

Readington News Article – October 2018

Schools Harvest Energy From The Sun

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On May 9, the Readington School District held a dedication ceremony for solar power installations on three of our schools that will supply them with sustainable carbon-free energy, at a price that is below-market. The system at the Holland Brook School will meet 64% of that school's electrical demand. Readington Middle School's will provide 30% and Three Bridges' 28%. There are panels installed on each school's roof, and also on the ground at HBS and RMS. Unfortunately, Whitehouse School has no available or appropriate areas for such an installation.

The construction of these systems was at no cost to the District, which entered into a 15-year contract to purchase the electricity generated from the panels. The Power Purchase Agreement obligates the contractor, Ameresco, to maintain the systems. At the end of the contract, they must either remove the systems at their cost or sell them to the District. The output from the panels is warrantied for 25 years. So, if at the end of the contract the District chooses to purchase the systems at some nominal price, the electricity will be essentially free, minus maintenance costs and setting aside some funds for decommissioning.

Over the next 15 years, these solar installations will prevent approximately 5 million pounds of carbon dioxide from being emitted into the atmosphere. In addition, it will reduce our children's exposure to significant amounts of sulfur and nitrogen oxides. It will also save the district hundreds of thousands of dollars.

Possibly more important than the environmental and financial benefits is the educational opportunities that this initiative will provide for our children. The contract also includes the development of curriculum materials and real-time monitoring of the production of

the systems to be displayed online as well as on flat-screen monitors in each school. Thus, the students will be inspired by the panels themselves, what they represent and their integration into the curriculum. Every day they will be able to see the production of the systems as they pass the hallway monitors and they can access the data online for a myriad of class projects.

In doing so, we will change the educational trajectory of some of these students. Some may become electrical and chemical engineers, materials scientists, energy modelers or whatever their interest and inspiration leads them to, supported by the excellent educational foundation provided by this district. Even if they don't invent the next generation battery storage technology or desktop fusion, they will be much more likely to make lifestyle choices which consider sustainability.

The installation of solar power in the Readington School District is just the latest expression of our efforts to infuse an ethos of sustainability and environmental stewardship into the operations of the district as well as the very culture of the education we offer. We have made very substantial strides in this direction, as recognized by the numerous awards our schools have been bestowed for these efforts, both within the state of New Jersey and nationally: Green Ribbon Schools (U.S. Department of Education); Sustainable Jersey For Schools Certified (Sustainability Institute - CNJ); Eco-Schools (National Wildlife Federation); Energy Star Certified (US Department of Energy); River Friendly School (NJ Water Supply Authority).

In 1854 Chief Seattle delivered a moving speech when he was asked by the US Government to cede much of their ancestral lands. In an apocryphal transcript of the speech, he explained the sacred nature of the earth to his people, and admonished us to protect it:

"You must teach your children what we have taught our children, that the Earth is our mother. Whatever befalls the Earth befalls the sons of the Earth. This we know: the Earth does not belong to man, man belongs to the Earth. All things are connected like the blood that unites us all. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself."