

Published on KeysNews.com (<http://keysnews.com>)

From ocean breeze to electricity

Tuesday, November 17, 2009
Alternative energy students tap into the grid

By MANDY BOLEN Citizen Staff

A new wind turbine at Key West High School is providing a hands-on lesson in alternative energy while eventually lowering the school's electric bill.

Students in Josh Clearman's senior-level Alternative Energy Center classes are combining physics lessons with green technology.

The students have been producing bio-diesel for the past two years, and now are embarking on a wind turbine project that will track the amount of energy harvested in the island's varying weather conditions.

One turbine already stands 53 feet in the air near a softball field toward the back of the campus. A second turbine that operates on a vertical rather than horizontal axis will be placed on the roof of the Alternative Energy Center.

"We will conduct a side-by-side experiment to see which type supplies more power," Clearman said on Monday.

The turbines eventually will be tied into the school's power grid, and the meter will be in Clearman's classroom so students can see its output on windy and calm days.

A webcam also will be installed, and student Max Kohler will maintain a blog about the high school turbine project, which apparently is the first of its kind in this country.

"I really wasn't that into green energy until I started with this class," Kohler said. "But I've recently really started considering a career in renewable energy."

The turbines were paid for with a grant from the Florida Green Alliance, which budgeted \$20,000 for the project, Clearman said. He is hoping for continued grant support from other foundations and private companies.

One estimate states that the turbines could save the school as much as \$5,000 per year in energy costs, said Clearman, who hopes next to find the financial support to launch studies in solar technology.

Solar equipment is expensive, and thus cost prohibitive for use in the classroom, he said.

High school senior Heindrek Allen has a plan to help. Allen is trying to drum up national support for the school's Alternative Energy Center by naming the new wind turbine after the comedian and popular political commentator Stephen Colbert.

The student team will let Colbert know about his namesake in the hope he will mention it on his Comedy Central television show, "The Colbert Report" and result in grants and donations that can help the school further its commitment to alternative fuels.

The Alternative Energy Center's long-term goal is to create a classroom that provides its own energy, with a curriculum that is rigorous, relevant and makes a positive difference in our youth, Clearman said.

"Team-building, recognizing and solving problems, and entrepreneurship are all skills that will serve them well in the community and in their quest for higher education," he said.

mbolen@keysnews.com

[Home](#) | [About us](#) | [Subscribe](#) | [Advertise](#) | [Visitor Information](#) | [Contact Us](#) | [Employment Opportunities](#) | [Site Plan](#)

Source URL: <http://keysnews.com/node/18607>