



Berea College

10x10 campaign

Organizers

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Mission Statement

- **The “Ten by Ten” Student Initiative at Berea College is part of the growing national movement of students and youth working for energy justice on our campuses and in our communities. We believe true sustainability and stewardship to the communities that Berea College aims to serve requires a conscious and preemptive transition to clean renewable energy sources. We work to reduce overall energy use at Berea College and we encourage Berea College to meet ten percent of the energy demand with clean renewable energy sources by the year 2010. We work to raise awareness of the injustices of fossil fuel use, such as environmental racism, and to empower students to actively respond to these injustices.**



"This student initiative/ specific project crosses traditional academic boundaries."

- **Most Americans consume our body weight in petroleum each week—140 lbs/person**
- **Domestic Oil production peaked in 1970**
- **10 southern cities are among the US's top 25 most polluted**
- **In half an hour, enough of the sun's energy reaches the Earth's surface to meet the World's energy demand for a year. A typical solar module converts 13-16% of the sun's energy into electricity. One of the largest solar markets in the world today is Germany, which receives less solar energy than Massachusetts. In solar energy terms, Los Angeles receives only 25% more solar energy than Boston, MA. (<http://www.sunedison.com/why.html>)**
- **PV was invented by converting sand into a semi conductor material that absorbs the energy from sunlight and puts it to work mobilizing a flow of electricity- the highest form of useful energy- and do it without motion, pollution, or making a sound (Eckhart)**
- **"We will never run out of it. Its efficiency will only go up and its cost will only go down. It is safe. Some people would ask, in terms of our energy future: why are we working on anything else?" (Eckhart)**



Accomplishments within a year

- *Spring 2005*
- **Peak Oil Display in CPO**
- **Mobilize students to annual Southeast Student Renewable Energy Conference in Knoxville**
- **Berea and 10x10 in campus edition of Kilowatt Ours Documentary**
- **Hosted EarthRoots and revealed the all new EcoOlympics**
- **Articles in the Pinnacle**
- **Participated in Berea Bikes Spring Critical Mass 2005**
- **Coalition with Tech students**
- **“Light Bulb Brigade” hit the Dorms, which will save Berea College over \$13,000 in the next four years**



Accomplishments of Fall 2005

- Mobilized students to the Lexington Energy Expo in September
- Passing of Solar Panel Proposal
- Attended the KFTC conference
- Coal Display in Alumni Building for Earth Day
- Participated in Berea Bikes Fall Critical Mass 2005
- Mobilized Students to Mountain Top Removal Site in Hazard County in November



Accomplishments as of Spring 2006

- **Presented 10x10 to influential administration, faculty, and staff**
- **Hosted the SEAC National conference**
- **Dorm competition ran in March**
- **Earth Month Activities such as a bike race, MERJ work day, educational activities**
- **Eco-Olympics**
- **Begin building solar panel**



How Berea is on its way

- **Upgrading Efficiency**- Heat plant will be more efficient and utilizes natural gas. Older buildings are being retrofitted.
- **Build Better**- Lincoln Building was the first Silver LEED certified building in KY. New renovations follow renovation standards for high efficiency.
- **Move to Clean Power**- The SENS house uses solar. A one Kw panel has been approved and financed. Our cheap KY electricity is still produced from coal powered plants, right?
- **Expand Transportation Alternatives**- Facilities Management has one electric pick-up and several small electric carts. The Berea Bikes co-op is being used. Are there incentives for bike/carpooling commuters? Is Bio-diesel being used on campus or on the farm? Is the Tech department/Farm/Facilities becoming educated on how to make this transition?
- **Implement Green Purchasing**- Purchasing Recycled Toilet Paper. Is there a standard for new appliances or building materials to use less energy, last longer and be more gentle on the environment?
- **Institutionalize Conservation**- Recycling is institutionalized through efforts of Student Life. Have we done our best to create a culture of conservation on campus?



Solar Timeline

- **Fall 2004-** started thinking about it
- **Spring 2005-** Proposed to school. Began fundraising. Collected student, faculty, administration, staff, community, and anonymous pledges for donation=\$4500
- **Fall 2005-** Solar panel proposal passed through our administrative committee-they gave us the \$4500 more to begin the project, total cost \$9,000
- **Spring 2006-** Collected pledges, began logistics, began meeting with campus facilities manager, electricians, builders, engineers, etc.



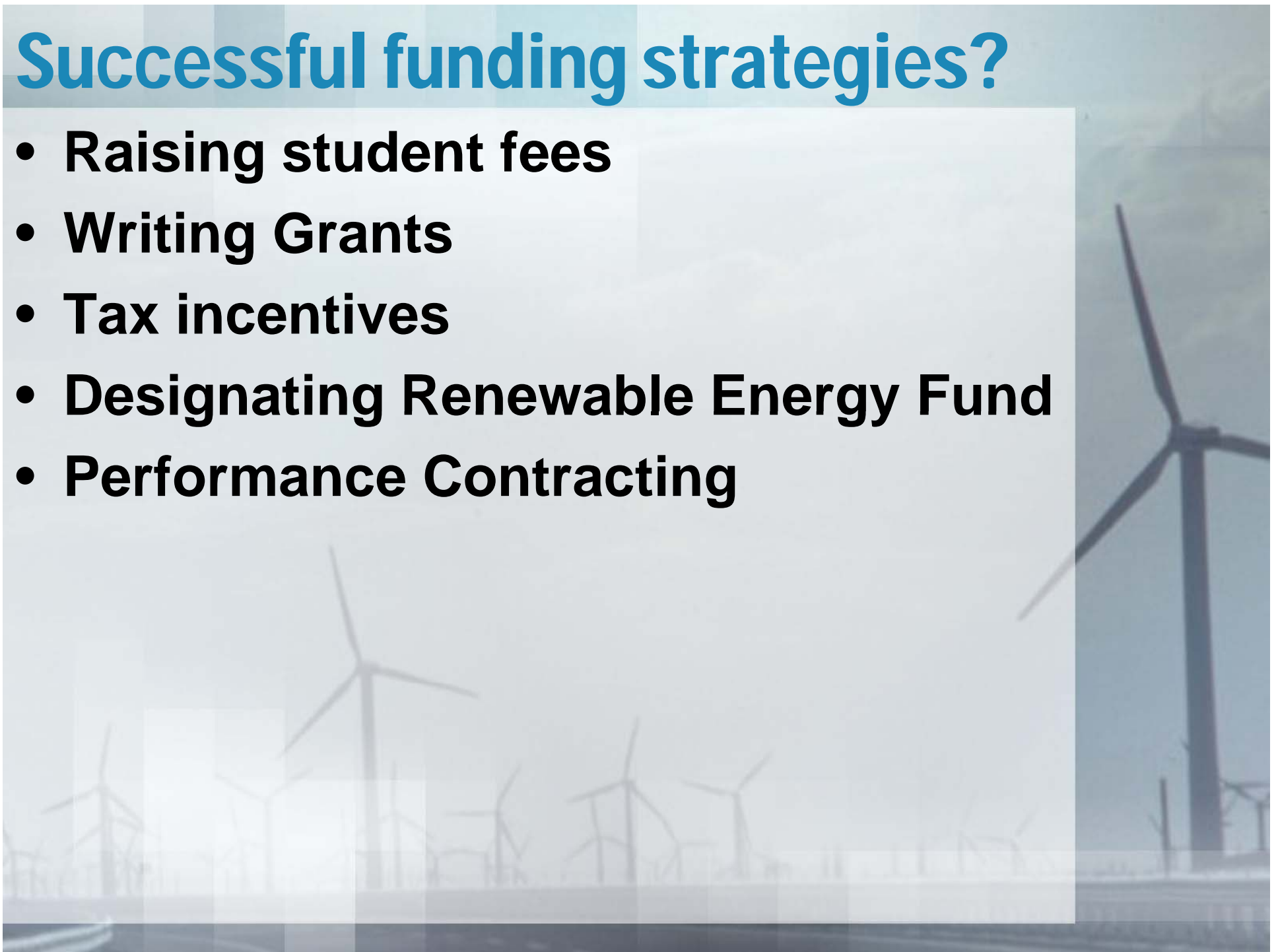
Solar Logistics

- Found an alumnus who specializes in solar panel installation
- It is a 1kwh panel, and will produce 3.5 kwh daily (conservative household produces 10 kwh a day)
- Will be put on the south side of our alumni building
- Ever-changing display (how much will it save over the long run, what does it look like, how does it work)
- Should be built by end of May, reception in the Fall



Successful funding strategies?

- **Raising student fees**
- **Writing Grants**
- **Tax incentives**
- **Designating Renewable Energy Fund**
- **Performance Contracting**



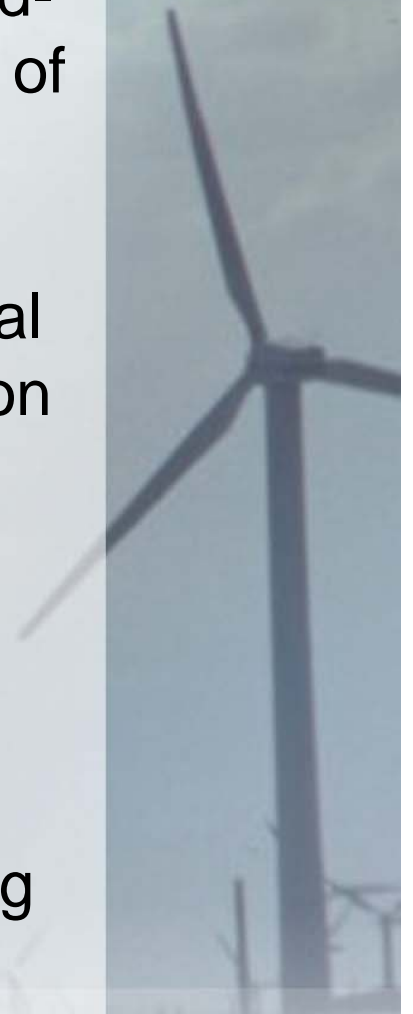
How to fund other projects for Berea

Original Plan with the solar panel- money saved by the solar panel will go into a renewable energy fund- shot down b/c the school needs to absorb the cost of the money first invested

Researching REC's and Green Power- we read Warren Wilson's proposal. Received same proposal from same company-Sterling Energy. Administration had issues. New heat plant will be run on nat. gas 60% more efficient, rising cost of nat. gas makes administration wary in investing in something that does not produce energy

Grants-Researching grants and writing proposals

Development- working with development in allocating a fund in which donors can give money into "renewable energy fund"--roadblock



Ultimate Goal

- **Reach 10% by 2010**
- **Reach 100% ASAP**
- **Hope that solar, hydro, biomass, and geothermal costs go down in the future, invest in them later**

