**GREEN ENERGY COMMITTEE**

Ed Lang

Jim Hutchinson

Sue Klem

Jennifer Morris

David O’Neil

John Snell, chair

**Town staff** — Mary Day, Assistant Town Administrator, and Michael Haines, Facilities Manager, provide Town administrative and technical assistance to the Green Energy Committee.

**Municipal energy use reduction** — Lincoln is guided by a commitment it made as a Massachusetts Green Community designee in 2010, with a goal of reducing municipal energy use by 20% within five years of its self-determined baseline year of 2009. Municipal energy use includes electricity, natural gas, fuel oil, and gasoline and diesel fuel used by Lincoln’s town-owned facilities, vehicles, and street lights.

In 2016, overall municipal electricity use for Lincoln’s major town-owned buildings was 9% lower than the 2009 baseline, still falling short of our 20% goal by 2014. **Additional energy efficiency measures will need to be installed at the Lincoln school complex in order to meet this target.** Natural gas use in 2016 for all municipal buildings was 23% lower than the 2009 baseline. A major contributing factor in the savings was a warm winter in FY2016, so energy savings may be less in future years. Another factor was renovations at Town Offices, which added central air conditioning, and thus increased the building’s electricity use by 126%. Energy savings in Lincoln’s vehicle fleet and water department will continue to be challenging. Lincoln’s street lights have already been converted to LED. Committee members will continue to work in 2017 to assess and optimize energy performance in various municipal buildings, as well as to investigate opportunities to lower emissions from the municipal vehicular fleet.

**Municipal renewable energy** — GEC participated in a solar PV Working Group that the Selectmen assigned to assess and recommend appropriate sites for the installation of solar PV on town-owned facilities and land. That group consisted of Tim Higgins, Town Administrator; Tom Gumbart, Lincoln Conservation Officer; Renel Fredriksen, Selectman; Peter Von Mertens, Conservation Commission; Jim Henderson, Conservation Commission; John Snell, Green Energy Committee; and Gary Taylor, Planning Board. Working with Solar Design Associates (SDA) of Harvard, Mass., the group assessed 25 potential municipal sites, assigning a letter grade (A–C) for each site’s solar viability. Two sites were recommended for near-term solar installation: (1) the Public Safety building roof with up to 45 kW capacity; and (2) the capped landfill site at Lincoln’s Transfer Station with up to 1 MW capacity. Combined, the sites have the potential to power more than 50% of Lincoln’s municipal electrical supply. In December 2016, the Conservation Commission approved a land swap to accommodate Article 97 provisions requiring replacement of the landfill site’s portion of the Town’s conservation land stock. Additional Town, State and Utility approval requests, financial analysis, contract negotiations, and other technicalities will continue through 2017.

**Residential energy use reduction** — Lincoln contracted with Next Step Living, an energy services company, to promote and perform no-cost home energy assessments (HEAs) and subsequent energy-efficiency measures throughout Lincoln. The Lincoln Energy Challenge, as it is known, is made possible through Mass Save, and has a goal of performing 200 HEAs. A total of 59 were completed, a number reflective of the abrupt closure of Next Step Living in March 2016 and changes with our subsequent service provider contracts. Mark Deck, a volunteer with GEC, has contacted homeowners to assess their experiences of the process and better determine how to improve the effectiveness of the HEAs that were performed. Lincoln Energy Challenge organizers are now confident that their current service contract with Co-op Power and HomeWorks Energy will lead to improved results. The committee also hosted a town-wide workshop on residential energy-efficiency measures in November. Homeowners are encouraged to call 617-752-1259 or visit LincolnEnergyChallenge.org if they have not have a home-energy assessment performed within two years.

In fall 2016, Sue Klem and Lynne Smith were successful in receiving a grant for up to $7,000 from National Grid for continued marketing and promotion efforts for the Lincoln Energy Challenge throughout 2017. The final grant amount will hinge on the number of energy audits that Lincoln residents request and the number of energy-efficiency measures residents install.

**Residential solar** — Jim Hutchinson and Sue Klem proposed to the Planning Board in December 2016 a bylaw change that would eliminate the required one-foot setback for solar installation on rooftops, raise the height limit for pole/ground mounted systems from 10’ to 12’, and make Planning Board waiver provisions more consistent. This change would increase the amount of solar PV that can be installed in Lincoln. The Planning Board approved these changes, which will be voted on via a warrant article at Town Meeting in March 2017.

The GEC is looking to partner with Sudbury, Wayland, and Natick in 2017 to engage in another Solarize Mass initiative, which would encourage and promote options and incentives for solar installations throughout Lincoln.

**Municipal aggregation** — GEC is investigating opportunities for Lincoln to purchase electricity on behalf of town residents and business owners. Options include purchasing electricity at a potentially lower rate and/or have it include up to 100% renewable energy.