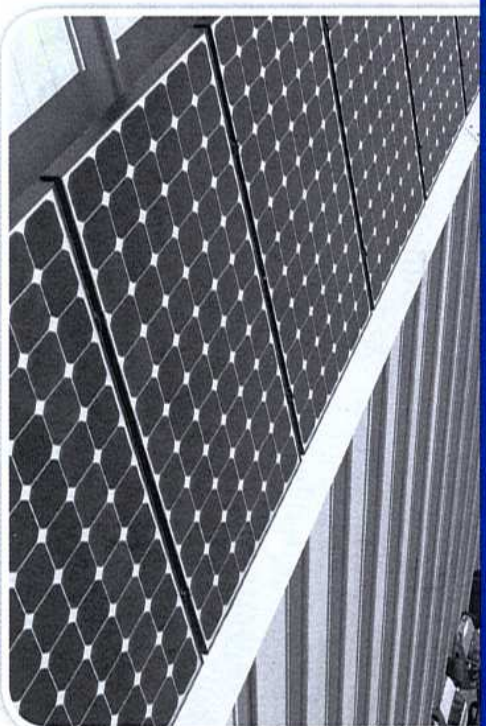


FIELD DAY BRINGS SOLAR PANELS TO NA

As part of the green initiative for Field Day 2009, Norfolk Academy installed solar panels on campus. They are located on the south side of the maintenance facility. The panels generate power cleanly from the sun in the form of DC power, which is converted to AC by an inverter, and is then distributed directly to the power-breaker panel. This is called a grid-tied model because the power is tied into the electrical grid rather than stored in batteries. A fascinating fact about the panels is that if they generate more electricity than is consumed, the electric meter runs backward.



▲ The Solar Panels on the roof of the Maintenance facility.

These eight panels can generate up to 1750 W in full sun. The panels, developed by Sunpower and installed by Solar Services, are attached via Internet to the Sunpower server. Students and teachers at Norfolk Academy can visit the "NA Today" section of the Norfolk Academy website to view images and to see how much power the panels have produced. The site reports the environmental savings in terms of equivalent carbon offset (e.g., number of mature trees harvested or miles of driving avoided). For example, in one year this system will make about 3000 kw-hr of energy, or enough to light one classroom for an entire year!

There are many reasons to use electricity created by the sun. It decreases the amount of coal-fired power, used coal

waste, pollution, carbon emission, global warming, and power lost in transmission. It also reduces the Norfolk Academy power bill, creates profit by selling renewable energy credits, and sets a good example for the community.

This solar system is modular and was designed with the possibility of being expanded by additional donations. Our inverter can handle up to 32 additional solar panels, which would provide more than 7000 W total. Gifts of any size can help us gradually build the size of our solar array and offset more and more of the electricity we buy. If you are interested in supporting this project, please contact Andy Walker in the Development Office for details at awalker@norfolkacademy.org or 461-2223 x5151.

The NA solar panel system was made possible thanks to donations from parents and alumni. Many thanks for your support!

