

**Sudbury, MA, Energy and Sustainability Green Ribbon Committee  
Meeting Minutes September 9, 2010**

**OPENING:**

The meeting of the Energy and Sustainability Green Ribbon Committee was opened by Chairman, Bill Braun, at 7:35 P.M. on September 9, 2010 at the Town of Sudbury DPW Building Conference Room.

**ATTENDANCE:**

Committee Members	Attending
Rami Alwan	
Jeffrey S. Beeler, Vice Chairman, Sudbury School Committee	
William G. Braun – Chairman	X
Dean Holden	
Edward Lewis	X
Robert Morrison	X
Mark Sevier	X
Michael E. Melnick, Co-Chairman, Sudbury Permanent Building Committee	
Building Inspector, Town of Sudbury	
James Kelly	X
Guests / Presenters	
Craig Blake – Sudbury Permanent Building Committee	X
Naoto Inoue – President - <i>Solar Market, Inc.</i>	X
Kale Inoue – CFO - <i>Solar Market, Inc.</i>	X
John Manchester – VP Business Development - <i>Solar Market, Inc.</i>	X

**Meeting notes:**

Sudbury has been contacted by several renewable energy related companies that are interested in reviewing what they could offer to help Sudbury reduce energy consumption and costs. The energy committee is meeting with viable companies to gain a better understanding of specific goods and services available that will allow the committee to make an informed recommendation to the town on what might be beneficial to explore further.

*Solar Market, Inc's* company president, Naoto Inoue, CFO, Kale Inoue, and VP of Business Development, John Manchester, attended this meeting.

They provided a company overview along with a synopsis of their alternate / renewable energy activities including municipal Power Purchase Agreements (PPA). Following are notes recorded from our round table discussion - these should be considered preliminary information designed to help educate the Energy Committee with *Solar Market, Inc.* offerings.

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*Solar Market, Inc.* is based in Arundel, Maine and is an offshoot of *Talmage Solar Engineering* which was founded in 1975.

Their original focus was in residential renewable energy and they continue to have a retail outlet and presence for that market. They have also worked continuously with private and municipal entities to help provide renewable energy options.

With the current economic incentives available from the Federal and State government they have ramped up their efforts working with municipalities to offer PPA agreements.

They are currently working with the towns of Amesbury, Newburyport and Canton on PPA related activities. They have provided PPA proposals to Amesbury and Newburyport and are working as subcontractors to provide engineering and equipment to an existing PPA agreement with Canton.

*Solar Market, Inc.* is a fully integrated supplier of PPA's so they manage the entire project including the system design, procurement, financing and operation.

*Solar Market* deploys a unique solar array layout they believe provides more efficient operation in New England locations. They also believe the additional efficiency of the install and layout of the PV array allows them to provide the lowest cost electricity to the host community. Their pricing target for the electricity generated is typically half of what the municipality is currently paying.

They reviewed the typical structure of a municipal Power Purchase Agreement. According to *Solar Market, Inc.* at this time significant Federal and State incentives in the form of tax credits, accelerated depreciation and SREC's along with the institution of net metering allows Massachusetts communities to enter into very cost beneficial PPA's.

With a Power Purchase Agreement the host community provides a location for a private company to build a Photovoltaic (PV) array (typically a capped landfill, school or municipal buildings) and agrees to buy the electricity from the system owner at a discounted rate for a fixed amount of time. The outside company pays both the capital cost of building the system and the ongoing operations and maintenance costs.

Any excess electricity generated by the array is fed back into the grid and must be purchased by the electric provider at current rates less the renewable energy and energy conservation surcharges.

The closed and capped Sudbury landfill was discussed at a high level and might be a candidate for up to a 2 Megawatt installation. School based systems were also discussed but may be more challenging due to the roof load from the panels.

*Solar Market, Inc.* also suggested they can work with distributed sites where smaller PV arrays can be placed on sites as small as 12,000 ft<sup>2</sup>.

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Although they have some flexibility with terms they typically quote PPA's with a 25 year term (or a 15 year term with a 10 year renewal option.) At the end of the contract the host community can renew the agreement, purchase the PV system at fair market value or have the system removed at no charge.

The PPA *Solar Market, Inc.* discussed could be available at no capital or operational cost to the town and the town could purchase electricity at a significant discount.

The Energy Committee is in the early stages of learning about PPA's and has a few preliminary concerns that would need to be discussed and followed up upon:

- 1) Landfill – to help determine if the landfill site is suitable
  - a. The Federal, State and local permitting processes would need to be fully explored and understood.
  - b. Organic growth issues need to be addressed in an environmentally acceptable way. (the layout that *Solar Market, Inc.* suggested could reduce this concern)
  - c. Grid capability for the tie-in would need to be sufficient.
- 2) Roof loading on school buildings are a concern. Thin film PV was discussed as a potential alternative – *Solar Market* might be willing to review a thin film alternative – although at different terms as current efficiencies of thin film is about half that of commercially available PV panels and the warrantee is only 10 years.
- 3) Incentives – this PPA financial model is based largely on federal incentives (they pay approximately 30% of the capital cost and allow accelerated depreciation) and state incentives – primarily the SREC program which requires MA utility companies to source a certain percentage of electricity thru renewable generation sites or purchase SREC energy credits from renewable energy sites. These programs seem to be accelerating the adoption of renewable power generation; they appear to be on solid footing, however a concern would be these programs changing, expiring or program limits being reached.

The Energy and Sustainability Committee wishes to thank Naoto Inoue, Kale Inoue and John Manchester for their time and informative discussion.

**Next Currently Scheduled Meeting:**

- September 21, 2010 at 7:30 PM, DPW Building Conference Building.

**Adjournment:**

- The meeting was adjourned at approximately 10:22 P.M.

*Minutes submitted by: Edward Lewis, September 13, 2010*