

**Sudbury, MA, Energy and Sustainability Green Ribbon Committee
Meeting Minutes May 19, 2011**

OPENING:

The May 19th, 2011 meeting of Sudbury’s *Energy and Sustainability Green Ribbon Committee* was opened by Chairman Bill Braun at 7:35 p.m. in the DPW Building conference room.

ATTENDANCE:

Committee Members	Attending
Rami Alwan	X
William G. Braun – Chairman, Energy and Sustainability Green Ribbon Committee	X
Jennifer Dudgeon	X
Dean Holden	X
Edward Lewis	X
Robert Morrison	X
Mark Sevier	
Michael E. Melnick, Co-Chairman, Sudbury Permanent Building Committee	X
Building Inspector, Town of Sudbury	
James Kelly	X
Guests	
Erin Sweet - Senior Energy Analyst Energy Services Group at <i>Cadmus</i>	X
Maureen Sakakeeny – Principal at <i>SAK Environmental</i>	X

Agenda:

1. Membership
2. Landfill solar update & next steps
 - a. Owner’s agent presentation by Cadmus & SAK Environmental
3. Green Community projects – status update
4. Noyes Project Update
5. EECBG (Fairbanks Solar) update
 - a. Status
6. Other business?

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1. Membership

Bill distributed all energy committee applications that had been submitted to the town to allow the committee to review for critical skill sets leading to an appointment recommendation to the Selectmen.

ACTION:

All committee members review applications be prepared to discuss at the next meeting

2. Landfill solar update & next steps

a. Presentations by **Cadmus & SAK Environmental**

The energy committee welcomed Erin Sweet - Senior Energy Analyst Energy Services Group at **Cadmus**. Erin spoke about the role of an Owner's Agent / Project Manager for municipalities going forward with PPA agreements.

Also presenting was Maureen Sakakeeny – Principal at **SAK Environmental**. She represents the environmental consultant that **Cadmus** works with for landfill solar. Maureen has worked with municipalities in our region applying for Post Closure Use Permits for solar on landfills.

Cadmus is an employee owned consulting business based in Watertown, MA. They provide significant consulting services in the environmental and energy area and work primarily with town, state and federal governments.

Cadmus is pre-approved by the Mass **Department of Energy Resources** (under contract PRF46) for statewide contract work for municipalities working on renewable energy projects.

For municipal PPA projects **Cadmus** typically provides owner's agent / project management services.

Services they can provide include:

- Site feasibility
- Financial evaluations
- RFP draft
- Bid and contract review
- Design review
- Contract management
- System inspection
- Production tracking

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Cadmus' experience suggests that areas of concern for a landfill solar array project include:

- SREC regulatory issues and capacity
- Consensus for towns 'appetite for risk' (i.e. fixed price / locked in rate contract, or 'shared pricing risk / shared pricing reward' based contract)
- Federal 100% 'bonus' accelerated depreciation program scheduled to end 12/31/2011
- Landfill permitting

Cadmus' suggestions for a smoother project include:

- Design the RFP to allow 'apples to apples' comparison – they strongly recommend including a checklist to clearly delimitate what is and is not included in the pricing.
- Establish a unified electrical energy bill for the municipality (helps for net metering)
- Require pricing information on a specific sized base system (along with the site optimized engineered system) to allow a base comparison over all respondents
- Consider using a well established PPA developer who has experience in MA and strong financial backing
- Consider requiring system decommissioning insurance or bond in RFP

Cadmus' experiences suggest the typical permitting / contract negotiations cycle for a municipal PPA is approximately six months if project is qualified (i.e. no issues with the MA DEP.) They are currently seeing PPA contracts in MA in the 9-10 cents per KWH range.

Maureen Sakakeeny – Principal at *SAK Environmental* spoke about the process for obtaining Post Closure Use permits for landfills from the Massachusetts Department of Environmental Protection.

Her experience suggests that the MassDEP post closure permit process will require, along with the cap information, a well detailed engineered plan of the solar array. Required details include physical layout, storm water runoff considerations / mitigation, methods of securing the array, grid tie in cabling layout and plan and plans should additional cap settling occur.

The Energy Committee thanks both Erin Sweet and Maureen Sakakeeny for taking the time to meet with us – their presentations and question and answer follow-up was both informative and educational.

3. Green Community status and projects update:

Green Community Grant Projects update:

- 1) Lighting controls in 5 Sudbury public schools

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- Significant progress has been made on the lighting controls work in the five Sudbury public schools. Noyes, Loring and Nixon Elementary schools and Curtis Middle School are complete and work is nearing completion at Haynes elementary.

2) HVAC controls:

A) Fairbank Community center

- HVAC controls for Sudbury's Fairbank community center have been evaluated. It has been confirmed that a portion of the targeted funds are available for other Sudbury energy projects due to synergies and intelligent overall design with the EECBG grant work currently being implemented.
- Controls for a fan coil unit and its companion condensing unit are on hold due to an in-depth evaluation of the fan coil unit showing it to be close to the end of its useful life. Town engineers are evaluating to determine unit replacement strategies to optimize energy efficiency and to confirm any GC funded control updates will be most effectively utilized.

B) Mapping of control bus at Lincoln Sudbury Regional High School

- Quotations for the control bus mapping project have been received and are significantly higher than estimated. A modified approach is being evaluated where school personnel would work with the controls engineer consultant, this could lower the cost and give the school a hands on in-depth knowledge of the project.

3) Supplemental funding to purchase a highly efficient replacement vehicle.

- Purchase of a highly efficient municipal vehicle is underway thru the standard town procurement process – this is expected to be completed by mid July.

4) Purchase of an infrared thermal imaging camera

- The *FLIR E40bx* Thermal Imaging Camera has been received by the building department.

The committee is looking forward to the next round of Green Community grants and is developing a list of high gain energy reduction projects to submit for grant consideration.

Potential projects include but are not limited to:

- Municipal building envelope improvements
- Replace Fairbank Community Center's aging and inefficient make-up air unit with a highly efficient heat recovery unit

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- Additional lighting upgrades in schools and municipal buildings.
- Pool cover for Atkinson Pool

After preliminary evaluation it appears that the Fairbank make-up air unit may have the biggest energy savings available and will be studied further to flesh out a project plan.

ACTIONS:

Energy Committee - continue to develop list of high gain energy reduction projects

Ed to contact Green Communities coordinator to determine if Owner's Agent services are approved / applicable for Green Community grants, new or re-deployed.

Ed to update Green Communities Grant deployment spreadsheet for review at next meeting

4. Noyes Project Update

Bid response for the roof replacement / insulation, window replacement, and boiler replacement projects for the Noyes school was strong and the town has awarded the contracts. Work is scheduled to commence after school lets out, June 27th.

5. EECBG (Fairbanks Solar) update

Update tabled until next meeting due to time constraints.

Scheduled Energy Committee Meetings: (DPW Building Conference room - 7:30 p.m.)

NOTE – due to workload an additional meeting has been added for June 7th

- June 7th, 2011
- June 21st, 2011
- July 19th, 2011
- August 16th, 2011
- September 20th, 2011

Adjournment:

- The meeting was adjourned at approximately 10:05p.m.

Minutes submitted by: Edward Lewis, May 26, 2011