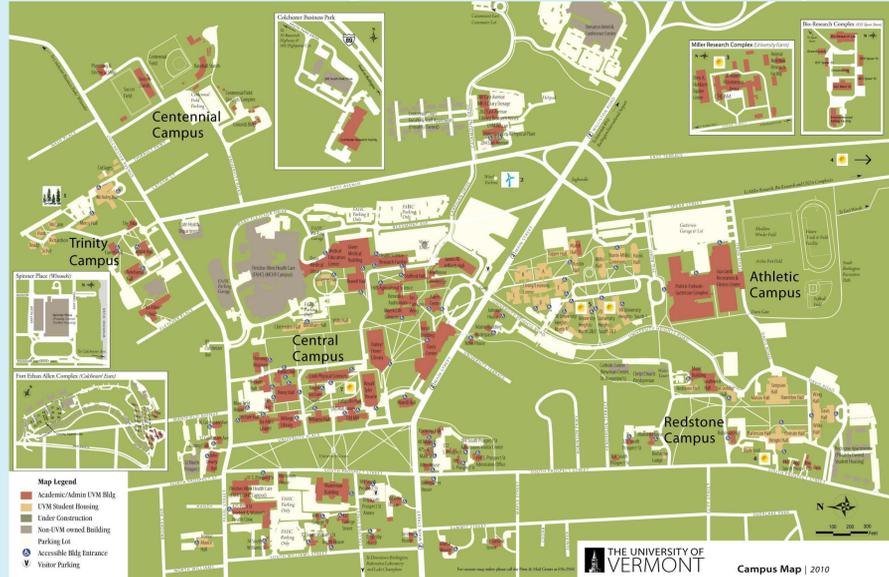


Renewable Energies at UVM

By: Mike Grubert, Katie Fox and Chris McDonough

Potential and Existing Renewable Energies On Campus



Key

- Wind
- Solar
- Biomass

Many of the potential projects have come from Clean Energy Fund ideas

1. Potential biomass energy system
2. Wind turbine, currently in use
3. Potential solar panels
4. Solar panels for Aiken building, project in process, located at the US Forest Service Lab
5. Potential solar panels on top of University Heights buildings
6. Potential solar hot water system in Slade Hall
7. Solar panels, currently in use

The UVM Climate Action Plan

- In 2007, University of Vermont President Daniel Mark Fogel signed the American College & University Presidents' Climate Commitment
- As a result, in December 2010 UVM committed to climate neutrality by 2025, and published a preliminary plan that resides on the ACUPCC site
- One way to reach climate neutrality is to invest in clean renewable energies

AASHE STARS

What is it?

The Sustainability Tracking, Assessment and Rating System (STARS) is a transparent, self-reporting framework for colleges and universities to gauge relative progress toward sustainability.

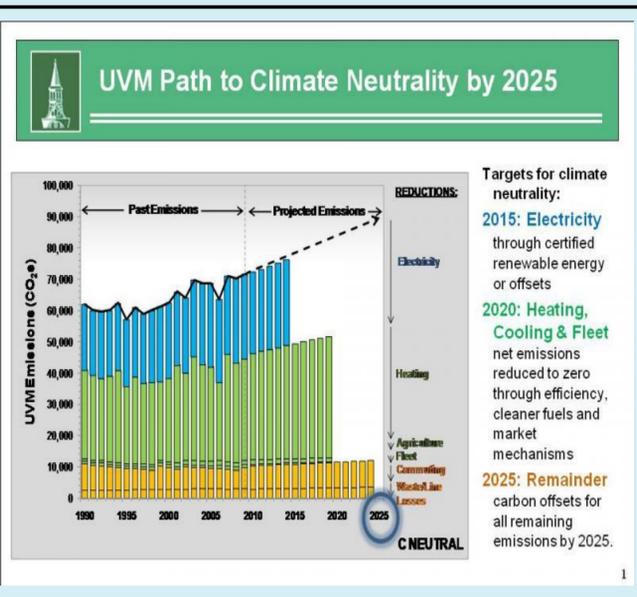
- The report is broken up into various categories, asking questions about what the college or university does in regards to sustainability
- Points are given for how well the college or university meets the credit. The points are then tallied up and the college or university is given a rating

How does STARS relate to renewable energies at UVM?

STARS OP credit 8: Renewable Energies relates to the use of clean and renewable energies a college or university uses.

- Currently, UVM receives 0 out of 7 points because renewable energies account for only less than 1% of electricity use

Total Points	Potential Points
0	7



Stakeholders Involved in Renewables at UVM

- Richard Cate- VP for Finance and Administration
- Gioia Thompson- Sustainability Director
- Salvatore Chiarelli- Director of Physical Plant
- Robert B Vaughan- Director of Capital Planning and Management
- Mary Watzin- Dean of Rubenstein School
- Students supporting the clean energy fund
- Clean Energy fund committee
- People building the projects
- Surrounding community
- Local renewable energy companies

Current Renewables on Campus

- There is a currently a wind turbine and a collection of solar panels on campus
- On average, the solar panels generate 19 kilowatt-hours a day, enough to power about 9 desktop computers for 10 hours
- In 2008, the wind turbine produced an average of 20.9 kilowatt-hours a day, which is enough to power about 10 TV's for 10 hours
- In total, these renewables account for less than 1% of UVM's electricity use



How can we increase UVM's renewable energies?

In 2008, the Clean Energy Fund was created in response to students wanting UVM to be powered by locally produced renewable energies. Here is how it works:

- A \$10 per student semester fee that raises about \$225,000 annually to support clean energy projects at UVM
- Students, faculty, staff and administrators make up a committee to review potential projects and make recommendations as to how the fund should be allocated. An expert panel, made up of both members of UVM and local renewable energy experts, assists in the final recommendation
- The committee then reports to University's Vice President for Finance and Administration, who determines whether the Clean Energy Fund should finance the proposed project

Share your project ideas by going to <http://uvmcleanenergy.ideascale.com> or emailing cef@uvm.edu

References

- STARS Manual http://www.aashe.org/files/documents/STARS/stars_1.1_technical_manual_final.pdf (page 126)
- UVM Clean Energy Fund <http://www.uvm.edu/sustain/?Page=cef/cleanenergy.html&SM=cef/CEFmenu.html>
- UVM Climate Action Plan <http://acupcc.aashe.org/cap/792/>
- UVM Office of Sustainability <http://www.uvm.edu/sustain/>