



# Eastern-in-the-News



## 'GREEN ENERGY TECH' YOUTH ACADEMY AT EASTERN THIS SUMMER

Moorefield, WV — July 15, 2009 — From Backbone Mountain in Tucker County to Mount Storm in Grant, wind flows along the Allegheny Front are churning out electricity to light our communities night and day. Producing enough energy each year to power nearly 80 thousand Potomac Highlands homes and businesses, the wind turbine farms also serve as civic weathervanes, pointing the way to West Virginia's—and the nation's— energy future.

"It's a rapidly growing industry in our region," said Robert 'Buck' Eagle, Dean for Academics and Student Services at Eastern WV Community and Technical College, "and for the men and women who get the proper training, it offers strong promise of skilled employment."

Counting all the wind farms now operating, under construction, engaged in the permitting process and already proposed in the Potomac Highlands and neighboring counties and states, he said, "This industry holds the potential for almost 1,000 technician and construction jobs in our region in the coming years."

To promote understanding of this green industry sprouting up in our midst, and to increase awareness of the career opportunities it offers, Eastern will launch a Youth Academy in Green Energy/Technology Awareness this summer. Aimed at learners age 16 to 24, the two-week academy will meet July 27 through August 6, and focus on electrical generation using wind turbines and solar cells.

Space is limited. To register, and for more information about specific times and locations, contact Tom Shanholtz, at 304-434-8000, or toll free: (877) 982-2322; or by email

at [toms@eastern.wvnet.edu](mailto:toms@eastern.wvnet.edu). (Tuition waivers are available for students meeting family income requirements.)



Eastern's Summer Youth Academy in Green Energy/Technology Awareness tours a wind farm on Mt. Storm.

"We'll also explore the next wave of automobile engine design—hydrogen fuel cell technology," noted Shanholtz, an engineer with Defense Department project experience who will direct Eastern's Academy and lead the classes.

During the two-week session, students will construct working table-top models of green energy machines. "As they put together, operate and experiment with working models of wind turbines and hydrogen fuel cell vehicles," Shanholtz said, "they'll acquire an introductory understanding of basic chemical, aerodynamic, mechanical, and electrical engineering principals. That might sound like a lot of learning, but it's really mostly discovery and fun."

Experiments will include testing the model turbines while varying the wind speeds, the numbers and angles of rotor blades, and different gear ratios. With their hydrogen fuel cell vehicle models, learners will discover the secrets of converting the

sun's energy to electricity, storing that electricity with a simple chemical manipulation of water, and harnessing it in a fuel cell to power the engine. "And they'll learn how to run a volt-ohm meter to measure various factors that affect wind and solar energy efficiency," Shanholtz added.

At the end of the week, Academy participants can keep their working models so they may continue their study of the green technologies that will power the future.

"We can hand over the jobs of the 21st century to our competitors," President Barack Obama told workers at a wind turbine assembly plant in Iowa last April, "or we can confront what countries in Europe and Asia have already recognized as both a challenge and an opportunity.

"The nation that leads the world in creating new energy sources," the President said, "will be the nation that leads the 21st-century global economy."

In West Virginia, Governor Joe Manchin has been leading the charge to take up that challenge and exploit that opportunity. "We've been blessed in this state with coal, but we can do even better with both wind and solar," he noted at a wind farm dedication ceremony in Mount Storm last month.

Ever since his 2007 state-of-the-state address, the Governor has pursued "an energy plan for West Virginia that promotes technologies that increase our energy supply, creates new employment opportunities, helps to protect the environment, and, most importantly, makes West Virginia independent of foreign oil by the year 2030."

Serving the residents of Grant, Hampshire, Hardy, Mineral, Pendleton and Tucker counties, Eastern West Virginia Community and Technical College, fully accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, is a comprehensive and equal opportunity

community and technical college bringing the resources and assets of Education That Works to the families, communities and employers of the Potomac Highlands.