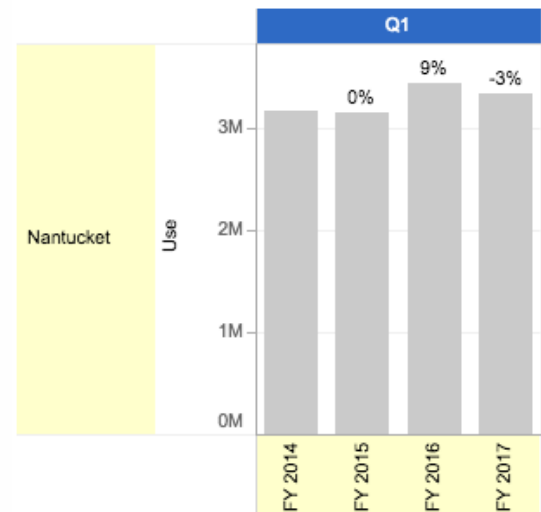


# Energy Report: First Quarter FY2017

Wednesday, November 2, 2016

Presented by:  
Lauren Sinatra  
Energy Coordinator  
Town of Nantucket  
2 Fairgrounds Road  
[lsinatra@nantucket-ma.gov](mailto:lsinatra@nantucket-ma.gov)

Quarter to Quarter



# Energy Announcements

- **Commonwealth Energy Tool for Savings (energyCENTS)**

<http://www.mass.gov/energycents>



**energyCENTS: Commonwealth Energy Tool for Savings**

*Connecting Energy Incentives with Consumers*



[Home](#) | [Glossary](#) | [FAQs](#) | [Contact](#) | [About](#)

The **Commonwealth Energy Tool for Savings (energyCENTS)** provides a single entry point to all of the energy saving opportunities available to Massachusetts residents, businesses and institutions. You can find rebates, loans and financing for electric vehicles, appliances, home energy assessments, solar electricity and far more and then go directly to the sponsor's website.

The information found on this website is maintained by DOER and not the entity offering the incentives or rebates, and as such may not fully reflect actual incentives and requirements. If you find information that is incorrect or inconsistent, please email us at [DOER\\_Energy@State.MA.US](mailto:DOER_Energy@State.MA.US) with correct information on the energy incentive and your contact information.

Please note that if you are searching for incentives available to Municipal or State Entities, contact [DOER\\_Energy@State.MA.US](mailto:DOER_Energy@State.MA.US)

What energy source are you looking for?  Electric  Natural Gas

Who are you?

- Agriculture Entity
- Business/Institution
- Clean Energy Industry
- Income Eligible Resident
- Resident

What are you looking for?

- Appliances
- Clean Energy Innovation
- Electric Vehicles
- Energy Audit
- Financing
- Heating and Cooling
- Insulation
- Lighting
- New Construction
- Remodeling
- Renewable Power
- Solar Electricity
- Training and Certifications

Search or refine by keyword or zipcode

Keyword

Zipcode

X 02554

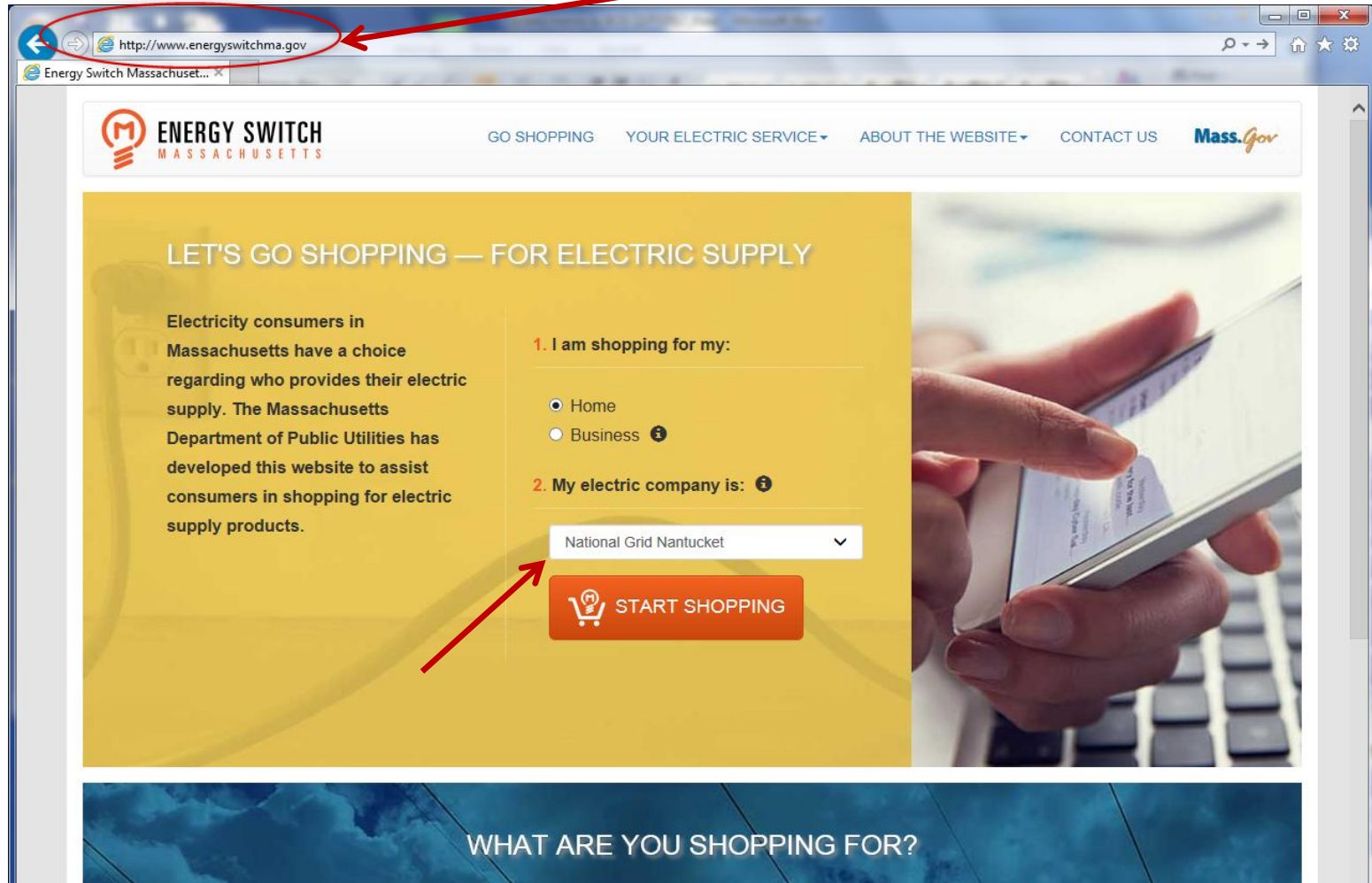
**CLEAR ALL FILTERS**

# Energy Announcements

- **National Grid Rate Increases**
  - Basic service (electric supply) rates will be rising in November (until April 2017) to **9.745 ¢/kWh**; a 21% increase over the current (spring/summer) rate (8.042¢/kWh), **but** 26% less than last year's winter rate (13.129¢/kWh).
  - National Grid is delaying October bills by about two weeks as the utility calculated a distribution rate increase recently approved by the Department of Public Utilities (DPU) that took effect on Oct. 1. Residential ratepayers can expect to see a **7% increase** in cost of "Delivery Services" on next bills.

# Energy Announcements

- **Energy Switch Massachusetts:** [www.energyswitchma.gov](http://www.energyswitchma.gov)



http://www.energyswitchma.gov

ENERGY SWITCH  
MASSACHUSETTS

GO SHOPPING YOUR ELECTRIC SERVICE ABOUT THE WEBSITE CONTACT US Mass.gov

LET'S GO SHOPPING — FOR ELECTRIC SUPPLY

Electricity consumers in Massachusetts have a choice regarding who provides their electric supply. The Massachusetts Department of Public Utilities has developed this website to assist consumers in shopping for electric supply products.

1. I am shopping for my:

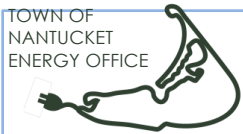
- Home
- Business ⓘ

2. My electric company is: ⓘ

National Grid Nantucket

START SHOPPING

WHAT ARE YOU SHOPPING FOR?



# Energy Announcements

http://www.energyswitchma.gov/#/compare/3/1



GO SHOPPING YOUR ELECTRIC SERVICE ABOUT THE WEBSITE CONTACT US **Mass.gov**

## LET'S GO SHOPPING

for **residential** electric supply products in the **National Grid Nantucket** service territory. You can filter, sort, and compare the products to help you find which may be right for you.

Average Monthly Usage (kWh) ⓘ

Usage / month

**Update**

**Filtering Options**

**Show**

Sort By

View

Print

**Compare**

### Electric Supply Products

Total Products: 9

SUPPLIER NAME	PRICE ⓘ	CONTRACT TERM ⓘ	RENEWABLE ENERGY ⓘ	ADDITIONAL PRODUCTS & SERVICES	ESTIMATED MONTHLY COST ⓘ
<b>Basic Service</b> ⓘ	9.787 ¢/kWh TBD	Nov '16 through Apr '17 May '17 through Oct '17			\$58.72 through Oct '17
<b>Provider Power Mass</b> <a href="#">Sign Up</a> <input type="checkbox"/> Compare	8.149 ¢/kWh	6 months Cancellation fee ⓘ Automatic renewal ⓘ			\$48.89 through May '17
<b>MAG&amp;E</b> <a href="#">Sign Up</a> <input type="checkbox"/> Compare	11.090 ¢/kWh	6 months Cancellation fee ⓘ Automatic renewal ⓘ			\$66.54 through May '17
<b>ADERA ENERGY</b> <a href="#">Sign Up</a> <input type="checkbox"/> Compare	11.985 ¢/kWh	24 months Cancellation fee ⓘ Automatic renewal ⓘ			\$71.91 through Nov '18



# Energy Announcements

## Rebidding Town Electric Supply

- Energy Office helped Town to lock in a new 24-month electric supply contract while wholesale prices were significantly declined.
- Contract signed on March 10, 2016 takes effect in November 2016
- Town departments can plan to adjust budgets for a 20% decrease\* in electricity costs through FY18

Supplier	Term	Volume (kWh)	Current Price (kWh)	New Price (kWh)	Total Savings
NextEra	24-months	24,227,468	\$0.10703	\$0.08292	<b>\$584,124.25</b>

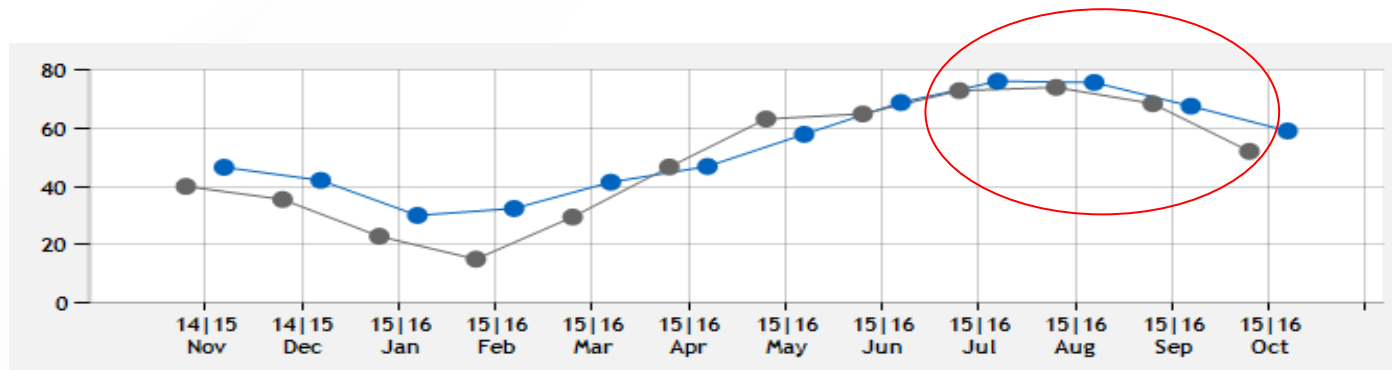
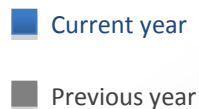
\*Depends upon how National Grid applies new distribution increase to commercial accounts, estimated to be between 5-7%.

# Municipal Electricity Use and Cost: Q1 Fiscal Years 2016 vs. 2017

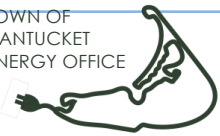
Monitoring of Town energy consumption. The following table compares energy consumption by municipal facilities and equipment during the first quarter of fiscal years 2016 and 2017. Both years had unseasonably warm temperature, with delivery schedule differences in September accounting for significant “usage/cost” discrepancies.

	Q1-FY2016	Q1-FY2017	Difference in Use	Difference in Cost
<b>Electricity</b>	3,439,340 kWh	3,338,515 kWh	<b>-3%</b>	<b>-6%</b>
<b>Heating oil</b>	1,930 gallons	3,194 gallons	<b>65%</b>	<b>64%</b>
<b>Propane</b>	3,155 gallons	5,214 gallons	<b>67%</b>	<b>55%</b>

## Temperatures:

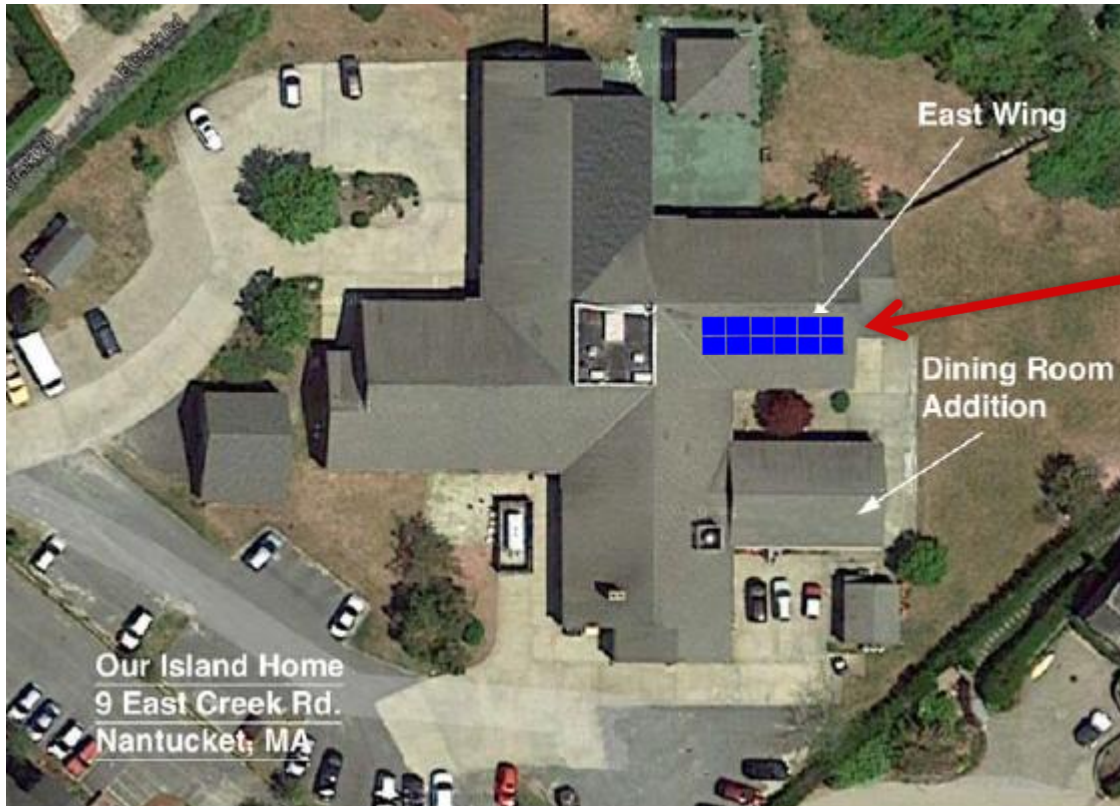


Source: MassEnergy Insight data as of September 30, 2016 based upon National Grid data (automatically updated in software on a monthly basis), and quarterly delivery records supplied by Yates Gas and Harbor Fuel (input manually by Energy Coordinator).



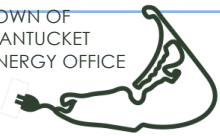
# Our Island Home: Solar Hot Water Feasibility Study

- Study 100% funded by a \$5,000 grant awarded through the Massachusetts Clean Energy Center (MassCEC) secured by Energy Office in July 2016
- Report finalized on October 28, 2016



**Recommended Design:**  
(12) 30-tube collectors,  
Flush-mount installation



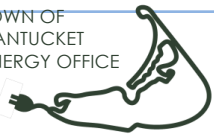


# Our Island Home: Solar Hot Water Feasibility Study

## Report Findings:

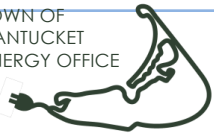
- Estimated oil savings
  - 1,213 gallons/year
  - Annual savings: \$2,547-\$3,638 (dependant on forecasted oil prices)
- MassCEC rebate for low income facilities equal to **more than 80%** of system cost!
- After rebate application, a \$70,955 system would cost Town approximately **\$13,335**.
  - Simple payback between **3.5-5 years**

**Next steps:** Pursue project with Northern Energy Services (MGL Ch. 25A) as part of larger mechanical upgrade project in progress.



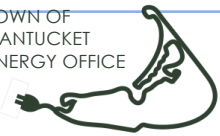
# Renewable Energy/Energy Storage Updates

- “Peak Demand Management” Energy Storage Pilot
  - Massachusetts Department of Energy Resources’ (DOER) \$10Million "Peak Demand Management Grant Program" RFP
  - Genbright LLC and IceEnergy, along with support from Energy Office, submitted a proposal for a \$3M Nantucket project to deploy residential ice energy air conditioners for summer peak load reduction.
  - Awards due imminently, indications that Nantucket project is on the shortlist.
- National Grid’s Solar Phase III Program
  - Program for NGRID to own, construct, operate solar facilities on private land in high priority areas—Nantucket listed
  - Nantucket Airport and Wannacomet Water Tower property included in Borrego Solar’s development bid package
  - Would guarantee long-term lease income from an ideal permanent tenant for current market or above market rates
  - Award decisions expected during week of November 7, 2016.
- MA Solar Incentive Program: Energy Office serving on separate stakeholder committees, representing island solar interests



# Mass Save Energy Efficiency Update

- A new record level peak load occurred on Sunday, August 14, 2016 at 6:00pm, reaching **48MW** (up from previous peak load of 44MW on August 4, 2015).
- **574** residential energy assessments to date (surpassed 2016 goal of 450 assessments by 27.5%, and 2015 annual record of 544 assessments), resulting in:
  - **25,151** LEDs installed
  - **150** Wifi programmable thermostats
  - **211** Dehumidifiers (+\$200 value)
  - **49** Hybrid electric Heat-pump Water Heaters (\$3,000 value)
  - **979** Powerstrips installed
  - **755** Low-flow showerheads installed
  - **121** Insulation contracts and **124** free Air Sealing contracts issued
- Energy Saving Measures installed= **80%** of peak load reduction goal (286kw)
- Next Energy Assessment Weeks: **November 7-11, 2016, March 13-17, 2017**
  - Sign-up online: **[NGRID.com/Nantucket](http://NGRID.com/Nantucket)**
  - Call: **844-615-8316**
  - Contact: **Energy Office** at 2 Fairgrounds Road (PLUS)



# WPI Electric Vehicle Research Project

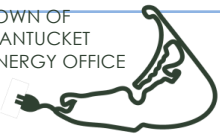
(October 20-December 17)



## **Electric Vehicles on Nantucket: Analyzing the Benefits and Complications of Increased Adoption**

### **Goals:**

- Analyze the increase in EV usage since the 2010 and Determine the adequacy of the Town's six (free) electric vehicle charging stations and recommend areas for improvement, including relocation of chargers, adding or removing chargers, requiring payment for charging privileges, etc.
- Determine how increased EV use may impact the island's rising "Summer Peak Load," and how local, seasonal, and visiting EV drivers may be incentivized to charge more responsibly during off-peak hours.



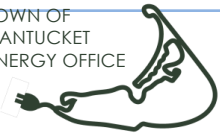
# Municipal Electric Aggregation



**Nantucket**  
**POWER***Choice*

Updates:

<http://nantucket-ma.gov/751/Municipal-Electricity-Aggregation>



# Questions?

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**Thank You!**