ENERGY COMMITTEE 2017

Energy Committee Members Betsy Rybeck-Lynd, Evan Oxenham, Michael O'Leary, Ron Eberhardt, Steven Ladd.

The Plainfield Energy Committee focus in 2017 was to work on the Ready for 100 Campaign. As in previous years the Plainfield Energy Committee joined forces with the Cornish Energy Committee to work on this project.

As a first step in the implementation of this goal the Energy Committees teamed up with Vital Communities, NHSaves and local home energy contractors on a Weatherize Upper Valley program for to Plainfield and Cornish residents.

A. Ready for 100 Campaign

As explained in last year's Annual Report, the Ready for 100 campaign is a movement of people working to inspire our leaders to embrace a vision of healthier communities powered by 100% clean energy. The intent is to commit our towns to a goal of 100% renewable electric grid electricity by 2030 and 100% clean renewable energy (including home and business heating, grid electricity and transportation) by 2050. Nationwide there are now 56 towns and cities that have committed to 100% renewable energy: Locally they include Burlington VT and Hanover, NH.

The Energy Committees Ready for 100 Campaign included three major efforts:

- organizing a **Renewable Energy Educational Series** consisting of presentations, movies and workshops to help residents understand the costs and benefits of this goal;
- developing a warrant article for each town and discussing that with the select board of each town;
- a **launch event** at the end of the year which presented the text of the warrant article and discussed the rationale for the Ready for 100 goal.

These events were made possible by a grant from the New England Grassroots Environment Fund (https://grassrootsfund.org/).

1. Renewable Energy Educational Series

The presentations in the Renewable Energy Educational Series dealt with the reasons for the Ready for 100 goal and technologies that could be used to meet the goal:

a. The Carbon Crisis and Its Impacts

- i. What's the Big Deal about Carbon? Tom Lord, a science teacher from KUA explained how our use of fossil fuels impacts the natural carbon cycle and how increasing carbon dioxide (CO2) affects our climate.
- **ii.** What if? Having fun with an environmental simulator. Jeremy Woods, one of the creators of the Global Calculator, showed us how various socio-economic scenarios could affect our future. The Global Calculator is a model of the world's energy, land and food systems to 2050 which allows users to explore the world's options for tackling climate change and see how they all add up. Some of the results of this exploration were quite surprising to those that attended the presentation.
- iii. The Messenger a nationally acclaimed film about the causes of the decline of our songbirds.

b. Renewable Energy Generation

- **i. Solar Installers Expo.** This was a workshop that explained the changes in the New Hampshire net metering regulations for solar Photo-voltaic (PV) systems, and gave participants the chance to talk to qualified PV installers and a bank that provided financing for solar PV systems. This expo was a joint effort between the Cornish, Enfield, Lebanon and Plainfield Energy Committees.
- **ii. Battery Power Presentation.** This presentation discussed how batteries can supplement renewable energy electricity generation systems (such as solar PV) to provide power when the renewable systems are not generating electricity. Both home battery systems and utility scale storage systems were discussed. The presentation was led by Kim Quirk from the Energy Emporium and Bill Bender from Solaflect.

c. Renewable Energy Home Heating and Efficiency

- i. Affordable home heating with renewable energy. This presentation discussed building energy efficiency and how important it is to ensure that a building is well insulated and sealed to reduce energy waste. Renewable heating systems were discussed, including air source and ground source heat pumps, solar heating and modern wood stoves. The presenters included Ina Pahl from Revision Energy, Kim Quirk of the Energy Emporium, Bill Knight and Bill Cable.
- **ii. Button Up Workshop**. This workshop explained how to reduce air and heat leaks in your home so that it is warmer and uses less energy. It was presented by Andy Duncan, Energy Training Manager, LRCC, sponsored by NHSaves and organized in conjunction with Plymouth Area Renewable Energy Initiative.

d. Renewable Energy Transportation

Upper Valley Electric Vehicle Expo (UV EV Expo). The Plainfield Energy Committee assisted in the running of the Upper Valley Electric Vehicle sponsored by Vital Communities as part of National Drive Electric Week. This expo featured a variety of electric vehicles, including cars from Tesla, Nissan, Chevy and BMW as well as electric bicycles and electric lawn mowers. Participants were able to inspect the vehicles and take test drives.

2. Town Warrant Article

The warrant article text was developed over several months by the Energy Committees and presented to the Plainfield Selectboard for consideration. Following a review of the text the Plainfield Selectboard gave it their unanimous support and agreed that it would be presented to the March town meeting as a warrant article that has the support of the Selectboard. It is article 8 on the warrant.

The Energy Committee fully endorses this warrant article and asks all Plainfield residents to vote for the article at town meeting.

3. Launch Event

The launch event which presented the Ready for 100 goal to the people of Plainfield and Cornish was held in November. It was titled "Why should our towns commit to 100% renewable energy by the year 2050?" and included presentations by Lee Lynd (who is the Paul E. and Joan H. Queneau Distinguished Professor in Environmental Engineering Design and Adjunct Professor of Biology, at Dartmouth College), Representative Lee Oxenham, Joanna Sharf of Cornish and Selectman Ron Eberhardt of Plainfield. Over 50 townspeople attended the presentation.

B. Weatherize Plainfield Cornish

Work on this began in late 2017 with the launch of Weatherize in January 2018. Flyers with information about this program were mailed to everyone in Plainfield. It is available to all Plainfield residents and makes it easy to professionally air seal and insulate your home.

Weatherization is the most effective way to increase your comfort and reduce your energy usage so that you have lower home heating bills. NHSaves estimates that installing energy efficient upgrades in your home can save about 20% on annual energy costs. Also, the leakiest homes may be eligible for up to \$4,000 of assistance from NHSaves.

The Energy Committee encourages every resident to consider participating in this program.

C. Meriden Town Offices Window Restoration Project

We are happy to report that the Meriden Town Offices window restoration project, launched back in 2014, was completed this year. This project was funded by several Moose Plate Grants, which are administered by the New Hampshire Division of Historical Resources. Particular thanks are due to Mike O' Leary, who managed this project over its many years, even after stepping down from the energy committee.

Submitted by Evan Oxenham, Chair