



About Subscribe Support Calendar cvillepedia Jobs

WELCOME

Charlottesville Tomorrow News Center

The articles on this blog were published during 2005-2012. All of this content has been moved to our new website at

www.cvilletomorrow.org

© 2005-12 Charlottesville Tomorrow

Our photos have some rights reserved.

HISTORICAL POSTS

We have a new website at www.cvilletomorrow.org

City Council reviews process for funding non-profits

Avoiding chloramines in drinking water may boost public confidence in system

State transportation board transfers funds for Hillsdale Drive

Albrecht Place recommended for approval behind Shoppers World

Environmentalists say Shenandoah National Park at risk

Council upholds Stonefield stormwater violation; Edens uncertain of next steps

AUDIO -- McIntire botanical garden proposal gets support from City Council

Council denies rezoning for infill development in Rose Hill neighborhood

Plans approved for Fresh Market in Albemarle Square

HISTORICAL COMMENTS

Kate Pemberton on Avoiding chloramines in drinking water may boost public confidence in system

James simcoe on Avoiding chloramines in drinking water may boost public confidence in system

mitch carr on Council upholds Stonefield stormwater violation; Edens uncertain of next steps

coleman kitchin on Council upholds Stonefield stormwater violation; Edens uncertain of next steps

Jeff D Johns on Environmentalists say Shenandoah National Park at risk

mitch carr on Council upholds Stonefield stormwater violation; Edens uncertain of next steps

We've moved to a new website!



You can find our continuing coverage of growth, development, and local politics at:

www.cvilletomorrow.org

« Supervisors deny Redfields expansion | Main | Biosolids legislation not likely in coming General Assembly session »

December 17, 2011

Renewable energy center unveiled at Albemarle middle school

Recommend 3

Follow @cvilletomorrow 3,586 followers

ShareThis Print this post

Reader comments (2)

By Kurt Walters

Charlottesville Tomorrow

Saturday, December 17, 2011

A cheering throng of [Henley Middle School](#) students gathered around a new 45-foot wind turbine Friday to witness a ribbon cutting and dedication of the school's Renewable Energy Resource Center.

Student, staff and expert speakers all praised the new center as a source of clean energy and educational opportunities for students, with eighth grader Alex Kingsley calling it an "amazing addition to the school."

"Enjoy it — it's great to have these [energy] systems in the school," said Richard Wright, director of business development at Baker Renewable Energy, the firm undertaking the project. "You'll be able to generate your own power on site here from wind and from the sun."

The renewable energy center will feature three different clean energy technologies: the wind turbine, 182 roof-mounted solar photovoltaic panels and six solar thermal collectors, which use the sun's energy to heat water.



Remy Pangle, from the Virginia Center for Wind Energy at James Madison University, explained to students that they will be able to look at real-time data from their renewable energy installations at a dashboard in the school's lobby. The school will also have access to data from nearly 50 other wind turbines throughout the United States.

- [Kim Connolly on Council upholds Stonefield stormwater violation; Edens uncertain of next steps](#)
- [coleman kitchin on Council upholds Stonefield stormwater violation; Edens uncertain of next steps](#)
- [mitch carr on Council upholds Stonefield stormwater violation; Edens uncertain of next steps](#)
- [Randy Salzman on VDOT pilots new traffic signal technology on Pantops](#)

CATEGORIES

- [About Charlottesville Tomorrow](#)
- [Affordable Living](#)
- [Aging](#)
- [Albemarle County](#)
- [Belvedere](#)
- [Bicycles](#)
- [Biosolids](#)
- [Biscuit Run Development](#)
- [Biscuit Run State Park](#)
- [Board of Supervisors](#)
- [Budget](#)
- [Capital Projects](#)
- [Charlottesville](#)
- [Chesapeake Bay](#)
- [Chloramines](#)
- [City Council](#)
- [City Elections](#)
- [Climate Change](#)
- [Community Design](#)
- [Community Voices](#)
- [Comprehensive Plans](#)
- [Conservation Easements](#)
- [County Elections](#)
- [Crozet](#)
- [Crozet Master Plan](#)
- [Cville3D Visualizations](#)
- [Daily Progress Partnership](#)
- [Downtown Mall](#)
- [Eastern Connector](#)
- [Economic Development](#)
- [Farming](#)
- [Fifth Street Station](#)
- [Fire-Rescue](#)
- [Forests](#)
- [General Assembly](#)
- [Government Officials](#)
- [Green Building](#)
- [Historic Preservation](#)

Renewable energy is already a component of the sixth grade curriculum at Henley, and University of Virginia students enrolled in professor Phoebe Crisman’s Global Sustainability class have been teaching Henley students about these alternative technologies during the center’s planning and construction phases.

The data from the renewable energy center will be used for real-world applications of math and science skills, echoing an educational focus that has been seen both nationally and elsewhere in Albemarle County, as evidenced by the Math, Engineering and Science Academy at Albemarle High School.

“Math and science can actually be fun,” said Jonathan Bartlett, a representative from the U.S. Department of Energy’s Wind and Water Power Program. “Hopefully some of you will end up moving into [careers in] renewable energy, be it solar, water, [or] wind.”

The original plan for the energy center included only the solar thermal installation, and would have been paid for entirely by fundraising.

Kingsley, who is the student government’s environmental secretary, explained that students and staff raised the initial \$40,000 through a long series of small-scale fundraisers, from bake sales to art auctions.

“That was, like, seriously one cupcake at a time,” said Susan Guerrant, a librarian and Henley’s environmental coordinator. “We had a crazy amount of fundraisers — everybody chipped in.”

The project’s increased scope came after the school applied for and won an American Recovery and Reinvestment Act-funded grant of \$211,000 from the Virginia Department of Mines, Minerals, and Energy. An additional \$35,000 was added by ACPS.

Bartlett said that Henley’s new energy systems are part of a nationwide trend. American wind power, he said, has increased 16-fold since 2000 to 40,000 megawatts of capacity, enough to power 12 million homes.

As a demonstration project, the wind turbine and solar panels at Henley are at a much smaller scale. Jonathan Miles, director of the Virginia Center for Wind Energy, said after the dedication that most sites suitable for commercial-scale wind power in Virginia lie along mountain ridges or off the coast of the Atlantic Ocean.

“Offshore — that’s the future for large scale [wind power],” said Miles. “We [in Virginia] have arguably the best, or one of the best, offshore resources.”

In comparison, Wright said that Henley’s solar panels will generate around 46,000 kWh per year, the electricity needs of just over four American homes, according to U.S. Energy Information Agency data, with the wind turbine adding only a fraction of that due to its low height. The solar thermal system is projected to provide 60 percent of the school’s hot water needs.

Supervisor [Ann H. Mallek](#), whose White Hall District includes Henley, attended the dedication and said in an interview that part of the reason for the low turbine height could be the county’s wind ordinance, passed in 2009. The ordinance aimed to allow test projects like the one at Henley, but only permits relatively low heights because of concerns about safety and noise, which she said was mainly an issue with older, loud turbines.

“We were stepping slowly and perhaps we were too restrictive,” stated Mallek. “Maybe this [turbine] is enough to show what they look like and people can listen to it with their own ears.”

The renewable energy center is scheduled to be fully completed and operational in January.

Posted at 12:01 AM on December 17, 2011 by [cvilletomorrow](#) in [Albemarle County](#) , [Daily Progress Partnership](#) , [Sustainability](#) | [Permalink](#)



You might like:



- [History](#)
- [Hollmead Town Center](#)
- [Land Use - Albemarle](#)
- [Land Use - Charlottesville](#)
- [Land Use - Crozet](#)
- [Libraries](#)
- [Livable Communities Project](#)
- [Meadow Creek Parkway](#)
- [Meet Your Government](#)
- [Mountaintop Protection](#)
- [MPO Policy Board](#)
- [Music](#)
- [North Pointe Development](#)
- [Old Trail Village](#)
- [Online Resources](#)
- [Pantops Master Plan](#)
- [Parks & Recreation](#)
- [Pie](#)
- [Placemaking](#)
- [Places29 Master Plan](#)
- [Podcasts](#)
- [Population](#)
- [Proffers](#)
- [Referendums](#)
- [Regional Transit Authority](#)
- [Revenue Sharing](#)
- [Rivanna Station Military Base](#)
- [Rural Areas](#)
- [Scottsville](#)
- [Solid Waste](#)
- [Soundboard radio show](#)
- [Stonefield Development](#)
- [Surveys & Public Opinion](#)
- [Sustainability](#)
- [Taxes-Property](#)
- [Tom Tom Founders Festival](#)
- [Top-10 Lists](#)
- [Transfer of Development Rights](#)
- [Transportation](#)
- [Underwriting](#)
- [University of Virginia](#)
- [Videos](#)
- [Village of Rivanna Master Plan](#)
- [Water Supply](#)
- [Water Treatment - Sewer](#)
- [Watershed](#)
- [Western Bypass](#)
- [Yancey Mills Business Park](#)
- [Zoning](#)

David Wyant seeks second term on Board of Supervisors

Supervisors provide direction on balancing five-year financial plan

Video: Madison Cummings' campaign launch

Toscano starts preparing legislation for Charlottesville-Albemarle transit authority and sales tax referendum

Recommended by

Comments

Comment policy: First and last names are both required and anonymous comments are not allowed. Comments are moderated, and will not appear on this website until the editor has approved them.

1  **Jeffrey E. Cosnow said...**

Congratulations to Charlottesville. The idea that the system will be integrated in into the math and science curriculum is a really good thing.

That the University of Virginia, one of the most prestigious universities in America is participating, makes it even better.

The fact that the "seed" money came in "one cupcake at a time" makes it even nicer.

[Reply](#)

[December 17, 2011 at 03:22 PM](#)

2  **Tracy Carver said...**

You are using the wrong comparisons regarding the output of the solar panels. You should be doing a comparison of what Henley uses and what will be collected from the panels. How much energy is being produced vs cost. Also, according to other articles, Dominion Va Power somehow became involved, as to why I don't know.

[Reply](#)

[January 20, 2012 at 02:34 PM](#)

Comments on this post are closed.

POWERED BY  TypePad

ARCHIVES

[July 2012](#)

[June 2012](#)

[May 2012](#)

[April 2012](#)

[March 2012](#)

[February 2012](#)

[January 2012](#)

[December 2011](#)

[November 2011](#)

[October 2011](#)

[More...](#)

Charlottesville Tomorrow * www.cvilletomorrow.org * 434.260.1533 * P.O. Box 1591, Charlottesville, VA 22902