

## Mason Energy Commission Report -- 2019

The New Hampshire electorate appears to be at an inflection point with majorities of voters across the political spectrum expressing support for the goal of 100% clean energy for the state. As the costs of renewable energy go down and become competitive with those of fossil fuel sources, clean energy goals can be attainable and sustainable. Communities and institutions across the state are investing in large-scale solar arrays and mountain top wind turbines. Governor Sununu has agreed to fund a major study of offshore wind farms as potential sources of good jobs and clean energy for New Hampshire. The Mason Energy Commission (MEC) has completed its first full year of activity just as the interest in energy sources and usage is coming into full focus.

One of the services the MEC provides is to track the Town's energy usage. When energy upgrades are made and weatherization is done, the energy usage information can be used to see how much money the taxpayers of Mason saved. In 2019, the Town used 48,390 kwh of electricity, 5996.3 gallons of propane heating fuel, 2644.3 gallons of #2 fuel oil, 2608.8 gallons of unleaded gasoline, and 6011.5 gallons of diesel fuel, for a total cost of about \$48.5K. These data may, when compared year over year, point to possible areas of energy and monetary savings.

The MEC hosted a community supper in conjunction with a weatherization workshop on 9/12/19. At that time, there had been 14 other weatherization workshops held in NH since June 2018, and little Mason's workshop boasted the second highest attendance. The MEC lined up local partners, printed and distributed flyers, organized Town advertising through Town email, Facebook, and the church newsletter, created handouts including bookmarks that were illustrated by the Mason elementary school students, created a survey, organized print media publicity through newspaper articles and a newspaper interview, advertised at the Bronson Potter event, advertised at community suppers, provided Town signage for the event, provided entertainment and childcare during the supper, and followed up with workshop attendees.

The MEC formed two subcommittees in 2019, the outreach subcommittee and the planning subcommittee. The outreach subcommittee planned and executed the weatherization workshop and community supper, and is working with the Mason elementary school to bring energy education to the students. The planning subcommittee is writing the first energy chapter for the updated Mason master plan. The planning subcommittee has suggested creating a parking area for commuters, a carpooling app, and locating electric vehicle charging stations in Mason. The planning subcommittee is creating a long-term vision for the Town's energy use centered around renewable energy sources.

The MEC presented the results of an Eversource-funded energy audit of the Mann House Offices and Library by Margaret Dillon of Sustainable Energy Education & Demonstration Services. Dillon's 24 page report, "MannHouse\_EnergyAudit\_2018-12-24.pdf" (15 MB), can be downloaded from the Town website in the Documents section of the Energy Commission page. Its Executive Summary section states: "The bottom line, highlighted in yellow, is that by investing about \$17K to insulate and seal the basement walls, air sealing and upgrading insulation levels at all three ceiling planes, general weather stripping and air sealing, and insulating the walls of the original structure, the Town can expect to save an average \$2K/year at \$2.56/gallon of oil." The study suggests an annual return on investment to the Town of 4-10%, depending upon Eversource rebates. The BOS decided not to go forward with weatherizing the Mann house and library because of concerns about moisture issues in the basement.

The MEC also presented the results of an Eversource-funded study of lighting in Town buildings and street lights by Carl Edin of Energy Management Consultants, Inc. The proposal suggests energy savings from an investment of \$12K that would be paid back within 2 years. An Eversource financing program allows that investment to be repaid through energy savings with unchanged monthly utility bills and without any impact on taxes. In other words, there would be no change in cost for lighting for about 2 years, then the Town would achieve a permanent cost reduction from the energy savings.

The MEC is eager to assist the Town Hall committee in planning energy conservation measures into the renovation of the Town Hall, to assist the Highway Department in selecting energy-efficient vehicles when the time comes, and to assist the Internet Committee in bringing high speed internet to the Town.