

VREEM is a monthly electronic newsletter published by Renewable Energy Vermont.

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News

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1. Vermont State Senator Urges Moratorium on Wind Turbines

Colchester - Sen. Vincent Illuzzi, R-Essex-Orleans, is calling for a temporary moratorium on the construction of wind farms in the state. Despite the fact that he strongly supports renewable energy, Illuzzi believes the state needs time to come up with a wind energy policy that is well thought out.

"These are massive projects," Illuzzi said in early August. "They are highly visible and literally in people's back yards." Given such high visibility, Illuzzi believes everyone should have the opportunity to participate in developing the wind policy before further projects are considered."

Part of that policy should be a change in the permitting process, Illuzzi said. As it stands now, the three members of the Public Service Board make the final decision on who gets a permit to erect these turbines.

Illuzzi believes it is possible to come up with a policy by the end of next year's legislative session. Until then, no permits should be issued, he said.

Mathew Rubin, manager of East Haven Wind Farm, plans to erect turbines on East Mountain and on land owned by Essex Timber Company in the Northeast Kingdom. If the project is completed as planned, it will be the largest wind farm in the Northeast.

Another large project is planned for Lowell by enXco, a developer of wind power based in California, along with the Vermont Public Power Supply Authority and Vermont Environmental Research Associates of Waterbury.

(This article was excerpted from the Caledonian-Record Online News as written by Jeanne Miles)

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2. Vermont Company Spreads the Word on Wind Energy

Waterbury - A local consulting company is helping to disseminate information about wind energy projects around the state through a new Web site and newsletter. Vermont Environmental Research Advocates (VERA) is set to roll out a new Web site and newsletter devoted to the proposed Lowell wind farm project in Lowell, Vermont. "Our goal is to educate people about this project and wind energy in general," said Martha Staskus, a research partner in the firm.

The Lowell project is being developed by enXco, a California-based company with wind energy projects around the world. VERA, which has experience developing and managing Vermont's first wind farm in Searsburg, is serving as a consultant to enXco and is the Lowell project's public face in meetings and the development process.

The periodic newsletter, entitled "Vermont Wind Power News," helps to spread consistent information about wind energy around the state, said Staskus. "Our first newsletter will address the ABCs of wind energy. In the next one, we'll discuss the wind farm development process. After that, we'll explain how wind turbines work."

"Anybody interested in wind energy is welcome to subscribe," Staskus said. "Public education is the key to any successful project."

Staskus noted that the newsletter and Web site will both be available in early September.

For more information:  
[www.lowellwind.com](http://www.lowellwind.com)  
[www.northeastwind.com](http://www.northeastwind.com)

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### 3. Design and Construction Professionals Win Energy Efficiency Awards

South Burlington - The state's most innovative designers and builders recently won Better Buildings by Design Awards for their creative approaches to constructing energy efficient buildings. The awards were presented at the Better Buildings by Design Conference, hosted by Efficiency Vermont, the state's energy efficiency utility.

"By designing and constructing high quality, energy efficient buildings that satisfy their clients' needs, these firms have demonstrated their commitment to excellence in new construction," said Blair Hamilton, Managing Director of Efficiency Vermont. "They are leaders in the field of new construction professionals who, in the last three years, has saved Vermonters more than \$15 million and reduced harmful greenhouse gas emissions by more than 14,000 tons."

More than 800 of the region's top residential and commercial new construction professionals attended the Better Buildings By Design 2003 Conference at the Sheraton Hotel and Conference Center in South Burlington. Conference highlights included the Better Buildings by Design Awards, a home builders forum, evening reception, and exhibit hall trade show with more than 60 exhibitors of cutting-edge products and services.

For a complete list of winners, please visit [www.efficiencyvermont.com](http://www.efficiencyvermont.com).

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### 4. Bennington Middle School to Install Wood Chip Furnace

Bennington - Officials at the new Mount Anthony Union Middle School hope to

cut back on heating costs by using a wood chip furnace.

Simple economics and environmental factors made the choice a logical one, said Chris Williams, a member of the Middle School Construction Committee and an architect at Williams College in Williamstown, Mass.

"School budgets are vulnerable to spikes in oil prices that can trash your budgets," he said. "The price of wood chips hasn't changed much in seven years."

They are also a renewable energy source that is readily available locally, Williams said. The system will mainly produce water vapor as the wood chips burn, generating much less pollution than an oil-fired system.

A back-up oil furnace will be installed to assist the wood chip furnace on the coldest days if it can't keep up with the demand for heat or if it needs to be shut down for maintenance or repair, he said.

The state government will contribute up to 50 percent of the cost of an environmentally-friendly wood chip furnace, said Cathy Hilgendorf, school construction consultant with the state Department of Education.

The abundance of forests makes Vermont a natural choice for wood chip heat, said Valerie Messersmith with Messersmith Manufacturing Inc., the makers of the wood chip furnace. The high cost of oil and Vermont's relatively high electric costs also make it a good choice, she said.

The cost of the system is about \$400,000, said Barry Bernstein, a sales representative for the Michigan-based company. Three supplementary oil boilers added an additional \$75,000 to the total costs, he said.

However, the cost of wood chips is about \$20 a ton. Oil would have to be priced at 50 cents per gallon to be competitive, he said.

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## 5. Public Service Board Posts RPS Informational Material

Montpelier - The Vermont Public Service Board (PSB) has posted informational material on its Web site regarding the Renewable Portfolio Standard (RPS) Collaborative study currently underway.

During the last legislative season, the legislature instructed the Public Service Board to design an RPS in collaboration with state energy stakeholders and present this RPS to the legislature for consideration in January 2004. Renewable Portfolio Standards dictate that a certain percentage of electricity be generated from renewable energy sources. Thirteen states currently have RPS laws, including Massachusetts and Connecticut.

The Vermont RPS informational material includes a schedule for the collaborative process and links to similar studies conducted in other states.

For more information:  
[www.state.vt.us/psb/rps.htm](http://www.state.vt.us/psb/rps.htm)

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## 6. State Hires Massachusetts Firm to Study Dam Purchase

Montpelier - A Cambridge, Mass., company will study the proposed purchase of several Connecticut River hydroelectric dams.

Lexecon Inc. was the unanimous choice of the Vermont Renewable Power Supply Acquisition Authority, which was set up by the Vermont Legislature to study the issue.

Lexecon Senior Vice President James Coyne said that his firm would examine the risks of ownership, and whether the ownership could harm Vermont's bond rating. The study will cost \$250,000.

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## Features

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### Company in the Sun: Windstream Power Systems, Inc.

Windstream Power Systems had its start in the mid-seventies, as did several other local wind enterprises. The company began by manufacturing and selling Heliuss (vertical axis) and Windstream (horizontal axis) wind turbines - both of which are still in production today, after almost thirty years!

Most of Windstream's early business was overseas. A Canadian factory at Vankleek Hill, Ontario, was in operation until 1988. In the early eighties, with twelve employees, the company was poised to enter the big time - and almost did, through a 1985 contract with a large German company, to manufacture and sell high-efficiency single-bladed wind turbines right up to 3MW scale. Regrettably, that contract didn't work out, because in 1989 the German partner was bought out by an even bigger company, which then cancelled all its wind activities.

Windstream was founded by Valerie Chapman, now retired after twenty-five years. Colin Kerr is in charge of engineering, and Bill Lockwood is sales manager.

The company's activities are divided into two distinct areas: (a) the bread-and-butter manufacturing and sales worldwide of small-scale renewable energy power systems, including, microhydro turbines, and (b) research and development activities, mostly focused now on systems for the localized production of liquid hydrogen fuel for vehicles - again, in partnership with a large European company.

For more information:  
[www.windstreampower.com](http://www.windstreampower.com)

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### Why Wind Energy Works For Vermont: by Andrew Perchlik

The recent public discussion on wind energy is critical as we pursue a future that will protect what we value about Vermont while building a state that our children can live and work in. No one wants to destroy Vermont's beauty. But we all must recognize what the gravest threats to our landscape and our way of life really are.

My hope is that those Vermonters who oppose wind farms can take a serious look at solving the real ecological and economic problems facing Vermont. Wind farms will reduce acid rain and global warming, strengthen, and reduce risks to, Vermont's economy, reduce toxic waste, and help secure competitive electric rates.

Yes, wind farms will change one's view of a ridgeline. But Vermonters have dealt effectively with change to their landscape for generations, especially when done in the interest of Vermont's future. Ski areas have changed the view of many mountains and blue Harvestore farm silos changed the landscape.

Opposition to local wind farms appears to ignore the very real concerns about the health of our local and planetary ecosystems and focuses almost entirely on objections to the visual appearance of wind turbines. Those who have for years focused on environmental health and base their concerns on the scientific evidence of a dramatically deteriorating environment support wind projects.

Acidic precipitation has led to the dieback of 25-50% of the large canopy red spruce in the Green Mountains of Vermont, and signs of stress connected to acid rain have been documented in sugar maple stands on sensitive soils across the Northeast.

Wind farms producing clean energy into the Vermont utility grid will significantly reduce the amount of pollutants released by fossil fuel plants that cause the acid rain and global warming that threaten Vermont's great way of life.

Vermont relies on heavily subsidized and imported energy from outside the state. And we are beginning to see the need for new sources of power. Consumption is growing at one percent per year. The Vermont Yankee license will be expiring and the Hydro-Quebec contract will end. Why not replace those sources with cleaner, cheaper, homegrown energy, especially when doing so keeps much of the dollars generated in the state, strengthening our economy at the same time we strengthen our environment

The development and construction of just six wind farms would require a capital expenditure of \$342 million of which \$152 million (in current dollars) would be spent in Vermont on goods and services. These wind farms would pay annually approximately \$2.7 million to land owners, \$2.2 million in property taxes, and \$0.7 million in state taxes.

Vermont utilities can purchase this wind power at competitive rates, keeping ratepayer dollars in Vermont and helping to protect Vermont ratepayers from rate increases tied to fossil fuel prices.

I see wind turbines as graceful environmental sculptures. As turbines help us become more energy independent, grow our local economy, and clean our environment, they become all the more attractive in the landscape.

In the end, the choice for me is clear. The environmental and economic benefits of wind far outweigh the costs. We must take steps now to integrate cleaner, cheaper wind power into our landscape and our economy. Delay only increases environmental damage and hurts the Vermont economy.

Andrew Perchlik  
Executive Director, Renewable Energy Vermont

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## Events

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Wednesday, October 8, Burlington  
Renewable Energy Vermont's 2nd Annual Power for a New Economy Conference.  
This will be a full-day event designed to meet the growing demand for renewable energy information and spur development of renewables in Vermont.  
The event is intended for the interested public, the renewable energy

industry, state government, and other interested organizations. Conference speakers include Robert Costanza, Director of the Gund Institute of Ecological Economics, author Bill McKibben, and Governor Jim Douglas. The event will also feature display tables, networking opportunities, and workshops. Contact: [www.REVermont.org](http://www.REVermont.org).

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#### About VREEM

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We want and need feedback and information from our readers. Please e-mail any comments, story ideas, events, complaints, diatribes, or unabashed praise to the editors at [vreemnews@yahoo.com](mailto:vreemnews@yahoo.com). The editors can also be reached via the REV office at 802-229-0099.

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