OPENING:

The March 1st, 2017 meeting of Sudbury's *Energy and Sustainability Committee* was opened by Chairman Bill Braun at 6:30 pm at the DPW Building conference room.

ATTENDANCE:

Committee Members	Attending
Rami Alwan	X
William Braun – Chairman, Energy and Sustainability Committee	X
Jim Cummings	X
Edward Lewis	X
Joe Martino	X
Robert Morrison	
Kurt Reiss	X
Mark Sevier	X
Facilities Director, Town of Sudbury	
James Kelly	X
Guests	

AGENDA:

- 1. Green Community Grant Projects
 - a. Finalize Project Selection
 - b. Finalize Grant Proposal
 - c. Submit Grant
- 2. Municipal Aggregation Update
- 3. Approval of meeting minutes
- 4. Other business?

1) Green Community Grant Projects:

- Finalize Project Selection
- Finalize Grant Proposal
- Submit Grant

The goal of this meeting was to finalize the project selection and the grant proposal and submit the application and back-up material for the 2017 Green Community Competitive Grants.

It was a long evening but that goal was achieved! With contributions from all of the Committee a robust set of high gain energy efficiency / sustainability projects were selected and submitted to the State.

It was discussed and decided by the Committee to include funds from the Solar Revolving fund (that is a portion of the revenue from the landfill solar array that has been designated for Town energy efficiency projects) on each project submitted in the grant. Inclusion of some Town funding on submitted projects is suggested by the DOER, and casts the projects in a much more favorable light in terms of securing State funding for them. With the State funding, the Town's contribution and the Utility incentives, Sudbury would be able to increase the number of projects undertaken, increasing the energy savings and further reducing our green house gas emissions.

Following are projects the Committee included in this years' grant proposal.

a. LED lighting upgrades.

LED lighting projects save significant energy and maintenance costs along with providing better lighting. The Committee included all the following interior LED lighting retrofit projects in our Green Communities Grant request.

Facility	Lighting project area(s)
Curtis Middle School	Gymnasium & library
Haynes School	Gymnasium
Loring School	Gymnasium
Nixon School	Gymnasium
Noyes School	Gymnasium
Atkinson Pool	Pool
LSRHS	Auditorium and room A216

b. Refrigeration improvements:

Curtis and Noyes school cafeterias have older walk-in coolers and / or walk-in freezers with fan motors that run constantly to maintain temperature ranges. The electrical power used by the fan motors ends up as heat inside the refrigerated

space. By installing 2 speed EC (electronically commutated) motors, the fans will operate at a low speed when no cooling is called for, and at high speed only when the system is actively cooling the refrigerator. In turn, much less heat is introduced into the cooler/freezer. This results in savings in evaporator fan motor energy consumption also, saving enough energy at the compressor to almost double the savings provided by the EC motors alone.

The Energy Committee requested funding to upgrade these units.

c. Weatherization and air sealing

Complete building envelope assessments were conducted on the Curtis and Noyes schools. These assessments identified locations of air leakage losses and thermal transfer – the two primary modes of energy loss in buildings and significant areas for savings were uncovered, primarily in roof-wall intersection air sealing, wall air sealing / insulation, and overhang air sealing.

The Energy Committee requested funding to complete these weatherization projects.

d. Electric Vehicle

The Energy Committee proposed to purchase one Electric Vehicle (EV) for Town employee use (primarily the Building Inspector's vehicle) around the local area, with the expectation of nightly re-charging at the Sudbury's Department of Public Works (DPW) EV charging station mentioned below, displacing the use of gasoline with renewable electricity generated from the Town's Photovoltaic (PV) solar arrays.

In addition, we proposed to purchase and install a dual-head Charging Station located at the DPW building, where the Building Inspector's office is located. One charging head will be used by the Town EV when it is parked at the DPW building, while both heads may be available to the public during the day when the Town EV is away from the DPW

The Energy Committee requested funding for the EV and the charging station.

e. Goodnow Library EMS / Controls Upgrade

An in-depth study of the Library HVAC systems and operation has concluded that a DDC upgrade of the control system would save significant energy and provide better distribution of the heating and cooling within the Library, along with providing a better environment for the preservation of Library materials. This project includes upgrading the Energy and Lighting Management Systems to

provide optimized control of the lighting and the environment, and adding controls to upgrade the existing VAV boxes to DDC.

The Energy Committee has requested funding to upgrade the library systems.

These projects will reduce Sudbury's Municipal electric, natural gas and gasoline consumption to a measureable degree. In all, they are estimated to reduce our town-wide Municipal energy usage by almost 1.6%.

In total the Energy Committee requested \$250,000 (the maximum grant available) in Green Community funding for these projects.

In addition to the grant, utility incentives would provide another \$66,000 and the Committee elected to utilize \$39,000 in Town support to be provided from the Energy Savings Revolving Fund using the proceeds from the Landfill Solar Array.

These are solid, well designed projects with very good energy savings and green house gas reducing benefits, however, we are competing with 155 other Mass Green Communities for limited funding. Including Town support for the projects is looked on very favorably by the Department of Energy Resources (the granting authority) and should increase the chances of Sudbury receiving a healthy grant.

2) Municipal Aggregation Agreement

Sudbury, along with Arlington and Somerville participated in the Metropolitan Area Planning Council (MAPC) collective competitive procurement for purchasing residential electrical power under an aggregation plan.

After an exhaustive evaluation, following all applicable state procurement guidelines, the MAPC committee chose Good Energy as the Aggregation Consultant as they were the most advantageous bidder in terms of technical quality and competence, experience and pricing.

At Town Meeting Sudbury residents approved going forward to offer the aggregation plan for electrical supply to the town households and small businesses.

A Department of Public Utilities (Mass DPU) hearing was held where Mass State approval for Sudbury, Arlington, Somerville and Winchester's residential aggregation programs was requested. This is under review by the DPU.

The contract between Sudbury and our Energy Consultant (Good Energy) is being reviewed by the Town's attorney.

Once the DPU approves our request and all documents are reviewed and approved, Good Energy, Rami and the Energy Committee will develop materials for the request for bid

from electrical suppliers. Good Energy has suggested releasing the Request for Bids in spring for the most advantageous overall pricing and terms.

A suggestion has been made to have a sub-committee of the Energy Committee, along with the Town, evaluate the bids to determine the most advantageous overall proposal.

The Committee's general recommendation is to offer a two tiered approach, the first or base offering would include more Green Power than is currently included in Eversource supply. This would include more additionality (inclusion of Class 1 RECs (renewable energy generated in Massachusetts)) along with a competitive price. The second tier would offer power with an even Greener component (i.e. a larger percentage of power sourced from Green renewable energy.) This would give Sudbury residents the option of a base power contract which would be greener than current Eversource supply and they would have the option to go even greener for a slight cost increase. Either of these options would decrease Sudbury's carbon footprint.

The Municipal Aggregation program is optional; residents can opt out at any point penalty free.

6) Approval of Meeting Minutes:

Minutes from the February 15th, meeting were approved.

8) Other Business?

Scheduled Energy Committee Meetings: (DPW Building conference room)

The public is welcome at all meetings.

March 29th at 6:30pm

May 17th at 6:30pm

June 21st at 6:30pm

<u>Adjournment</u>: The Energy Committee meeting was adjourned at 9:18pm.

Minutes submitted by: Edward Lewis, March 5, 2017