

# Oldmans Township Board of Education

## Solar and Wind Referendum Q & A

Last Updated 6/21/2010

### What is a referendum?

New Jersey school districts hold public referendum votes to seek approval of dedicated funding to improve and upgrade school facilities. If approved by Oldmans Township voters, this funding is dedicated and can only be used for the approved solar and wind improvement project.

### What is the planned project?

The Oldmans Township School is seeking to capitalize on current incentives and available funding to install a solar and wind power generation project. Highlights and key features of this project would include the following:

- 495 kW of ground mounted solar panels;
- 35 kW windmill;
- Offset the bulk of the district's power use through clean renewable energy;
- Significantly reduce the power the district has to purchase as prices continue to rise;
- Capture Renewable Energy Credits which will provide revenue to the district;
- Maximize available NJ Department of Education and other funding;
- Cash-positive: Generate savings and revenue that exceed the cost to install the system.

### Why undertake this project now?

Energy costs continue to rise and represent a significant cost in the operation of the Oldmans Township School. As costs rise, the impact of energy costs on the district budget will increase in the future. Additionally, incentives are currently available and construction costs are very competitive right now.

Through a combination of funding, incentives, and savings, the opportunity exists *now* to install a renewable energy power system (solar and wind) that is cash-positive starting with its first year of operation! Once operational, this renewable energy system will save (through energy that does not have to be purchased) and earn (through renewable energy credits) more money than it will cost to pay for the system.

### Has the district considered other renewable energy measures?

Oldmans Township School already benefits from renewable energy and is ahead of many other school districts in its active focus on energy efficiency. In addition to energy efficient lighting and other systems, a geothermal system supports the school's mechanical system. Geothermal utilizes the constant temperature of the earth to heat and cool buildings. Similar to solar, the geothermal system reduces the school's operating costs. When the district undertook the first phase of a two phase geothermal installation, the district realized a 50% reduction in electricity usage (total kW) in the first year of the system's operation.

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### **What happens when it's cloudy or at night?**

The solar system will continue to generate power even on cloudy or overcast days but at a lower rate. The system has already been modeled to consider a range of factors such as the typical number of sunny days in our area, the amount of daylight we receive in southern NJ, the angle of the sun, and other factors to accurately estimate the amount of energy anticipated from the system. Solar does not generate power at night however; the windmill will generate power whenever the wind blows, night or day.

### **What are Renewable Energy Credits?**

For every kilo-watt (kW or 1,000 watts) of power generated by a renewable solar or wind energy system, renewable energy credits (SREC's or REC's) are generated. Renewable energy systems generate REC's for the first 15 years of their operation. The value of these REC's is created by the obligation of public utilities to provide 22.5% of their energy generation from renewable sources by 2021. This solar and wind energy project will earn REC credits which will be sold by the district to produce income to offset costs.

### **What other benefits does the project offer?**

Beyond the significant monetary benefits, solar and wind are renewable resources enabling the power required for the school to be generated while reducing pollution and reducing the district's carbon footprint. Additionally, the information about the power generated will be available with general weather data online through software so teachers and students can utilize the information in science, math, and other coursework. This information will also be provided to the public (through a link on the district website) where awareness about the environmental benefits of renewable energy can be coupled with information about the monetary benefits the system provides.

### **Are the projects approved yet?**

This project was unanimously approved by the Oldmans Township Board of Education on June 8<sup>th</sup>, 2010 for submission to the NJ Department of Education (NJDOE) for approval. The submission to NJDOE should occur by mid-June 2010 and is anticipated to be under review by NJDOE over the next several months. Approval is anticipated by Fall along with written confirmation of eligibility for State share debt service funding.

### **If we get money from the State, why is a referendum needed?**

While the district is seeking approval for State share funding from the NJ Department of Education, State funding would only cover a portion of the costs. The district can only claim State share funding if the referendum passes, approving the local share costs of the project.

### **When would the project be completed?**

A referendum is being scheduled for December, 2010. If the referendum is approved the design and engineering work would be completed and the project would be publically bid and constructed with a goal of being operational in summer 2011.

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### **How can I find out more?**

Updated information will be posted on the district's website on a regular basis and everyone is encouraged to attend Board of Education meetings where questions can be asked and periodic update presentations will be given on the project. Additionally, information will be available at various events, at back to school in the fall, and at periodic special presentations focused on the project between now and the referendum date in December 2010.

For updates on information and dates of events:

Access the district website at:

**<http://www.oldmans.org>**

Contact the Office of the Superintendent at:

**10 Freed Road, Pedricktown, NJ 08067-9610**

**Phone: (856) 299-4240**

For information on solar or wind, visit the NJ Clean Energy Program website at:

**<http://www.njcleanenergy.com/renewable-energy>**

For information on educational facilities in New Jersey, visit the NJ Department of Education Office of School Facilities at:

**<http://www.state.nj.us/education/facilities>**