

A.A. Kingston Middle School

Potsdam, NY

THE BACKGROUND

A.A. Kingston Middle School is generating electricity from the Sun using a photovoltaic ("PV") system provided to fifty schools across New York through School Power...NaturallySM – an innovative program from the New York State Energy Research and Development Authority (NYSERDA). The program, managed by Solar Works, Inc. is **designed to educate New Yorkers about energy, and in particular, the role solar electric power can play in providing clean energy for our homes, schools, and workplaces.**

Education is the heart of School Power...NaturallySM. Sixty lesson plans for teachers cover a broad range of multidisciplinary topics and address the learning standards for New York State students in grades 5-12.

Instrumentation and educational software hooked up to PV systems in each school produce computerized performance data that is automatically posted to www.SchoolPowerNaturally.org. Any school, anywhere in the world can log on for free to use our lessons and data.



THE STORY

A.A. Kingston is the Middle School serving the rural community of Potsdam, nestled in the foothills of the Adirondack Mountains in St. Lawrence County.

“Our school was well poised to demonstrate the ability to produce electricity from the sun and to incorporate the PV system into our curriculum,” comments Richard C. Evans, Principal. “Faculty and students

from nearby Clarkson University are involved in our science, technology, and project-based learning courses. **The PV system provides new opportunities for even more collaboration in the future.”**

**For more information call 1-866-NYSERDA
or log on to www.SchoolPowerNaturally.org**

Students in 50 New York schools are learning hands-on how PV works, but the program does not end there. Incredible educational resources are available to any school, anywhere in New York or the world!

THE PV SYSTEM

The 2 kW solar electric system installed at A.A. Kingston Middle School is sized for its suitability as an educational tool. Such a system can meet about 25-30% of the energy needs of a typical, energy-efficient home. The system includes solar panels, an inverter that converts the DC power from the solar array to the AC power the school uses, and a sophisticated but teacher- and student-friendly data collection and monitoring system. Sensors measure electricity, air temperature, temperature of the solar panels, wind speed, and solar radiation.

THE RESULTS

“The PV and data acquisition system provide learning opportunities for all students and teachers in our school,” notes Brad Filiatrault, Grade 8 Technology teacher and Solar Coordinator for the school. “Plus, they enrich our Partnership in Engineering course (offered in collaboration with the Clarkson Engineering School), and our Energy and the Environment unit.”

“We are pleased and excited to now host solar tours and offer energy workshops, with the added excitement of being able to show off the solar panels on our building to members of the public, as well as the school community.”

A young boy with short brown hair, wearing a dark grey zip-up jacket over a red shirt, is looking down at a white rectangular component with three small solar cells on it. He is in a workshop or classroom setting with wooden workbenches and tools in the background.

For more information
about A.A. Kingston Middle School,
visit www.potsdam.k12.ny.us

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