



MEMORANDUM

TO: Libby Gibson, Town Manager

FROM: Lauren Sinatra, Energy Coordinator; Energy Office

RE: Update of Nantucket Energy Office Activities: Fourth Quarter of FY2015

DATE: July 1, 2015

This memorandum provides a brief summary update of the activities of the Energy Office through the fourth quarter of FY2015. The Energy Office will be prepared to discuss these items with the Board of Selectmen on July 8, 2015.

Announcements

- For meeting all of the energy milestones and goals set forth in a proposed workplan for FY2014, the Town of Nantucket has been awarded a grant of \$35,000 from the Commonwealth of Massachusetts Department of Energy Resources (DOER) to support the “Energy Manager/Coordinator” position for FY2016.
- Beginning July 1, 2015, the Energy Office will be relocating to 2 Fairgrounds Road and will operate as part of the PLUS department. The Energy Coordinator will continue to report to the Town Manager on a monthly basis and the Board of Selectmen on a quarterly basis.

Municipal Facilities: Energy Efficiency and Conservation Efforts

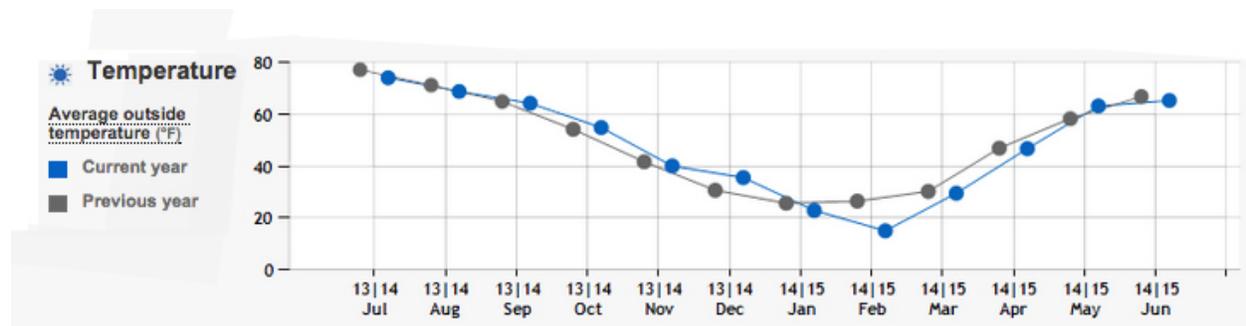
1. Monitoring of Town energy consumption. The following table compares energy consumption by municipal facilities and equipment in fiscal years 2014 and 2015:

	FY2014	FY2015	(=/-)%
Electricity use, kWh	11,763,159	11,772,265	+0.07%
Heating oil use, gallons	175,534	174,655	-0.5%
Propane, gallons	34,244	39,836	+14%

Source: MassEnergy Insight data, based upon National Grid data (automatically updated in software on a monthly basis), and quarterly delivery records supplied by Yates Gas and Harbor Fuel (input manually by Energy Coordinator).

Notable trends:

- According to Mass Energy Insight, the Town has used essentially the same amount of electricity this year versus the usage at this same time last year. This is despite colder weather, and many facilities that rely on electric heat.
- Nantucket High School’s electricity usage continues to decline vs. FY 2014 baseline (partially attributable to interior/exterior LED lighting upgrade), although the propane use for the school pool increased 420% in Q3.
- Nantucket Memorial Airport electricity usage was considerably high in Q3, perhaps attributable to the operation and settings of the ground source heat pump HVAC system into the warmer shoulder season. It is recommended that Airport Management reconsider the proposal (coordinated by the Energy Office and co-sponsored by National Grid) for the system to be recommissioned.
- The electricity usage at the Surfside and Sconset Wastewater Treatment Plants decreased in Q3, most likely attributable to efficient lighting/LED upgrade projects.
- Usage at the Sea Street Pump house increased for the months of January-April of 2015, which could be a result of the multiple storms and the associated increased inflow into the systems.
- Many of the smaller Town facilities (Town Hall, 37 Washington, 39 Washington, DPW Office) saw reductions in electricity usage after January 2015, which could be attributable to the installation of hundreds of high-efficiency florescent tube lighting procured for free by the Energy Office through a DOER grant.
- There were above average temperatures in Nantucket during December of 2014, and record low temperatures in February 2015. Otherwise, average temperatures in fiscal years 2014 and 2015 were similar.



More detail on Town electricity use is provided in Attachment Packet.

2. Technical Assessments, ASHRAE Level-1 Audits, Scoping Studies:

Within the last fiscal year, Ms. Sinatra coordinated and managed technical assessments and energy audits of the Town's top energy consuming facilities, including: Town Hall complex, the Planning/Land Use Services Offices at 2 Fairgrounds Road, and Nantucket Public Schools. She is also overseeing a project at the Town's Wastewater Treatment Plant, for which she is hoping to implement all of the recommended ECMs identified in a recently finalized utility-sponsored engineering scoping study, the incentives for which have not yet been received but are expected shortly.

3. Energy assessments and energy efficiency upgrades at Town-owned residences

Ms. Sinatra worked with the DPW and the Harbormaster to coordinate home energy assessments of several Town-owned staff houses, including: the lifeguard houses (109 Washington, 39 Washington, 47 Orkorwaw) and 5 & 7 Hillside Ave. The energy audits resulted in thousands of dollars of free instant saving measures (LEDs, smart power strips, programmable thermostats), as well as insulation incentives, free dehumidifiers (\$300 value), and two free ultra efficient "hybrid heat pump water heaters" (valued ~\$3000/each). The water heaters were installed at two of the lifeguard houses by a locally contracted plumber and are conservatively estimated to save the Town 35% in electricity costs at those two locations.

4. Employee Conservation Efforts

Ms. Sinatra has created various educational materials, guides, and stickers that are intended to help educate municipal employees on responsible energy use, which include: a ***Green Office Guide for Municipal Employees*** and an ***Energy Saving Guide for Employee Tenants***. She is also in the process of working with the Nantucket Employee Empowerment Team (NEET) to turn municipal scrap paper into useful office "NEET Pads," which will include office energy saving tips.

After observing wasteful window AC use (i.e. units left on during the night and weekends to maintain cool ambient temperatures), Ms. Sinatra researched and identified a highly-rated programmable outlet thermostat that can be used with window AC units, as well as electric space heaters to reduce electricity waste and achieve energy cost savings. As a result, the DPW has purchased a number of the Lux "5-2 Day Outlet Programmable Thermostats," which will allow Facilities to program sensible and accurate temperature set-points and customizable schedules (see attached) to achieve comfort and savings.



Lux | Model # WIN100-005 | ★★★★★ (10)

5-2-Day Outlet Programmable Thermostat

Community-Wide Energy Initiatives

1. Community Choice Aggregation (CCA)/Municipal Aggregation

It is the Energy Office's recommendation that the Town of Nantucket further explore the development of a municipal aggregation by issuing an RFP for an aggregation consultant to evaluate the feasibility of deploying a CCA in the best interests of Nantucket ratepayers.

*"CCA is not a liberal or conservative thing—It's a business tool that reflects the values of the region." —
D. Orth, [Kings River Conservation District](#) (Fresno CA)*

After attending meetings, participating in webinars, and speaking with municipalities, consultants and electricity suppliers all involved in municipal aggregations, as well as Town Counsel, Ms. Sinatra believes there to be absolutely no risk, but many benefits, for the Town of Nantucket to issue an RFP for an aggregation consultant. According to standard aggregation consultant RFPs, the consultant traditionally prepares the Aggregation Plan, secures plan approval from various state entities, manages public outreach, prepares an RFP for electrical suppliers, conducts electricity procurement, and manages the contract with the winning supplier—all without direct payment from the Town—in anticipation of getting paid a per/kWh fee by the chosen supplier *only if* the Town agrees to accept the winning bidder's supply prices.

From her research, Ms. Sinatra believes that Nantucket ratepayers could uniquely benefit from lower electricity prices through municipal aggregation because Nantucket's seasonal load profile possesses a "structural advantage" to minimizing risk, i.e. Nantucket's load is significantly reduced in the volatile/risky winter months (15-20MW), but is much higher in the spring/summer months (30-35MW) when the price of electricity is traditionally less expensive and easier to procure.

Other points to consider:

- Although not required due to Chapter 30B exemption, issuing an RFP for an aggregation consultant is a best practice that should be followed according to Town Counsel. It gives the Town essentially free market intelligence from a range of different providers and ensures that the Town receives competitive services and pricing.
- Residents and businesses owners, who already purchase their electricity from 3rd party suppliers, will not be automatically enrolled in the CCA. They will stay with their plan, and can then elect to join the CCA once their contracts expire.
- Currently, there are less than a handful of reputable electricity suppliers that serve the residential market on Nantucket, since there are extra expenses for suppliers to register with the DPU to service the Nantucket Electric load zone. The Energy Office staff believes that

the CCA will actually infuse more competition into the mix, as an additional choice, resulting in lower supply prices across the board.

- Anyone can opt-out of the CCA at any time, with no cancellation fee or penalty. The optional adder to partially fund the Energy Manager's position will support the local management of the plan and further streamline the public outreach and opt-out process, at no cost to ratepayers.
- According to Conedison, who has been the electricity supplier to the Cape Light Compact for the past 10 years, Nantucket is at a "huge advantage" having most of our annual load occur in the summer season when electricity is inexpensive. Savings could be spread throughout the year.
- Innovative CCA models can be explored, such as tiered rates, or split rate terms by season, as well as procuring for electricity supply with an increased renewable portfolio.
- It usually takes approximately 8 months to deploy a municipal aggregation. If the Town issued the aggregation consultant RFP in the summer of 2015, the consultant could be in a position to procure and offer electricity supply in the spring of 2016 for an 18-month term (2 summer seasons, 1 winter season), which should near guarantee savings for participating local ratepayers.

2. Mass Save Energy Efficiency Program: Residential & Business Energy Assessments

In the calendar year to date, the Energy Office has worked with National Grid and Mass Save to publicize, schedule and arrange no-cost home energy assessments for **338** Nantucket households during four separately coordinated "Mass Save Home Energy Assessment Week(s)", which puts us well on track to meeting our goal of **400 assessments by the year's end.**

- Since January 2015:
 - 338 Home Energy Assessments were performed
 - 651 Powerstrips installed
 - 15032 LEDs installed
 - 185 Programmable thermostats installed
 - 466 Low-flow showerheads installed
 - 522 faucet aerators
- As of April, residents are now eligible for new "enhanced incentives," which include:
 - A comprehensive audit with two energy analysts to maximize time
 - No-cost Smart Wi-Fi Thermostats (if home uses central AC)

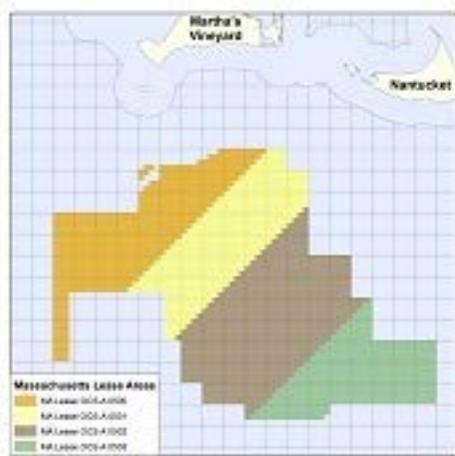
- Replacement of inefficient dehumidifiers (\$300/value)
- No-cost “ultra efficient hybrid heat pump water heater), installed by a local plumber (~\$3000 value) for homes with existing electric water heaters
- Small Businesses are now also eligible for:
 - No cost comprehensive energy assessments during scheduled audit weeks
 - 80% total cost incentives for new lighting and certain mechanicals, paid by National Grid
 - 0% interest financing for qualified energy efficient improvements
- National Grid has calculated that in six months, conducting 211 energy assessments, the Mass Save program has resulted in nearly **\$1 Million dollars in annual bill savings** for local residents (541,435 kWh equivalent to \$122,321 in electrical cost savings and 1,846,293 MMBTUs equivalent to \$803,876 in heating cost savings). This figure does not include the value of the installed equipment (LEDs, thermostats, weatherization, etc.), which is also estimated to be worth an additional hundreds of thousands of dollars.
- National Grid reports that from May 2014-April 2015, the Mass Save Home Energy Services program has saved over 7,000 MWH of energy over the lifetime of the measures installed, resulting in over **\$5.7 Million in lifetime benefits**. The benefits not only include energy bill savings, but capacity savings related to wholesale electricity markets, oil and propane savings, water savings, and property value impacts.
- The next scheduled residential and small business energy audits will take place:
 - **September 21-25, 2015**
 - **November 2-6, 2015**
- There is a new website landing page to sign-up online and to learn more information about special events and incentives only offered to Nantucket ratepayers:
 - **Ngrid.com/Nantucket**
- There is a “Nantucket-specific” call center phone number to schedule residential and business energy audits: **1-844-615-8316**
- **Increased marketing and PR to promote the Mass Save program as part of the “Non-Wires Alternative (NWA) Project” to defer the need for costly and disruptive infrastructure investments:**
 - Energy Awareness Event for Community Leaders/Stakeholders (July 29)
 - Increased radio announcements and interviews
 - Tabling at downtown Farmers & Artisans Markets

- Table at the St. Paul's Church Fair (July 15)
- National Grid/Mass Save sponsorship of Nantucket Film Festival and Raceweek
- Window air conditioner and refrigerator recycling event at the Nantucket Emporium on Friday, September 4.
- Informational table and sponsorship at 2015 Island Fair (September 13)

Supporting the Development of Solar, Offshore Wind, and Energy Storage

1. Off Shore Wind

On Wednesday, April 29, 2015, the Bureau of Ocean Energy Management (BOEM) convened a meeting of the "Massachusetts Renewable Energy Task Force," in which Ms. Sinatra participated representing the Town of Nantucket. OEM presented the details of the Massachusetts offshore wind auction held on January 29, 2015, and explained next steps for the commercial leases.



Two of the four off-shore federal leasing territories were successfully bid upon by two different companies: RES America/DONG Energy won the lease for the orange area, OffshoreMW (a Blackstone Group company based in New Jersey) won the yellow area on the map, for wind generation projects that could potentially be constructed

in the next 10 years (after 2020). Both companies have until April 1, 2016 to submit a Site Assessment Plan, at which point the Task Force will reconvene.

At the meeting, Ms. Sinatra inquired--given Nantucket's surging peak load and current partnered efforts with National Grid to defer the need for a 3rd undersea cable from the mainland-- if it is possible and economically/environmentally feasible for either wind development to provide direct power to Nantucket since--unlike Martha's Vineyard-- we possess an electric substation?

As a result of the interest that this question generated, Ms. Sinatra has had subsequent discussions with executives from OffshoreMW, National Grid, and the CEO and President of Atlantic Grid/Trans-Elect Development—the company that is proposing to provide the sub-sea transmission system for the BOEM offshore wind development.

Essentially, all parties are intrigued and excited by the possibility of connecting a cable from the offshore wind development directly to Nantucket, whereas the excess wind energy could be

transmitted back to the mainland via the two existing undersea cables. There could be considerable economic benefit to Nantucket's ratepayers to do this, although details regarding who pays for what—in terms of the wind cable investment—would still need to be determined and hinges upon newly proposed state legislation.

According to OffShoreMW, CEO Erich Stephens:

“We anticipate to approach this from a regional-scale perspective: If we’re going to connect 1000s of MW of offshore wind to the mainland anyway, maybe there is some economies to also connecting Nantucket’s 30-35 MW at the same time? If what they come up with isn’t of sufficient benefit or not otherwise of interest to Nantucket, then we can still approach it from a more targeted approach: Is there economic benefit to directly connecting a few of the wind turbines in our lease area (which is the closest lease area to Nantucket) to the island of Nantucket, instead of going to the mainland?”

The next step proposed would be a meeting with National Grid executives, members from Atlantic Grid Development Company, Energy Office staff, as well as certain state leaders at National Grid's Waltham headquarters later in July.

2. Solar PV opportunities

- a. The Energy Office is working with Nantucket Memorial Airport staff to monitor the progress of the solar project proposed as part of the Carbon Neutral Airport Program (CNAP), with a conference call scheduled with Airport Staff and Honeywell on 7/2/15.
- b. Ms. Sinatra has worked with procurement and facilities staff to propose the integration of PV solar shingles into the new construction of the Children's Beach Concession Stand and the Fire Department addition on 4 Fairground Road.
- c. Ms. Sinatra has recently engaged Direct Energy Solar—the solar provider of the “Mass Solar Connect” program—to see how Mass Energy/Town of Nantucket/Direct Solar/National Grid may collaborate to develop a customized, **Nantucket Community Solar Program**.

The idea would be to promote and facilitate an increased number of residential solar installations (optimally integrated with battery storage components), using local subcontractors (sales team, electricians, etc.), operating within HDC guidelines and a streamlined permitting process, with special National Grid incentives (e.g. \$.50/watt instant rebate), and the support of a larger company with experience creating successful community solar programs in Towns with HDC restrictions (Concord,

MA). Conversations are ongoing and promising.

3. Energy Storage Initiative

On May 28, 2015, the Baker-Polito Administration announced the launch of a new \$10 million initiative aimed at making Massachusetts a national leader in energy storage. [The Energy Storage Initiative \(ESI\)](#) includes a \$10 million commitment from the Department of Energy Resources (DOER) and a two-part study from DOER and the Massachusetts Clean Energy Center (MassCEC) to analyze opportunities to support Commonwealth storage companies, as well as develop policy options

As a result, Ms. Sinatra directly contacted Galen Nelson, the Project Director at the MassCEC, to express Nantucket's interest in participating in the study as a potential demonstration site. She suggested that, given Nantucket's need to manage summer peak load issues, the island would be interested in supporting a PV/energy storage pilot project that could offset peak loads in the 2pm-5pm with solar, and utilize energy storage to offset peak loads thereafter (5pm to sunset and beyond until demand declines).

Mr. Nelson's response expressed interest in the concept, which will be further pursued by Ms. Sinatra and with support from the "Non-Wires Alternative" project team at National Grid.

Lauren, thanks for reaching out. While we are moving ahead with the energy storage study – which got a lot of attention last week – we are still in the process of figuring out how we'll make investments in storage deployment. I suspect the answer will include a range of deployment regimes and technologies, but it's too early to say. The island opportunities are top of mind and I've been in touch with folks on Cuttyhunk about a similar (though not grid connected) solar and storage project. Your email is helpful as it provides a real sense here for me and my colleagues re. demand for this type of project. Let's keep in touch. Galen

4. Nantucket High School Wind Turbine update. The 100kW wind turbine at Nantucket High School has generated 112 MWh in January through June of 2015 to date, an increase from 97 MWh in January through June 2014, and has generated \$6,299.25 in Class 1 Renewable Energy Certificate (REC) sales. In this time, the turbine also helped offset over \$20,000 in electricity bill costs for Nantucket Public Schools.

Other Projects

- Energy Office teaches 3rd graders about energy as part of "Enrichment Cluster Program" From March 6 until April 8, Ms. Sinatra led a group of six 3rd graders in an "enrichment learning cluster" at the Elementary School, which is an opportunity for members of the community to teach students about a particular topic of interest. During her time with the group, Ms. Sinatra gave the students a tour of the 100kw wind turbine at the Nantucket High School, showed them how to make "solar cookers" to make 'smores, and led

activities, games and hands-on experiments (including solar powered toy kits) to educate the students about energy. On the last day, a “learning fair” was held, where the students were able to explain to their peers about the lessons they had learned, including demonstrations of the solar cookers and solar toys.



Projects and Goals for FY2016:

Improving & Increasing Awareness/Participation in Mass Save Programs in collaboration with National Grid

- Simplified process and better incentives to encourage increased contractor and residential participation in the Mass Save New Construction Program
- Strengthen and form strategic partnerships with key local businesses and organizations to engage community influencers and amplify program awareness and participation on Nantucket. Examples include: Chamber of Commerce, Nantucket Community Foundation, Nantucket Firemen’s Association, Nantucket Realtors Association, Rotary Club, Nantucket Builders Association, reMain Nantucket, Stop & Shop, Nantucket Bank/Cape Cod 5, Marine Home Center.
- Host seminars and training events to educate contractors and tradesmen on the programs, such as the COOL Smart Programs.
- Offer educational seminars to the community to educate Nantucket residents and businesses on the need for energy efficiency and the “enhanced” benefits of the Mass Save program on Nantucket.
- Recruit key community leaders and influencers to serve as “energy ambassadors” and be featured in case studies where they can serve as a recognizable face of the campaign and build program support and credibility
- Increase residents/small business participation numbers in the Home Energy Assessment Program to 400 in 2015, and 500 in 2016.

- Establish Nantucket Public School Partnership to raise program awareness, by: 1) Educating students on the importance of energy efficiency by presenting at a school assembly. Award students with a certificate of energy efficiency education. Should students complete a Home Energy Assessment, the school to be gifted \$100. 2) Providing students with an “energy efficiency kit” on Earth Day 2016, including a Mass Save reusable bag filled with energy saver stickers, an activity book, energy saving tips booklets, magnets, etc.
- Improve reporting to showcase the outreach campaign’s progress and Home Energy Service’s program’s participation and savings results. Reporting Metrics would include:
 - # of Assessments Completed (in each audit week and per year)
 - kWh savings
 - Instant Saving Measure Quantities (bulbs, t-stats, showerheads, powerstrips, etc.)
 - Oil & Propane Savings
 - Major upgrades installation rate (insulation, heating systems, new windows, etc.)

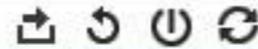
Municipal Energy Action Planning

- **Policies and Bylaws**
 - Issue RFP for Community Choice Aggregation consultant, and evaluate feasibility of CCA model for Nantucket ratepayers.
 - Explore the concept of an “Environmental Conservation Ordinance,” which would require an energy assessment prior to any real estate transaction for properties built prior to a certain year.
 - Adopt Energy/Sustainability Requirements/Design Guidelines for new municipal construction
 - Adopt a Municipal Vehicle Replacement policy to encourage integration of electric and fuel efficient vehicles
 - Streamline HDC and other applicable permitting processes for small solar applications
- **Municipal Facilities**
 - Continue to conduct energy audits and implement Energy Conservation Measures (ECMs)
 - Continue to monitor and expand LED streetlamp pilot project
 - Consider installation of additional EV Charging Stations through MassEVIP Incentive Grant
 - Expand Employee Energy Awareness efforts, utilizing the SEE the Light Energy Tool-kit and working more closely with the Nantucket Employee Empowerment Team, to reduce municipal energy waste.
 -

- **Municipal Renewable & Alternative Energy Projects**
 - Continue to support Nantucket Memorial Airport's efforts to develop a solar PV facility
 - Integrate aesthetically appropriate renewable energy technologies (e.g. solar shingles) into municipal new construction projects, such as at the new concession facility at Children's Beach
 - Continue work on BOEM's Massachusetts Intergovernmental Renewable Energy Task Force to provide input on behalf of the Town of Nantucket regarding a Federal off-shore wind power development project.

- **Research & Education**
 - Continue to facilitate and support research and education programs on local energy issues (e.g. WPI Project Center, UMass Energy Extension Initiative)
 - Continue to collaborate with the Island Institute and learn from other island communities on energy issues.

Original View ▾



[Normalized](#) |
 [Use and Cost Table](#) |
 [Annual Usage Patterns - Town](#) |
 [Usage Trends - Town](#) |
 [Use and Cost This Year to Last](#) |
 [Buildings to Target](#) |
 [Building Benchmark](#) >

Use and Cost This Year to Last

■ Total for Previous Year
 ■ Total as of June 30, 2015
 | Total for Last Year as of Same Date

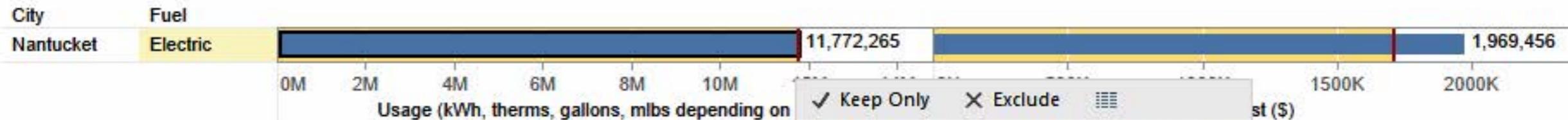
This chart compares your current energy use and cost, as of the date with the most complete data set (blue bar), to your energy use and cost this time last year (red line) and to last year's total energy use and cost (yellow bar). If the blue bar is past the red line, your energy use or spending is greater now than it was at the same time last year. To expand or collapse the chart, hover your pointer over the words City, Department, Building, etc., then click the plus (+) or minus (-) symbols.

Fiscal Year Start Month

July ▾

Fuel

- (All)
- Electric
- Oil
- Propane

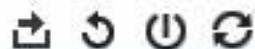


Keep Only
 Exclude
 ☰

Total Usage Last Year: 11,763,159
Total Cost Last Year: 1,711,572

As of June 30, 2015
Usage this year: 11,772,265
Usage at this time last year: 11,763,159
Cost this year: 1,969,456
Cost at this time last year: 1,711,572

Original View ▾

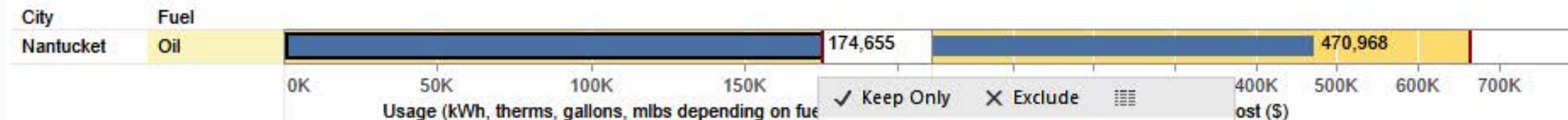


[Normalized](#) |
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Use and Cost This Year to Last

■ Total for Previous Year
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Keep Only
 Exclude

Total Usage Last Year: 175,534
Total Cost Last Year: 664,953

As of June 30, 2015
Usage this year: 174,655
Usage at this time last year: 175,534
Cost this year: 470,968
Cost at this time last year: 664,953

Fiscal Year Start Month

July ▾

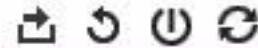
Fuel

- (All)
- Electric
- Oil
- Propane

Propane Use and Cost

[view reports](#) [organize data](#) [upload a spreadsheet](#)

● Original View ▾


▾ ◀ [Normalized](#) [Use and Cost Table](#) [Annual Usage Patterns - Town](#) [Usage Trends - Town](#) [Use and Cost This Year to Last](#) [Buildings to Target](#) [Building Benchmark](#) ▶

Use and Cost This Year to Last

■ Total for Previous Year ■ Total as of June 30, 2015 | Total for Last Year as of Same Date

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Fiscal Year Start Month

July ▾

Fuel

- (All)
- Electric
- Oil
- Propane

City	Fuel
Nantucket	Propane



Keep Only
 Exclude

Total Usage Last Year: 34,244
Total Cost Last Year: 43,254

As of June 30, 2015
Usage this year: 39,836
Usage at this time last year: 34,244
Cost this year: 66,502
Cost at this time last year: 43,254

Original View



Normalized Use and Cost Table Annual Usage Patterns - Town Usage Trends - Town Use and Cost This Year to Last Buildings to Target Building Benchmark

Use and Cost This Year to Last

■ Total for Previous Year
 ■ Total as of June 30, 2015
 | Total for Last Year as of Same Date

This chart compares your current energy use and cost, as of the date with the most complete data set (blue bar), to your energy use and cost this time last year (red line) and to last year's total energy use and cost (yellow bar). If the blue bar is past the red line, your energy use or spending is greater now than it was at the same time last year. To expand or collapse the chart, hover your pointer over the words City, Department, Building, etc., then click the plus (+) or minus (-) symbols.

Fiscal Year Start Month

July

Fuel

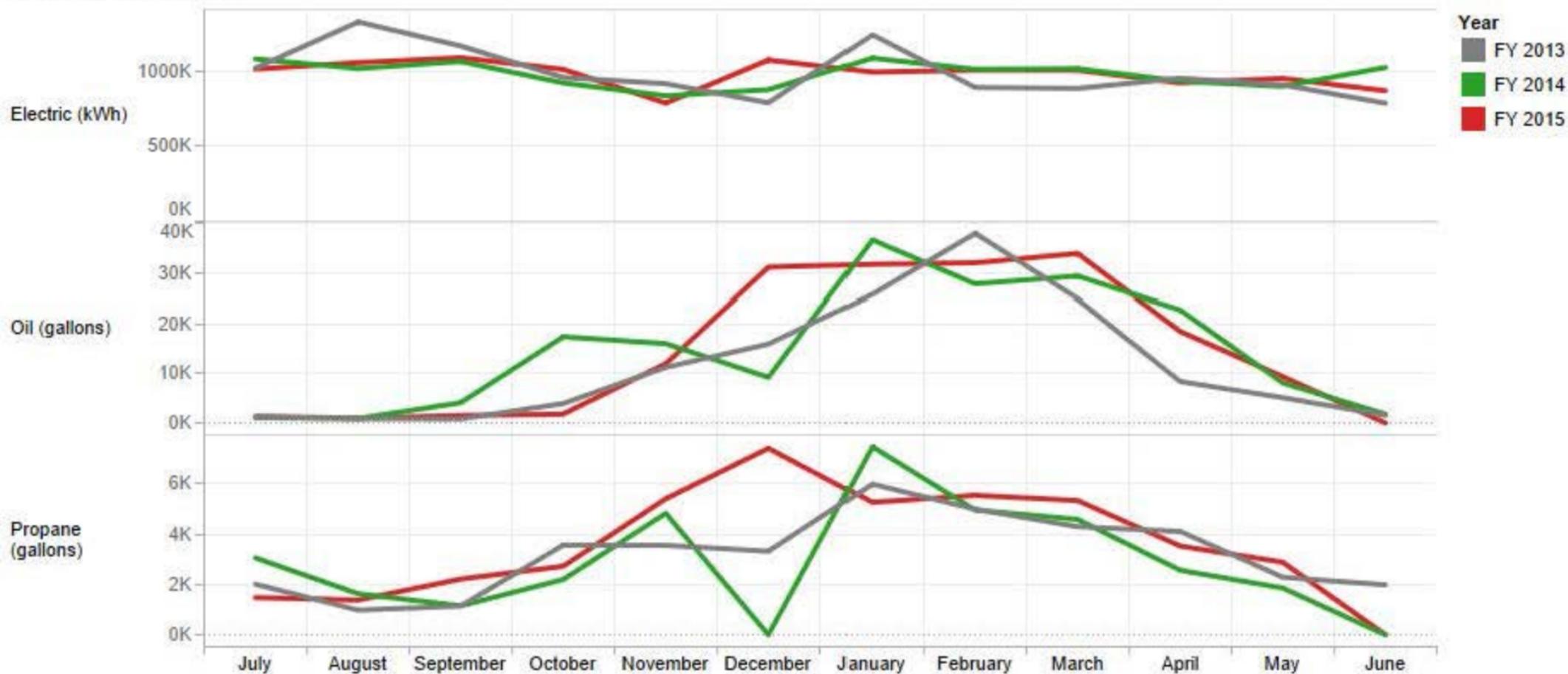
- (All)
- Electric
- Oil
- Propane



Propane Use and Cost: By Facility

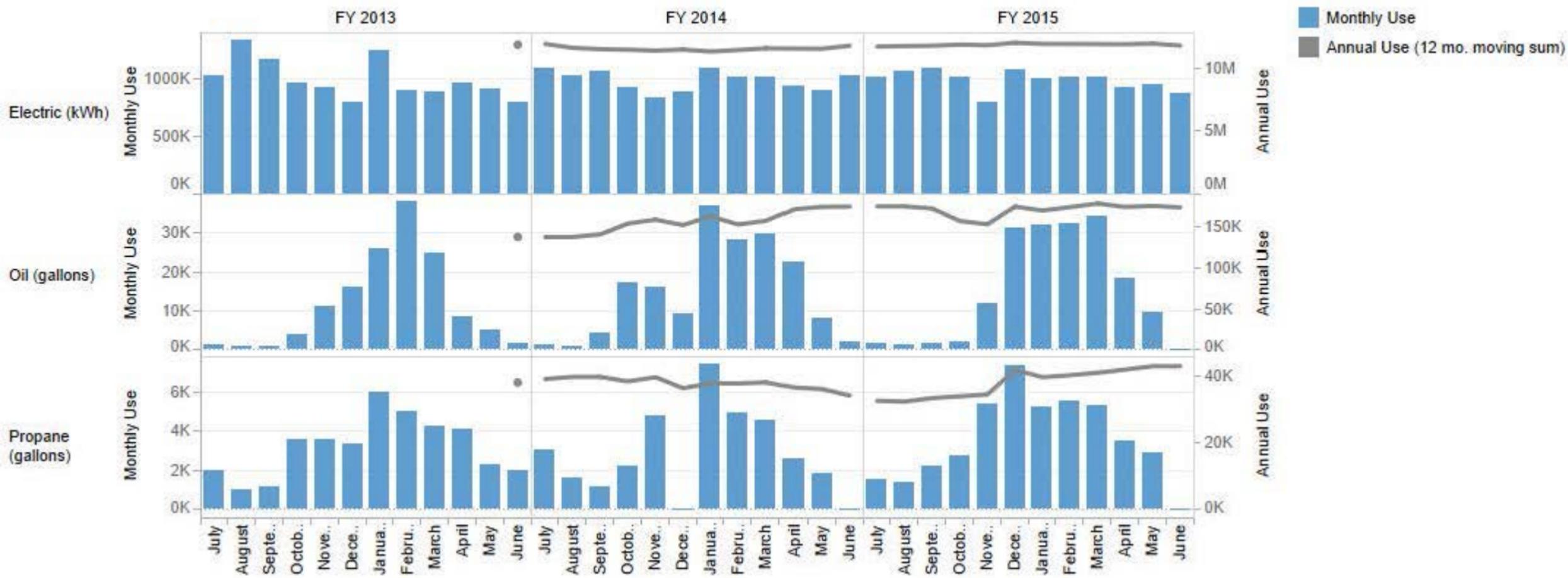
Annual Usage Patterns - Town

This report shows the annual usage patterns for each of the fuels used. Each line is a separate year, and allows you to compare usage patterns from year to year for the years selected.



Usage Trends - Town

This chart shows both the monthly use for each fuel (blue bars) and a 12 month moving sum of use (gray line). The monthly use shows how your use changes from month to month. The moving sum shows you how total annual use for that fuel is trending.



Green Office Guide:

Municipal Employees Leading By Example

The Town of Nantucket is committed to reducing energy & waste consumption in all municipal buildings to save on utility expenses and to help support a more energy-efficient and sustainable community on Nantucket.

We ask all employees to support our sustainability efforts by using the following guidelines:

ENERGY REDUCTIONS

Saving energy is not just for the maintenance and facilities staff to think about; all Town employees have a role to play in reducing municipal electricity, propane, and oil consumption.



LIGHTS

- Turn off all lights if you plan on leaving a room for more than 5 minutes.
- Keep the lights in the break room and bathroom OFF when not in use.
- Use LEDs whenever possible. Need some? Just contact the Energy Office.
- Use task lighting and natural light with the main lights off whenever possible.

THERMOSTATS (HEATING & COOLING)



- Some buildings have centrally controlled heating and cooling, while most of the smaller facilities have individually controlled thermostats prone to inefficiency.
- In the fall/winter months, keep temperatures **below 70°** (62° when unoccupied).
- In the summer months, keep temperatures **between 72-74°** (78° when unoccupied).
- If your thermostat is not adjustable or does not work and you are uncomfortable, talk to your building manager or contact the **DPW Facilities Dept. at 508-922-5086**.
- Report overheated and over-cooled rooms instead of opening windows and doors.
- A **space heater uses more energy than all your lights**, computer, printer, and other office appliances combined. Work with Facilities to optimize heating and cooling performance in your office so all space heaters can be removed.
- Dress appropriately for each season; wear warm clothes in colder winter months and lighter, cooler clothing in the warm summer months.



APPLIANCES

- In the summer, take advantage of Nantucket's cool summer breezes by opening windows vs. using an air-conditioner.
- If you prefer using an air-conditioner, make sure all windows are closed, and keep temperatures between 72-74° to maximize conservation and comfort.
- Take notice of wasteful operations: if heaters continue to operate when they're no longer needed, or if window AC units are running full bore on a cool day (or with windows opened), please alert your manager or the Energy Office.
- If you have electronic appliances that are rarely used, leave them unplugged.
- Share appliances rather than using individual refrigerators, printers, etc.
- Only purchase ENERGY STAR rated computers and appliances



COMPUTER SETTINGS

The IT Department has determined it is safe to turn off the following equipment if you are leaving your workstation for more than 20 minutes, and always at the end of the workday:

- Computer monitors, laptop computers, desktop printers, scanners, and speakers

- **Turn down the brightness setting on monitors;** it consumes **twice** the power of the dimmest setting
- **Don't turn on printers, laptops, scanners, printers, or extra monitors until necessary**
- **Unplug** cell phone chargers, laptop power adapters when not in use.
- **Stop using screen savers; they generally do not save energy!** In fact, certain graphics-intensive screen savers can cause the computer to burn more energy, and may actually prevent a computer from entering *Stand By* mode.
- Make sure all monitors, laptops and computers are set to go into automatic **Power Saver** mode after 5-10 minutes of non-operation. Contact IT (helpdesk@nantucket-ma.gov) for assistance, or go into "Control Panel" → Power Option → Select "Power Saver"
- In **Power Saver** mode, your computer and monitor will use a very small amount of energy, will start up quickly, and will go right back to what you were doing last.

Did you know?
The average desktop PC wastes nearly half of the energy it consumes as heat!

WASTE REDUCTIONS



WATER

- There are no health concerns with municipal tap water. Utilize water fountains, water coolers, or reusable water bottles rather than individual water bottles.

REDUCE YOUR PAPER FOOTPRINT

- Set double-sided (duplex) printing as the default setting on your computer
- Repurpose your one-sided printed paper into note pads

RECYCLING

- Single stream recycling: All types of paper, plastic including plastic bags, glass, aluminum and cardboard should be placed in the blue recycling bins.
- If you need a recycling bin or battery bucket in your office space, please contact Larry Kester, Facility Manager, at LKester@nantucket-ma.gov.



GREEN GUIDE FOR EMPLOYEE TENANTS: LEADING BY EXAMPLE

The Town of Nantucket is committed to reducing energy consumption in all of our buildings to save on utility expenses and to help support a more energy-efficient and sustainable community.

Did you know that Nantucket has among the highest electric rates in the country?!

PLEASE HELP US TO SAVE ENERGY AND REDUCE COSTS BY USING THE FOLLOWING GUIDELINES:

- **Turn off your lights and other electronics when you are done with them or when you leave the room, and encourage your roommates to do the same.**
- **In the daytime use natural daylight, not electric lighting.**
- **Take advantage of Nantucket's cool summer breezes by opening windows instead of using air-conditioners.**
- **If air-conditioners are used, please make sure all windows are closed, and keep temperatures between 72-76° to maximize conservation & comfort.**
- **Use fans in conjunction with less air-conditioning to keep cool.**
- **Fans cool people, not rooms. Shut off fans when leaving the room.**
- **Take shorter showers—the lifeguard houses use electric water heaters.**
- **Please report leaky faucets and showerheads, and running toilets to reduce water use/waste to your supervisor.**

The Energy Office is responsible for the professional, administrative, and supervisory tasks related to municipal and island-wide energy policies, practices, and projects that can deliver significant taxpayer savings through reduced energy costs, while contributing to overall community sustainability and economic development. Please contact Lauren Sinatra, Energy Coordinator, with any questions or concerns at 508-325-5379 or lsinatra@nantucket-ma.gov.