



MEMORANDUM

TO: Andrew Vorce, Director of Planning
FROM: Lauren Sinatra, Energy Coordinator
RE: FY2019: Update of Energy Office Activities

In FY 2019, the Town's Energy Office conducted professional and technical tasks related to municipal and island-wide energy policies, practices, and projects that deliver significant taxpayer savings through reduced energy costs, while contributing to overall community sustainability and economic development.

In FY 2019, Town facilities and vehicles consumed:

- 12,873,701 kWh of electricity (6% increase over FY 2018)
- 149,425 gallons of heating oil (22% less than FY 2018)
- 51,702 gallons of propane (25% less than FY 2018)
- 32,682 gallons of diesel fuel (6% less than FY2018)
- 126,915 gallons of gasoline (3% less than FY2018)

When normalized for weather patterns, the Town used 81,537 MMBTu in FY2019, at a total cost of \$3,225,713 for all power and fuel (10% less usage and 2% higher cost than in FY2018).

The High School Wind Turbine produced 181 Megawatt-hours (MWh) of energy in FY2019, offsetting approximately 13.3% off the High School's electric load, at an estimated value of \$28,960 in avoided electricity costs.

Among the achievements of the Energy Office in FY 2019 were the following:

- Managed the *Nantucket PowerChoice* municipal electric program, which secured a less expensive and greener electric supply for Nantucket electric customers. By the end of the 2019 Fiscal Year, enrollment in Nantucket PowerChoice grew to more than 11,400 electricity customers, which is 85% of all eligible accounts on Nantucket. The average program price of 9.07 ¢/kWh consistently beat National Grid's Basic Service rates, delivering over \$6 Million in cumulative savings to local participants since program launch in April 2017 (approximately \$500/year).
- Sold 191 Renewable Energy Certificates (RECs) generated by the High School wind turbine to Nantucket's Electric Aggregation Program. This transaction resulted in \$3,172.25 for the Town and 191,000 kWh of clean, local power for *Nantucket PowerChoice* program participants.
- Awarded over \$100,000 in rebates to local residents who installed Solar-PV. Funding for the Town's *Local Solar Rebate* program is provided through a 0.1¢/kWh charge that is included in the *Nantucket PowerChoice* program price.
- Managed HeatSmart Nantucket, a successful 12-month outreach program that encouraged residents to transition from traditional fossil fuel-based systems to high-efficiency, lower-carbon heating and cooling alternatives. Under HeatSmart Nantucket, dozens of islanders took advantage of limited-time pricing and thousands of dollars in state and utility incentives for solar hot water and airsource heatpump ("minisplit") systems. The Energy Office hosted a series of public workshops

and created an informational website, which continues to serve as a key resource for the interested public: www.heatsmartnantucket.org.

- Initiated Nantucket's Green Communities Designation: Secured a \$5,000 grant from the Massachusetts Department of Energy Resources (DOER) to engage the Cape Light Compact for Green Communities Designation Technical Assistance; coordinated a series of "Stretch Energy Code" informational workshops for residents and building contractors.
- Secured a \$7,500 grant award to support the purchase of the Town's first all-electric vehicle for the municipal fleet through the Massachusetts Electric Vehicle Incentive Program (MassEVIP). The all-electric, Nissan Leaf, is used primarily by the Department of Culture and Tourism.
- Initiated and managed a municipal solar procurement, which included a prioritized list of municipal sites most feasible for solar development, including the Surfside Wastewater Treatment Plant, Public Safety Facility, Wannacomet Water Co., Airport, DPW Compound, and the Schools.

Secured a \$12,500 grant from the Massachusetts Department of Energy Resources to engage an industry-leading Solar Consultant for project technical assistance. The bundled solar procurement was designed to secure the most cost-effective price for a 75-kW Solar PV system at the Surfside Wastewater Treatment Plant, for which a \$200,000 MassDEP grant was secured to offset ~90% of the purchase price.

- Worked closely with National Grid to identify methods for reducing growth in electrical demand during peak periods, including battery deployment and other non-wires alternative strategies, and to publicize, schedule and manage no-cost home energy assessments for 479 Nantucket households. The energy assessments and associated energy saving measures (i.e. LEDs, weatherization, wifi thermostats, etc.) resulted in 1,327,528 kWh saved, an average of \$685 in annual cost savings per home, and 408kW in island peak load reductions. The Energy Office also partnered with National Grid to host an AC-unit Recycling Event and assisted in the successful promotion of four designated "Refrigerator Recycling" pickup dates.
- Served as the Town's representative for matters pertaining to MA offshore wind development, including leading communications with several offshore wind developers seeking to build windfarms 14-25 miles off Nantucket's south shore and serving as the Town's liaison with the Bureau of Ocean Energy Management (BOEM)--the lead federal agency overseeing offshore windfarm permitting and development.

Represented the Town's best interests in the many federal, state and local permitting reviews for the Vineyard Wind-1 Offshore Wind Farm, including chairing the Town's "Offshore Wind Workgroup" and participating in the Section 106 Review to minimize and mitigate the effects of the project on local historic resources. The Energy Coordinator also assisted in drafting formal comments on key findings such as BOEM's *Draft Environmental Impact Statement* and the *Finding of Adverse Effect* on the Nantucket Historic District-National Historic Landmark.

- Secured a \$35,000 Planning Grant award from the Massachusetts Executive Office of Energy & Environmental Affairs to update and expand the 2011 Nantucket Energy Plan into a robust Climate Action Plan in FY2020.