-12. Additionally, some schools install wind turbines for collection and analysis of performance data. The Wind for Schools program aims to raise awareness on the benefits of wind energy while simultaneously developing a science, technology, engineering and mathematics (STEM), and energy-related knowledge base in Alaska’s youth.

Installed Projects

**Sherrod Elementary School, Palmer:** Alaska’s first Wind for Schools turbine, a Skystream 3.7, installed in November 2009.

**Coast Guard, Juneau:** The U.S. Coast Guard installed a Skystream 3.7 turbine at Station Juneau in October 2010. The Coast Guard Partnership in Education program is working with Wind for Schools and the Juneau School District to collect data from the turbines and provide educational opportunities for students to learn about wind energy.

**Mt. Edgecumbe High School, Sitka:** Mt. Edgecumbe High School installed a Skystream 3.7 turbine at the U.S. Coast Guard Cutter Maple Moorings facility, located next to the school. The turbine was installed in December 2010 and was the second in Alaska for the Coast Guard and the third in the state for the Wind for Schools program in Alaska.

Turbine Installations

- Anchorage
- Palmer
- Kodiak
- Juneau
- Nome
- Sitka

Who Can Participate?

The program is open to any school in the state that meets the success criteria. Schools across Alaska are currently in various stages of planning. The program is highly dependent on a network of sponsors at the community and state level to get projects off the ground and to provide long-term support.

Pinwheels and wind turbine at Begich Middle School ribbon cutting ceremony. Photo courtesy of Renewable Energy Alaska Project
Fostering development of innovative solutions to Alaska’s energy challenges.

For more information on ACEP projects, go to acep.uaf.edu/projects.

The success of the Wind for Schools program is highly dependent on a network of sponsors at the community and state level to provide in-kind services and funding to get projects off the ground and to provide long-term support.

Renewable Energy Alaska Project (REAP) - The State Facilitator for the Wind for Schools program in Alaska, REAP led the effort, along with the Alaska Center for Energy and Power, to have Alaska added in 2010 to the list of 11 states accepted to this national program.

National Renewable Energy Laboratory (NREL) - ACEP is coordinating with national partners, Wind Powering America and the National Renewable Energy Laboratory (NREL) who launched the first Wind for Schools project in 2005.

Mat-Su College, Palmer: Mat-Su College installed a Skystream 3.7 turbine in the spring of 2011. The turbine is used by students in conjunction with the Occupational Endorsement Certificate in the Renewable Energy program at the school.

Northwestern Alaska Career and Technical Center (NACTEC), Nome: NACTEC installed a Skystream 3.7 turbine on October 15, 2011. In September 2011, students from the villages of Golovin, Koyuk, Nome, Shaktoolik, and Teller participated in a Renewable Energy Course and worked alongside Bering Straits Development Company construction workers to construct the tower foundation. In October, a second group of students helped install the turbine.

Kodiak High School, Kodiak: After solving initial citizen concerns, the Kodiak Island Borough School District installed a Skystream 3.7 wind turbine in October 2012. The U.S. Coast Guard is a partner in this installation as it has been in several other Alaska Wind for Schools projects. Kodiak Electric Association, a pioneer in renewable energy in Alaska, and several other local sponsors assisted with the installation.

Begich Middle School, Anchorage: After a two-year process involving the first Wind for Schools municipal permitting scenario, Begich Middle School installed its turbine in February 2012. The data is used in specific classroom lessons and is now on a display kiosk in the school entry way so the entire school can monitor the performance of the turbine.

KidWind Participants

The following schools from across the state have participated in the Alaska KidWind Competition, a wind turbine design contest:

- Howard Valentine School (Coffman Cove)
- West High School (Anchorage)
- Petersburg Elementary/Middle/High School (Petersburg)
- Kokhanok School (Kokhanok)
- Kake High School (Kake)
- Dzantik’i Heeni Middle School (Juneau)
- Northwestern Alaska Career and Technical Center (Nome)
- Juneau-Douglas High School (Juneau)
- Aurora Borealis Charter School (Kodiak)
- Mt. Edgecumbe High School (Sitka)
- St. Mary’s High School (St. Mary’s)
- Tustamena Middle School (Kasilof)
- Hoonah Middle School (Hoonah)
- Craig Middle School (Craig)
- Napaqtugmiut School (Noatak)

Students participate in the KidWind Challenge.

Engineers work on installation of a wind turbine at Sherrod Elementary, Palmer, Alaska. Photo by Jason Meyers, ACEP