

Town of Brookhaven

Energy Efficiency & Sustainability Update

April 8, 2019

Energy Efficiency

50% reduction in Greenhouse Gas (GHG) Emissions from Town operations by 2020

- ▶ Initiated by Supervisor Romaine in 2015.
- ▶ **Purpose:** become a sustainable, self-reliant, environmentally pro-active community.
- ▶ **Resiliency:** combat climate change, reduce vulnerability to fluctuating fuel prices and supply, prepare for future economic challenges.
- ▶ **Adaptability:** incorporate new technology and industry practices, respond to 21st century challenges, become more energy independent.
- ▶ **Protect our community welfare and the natural environment.**

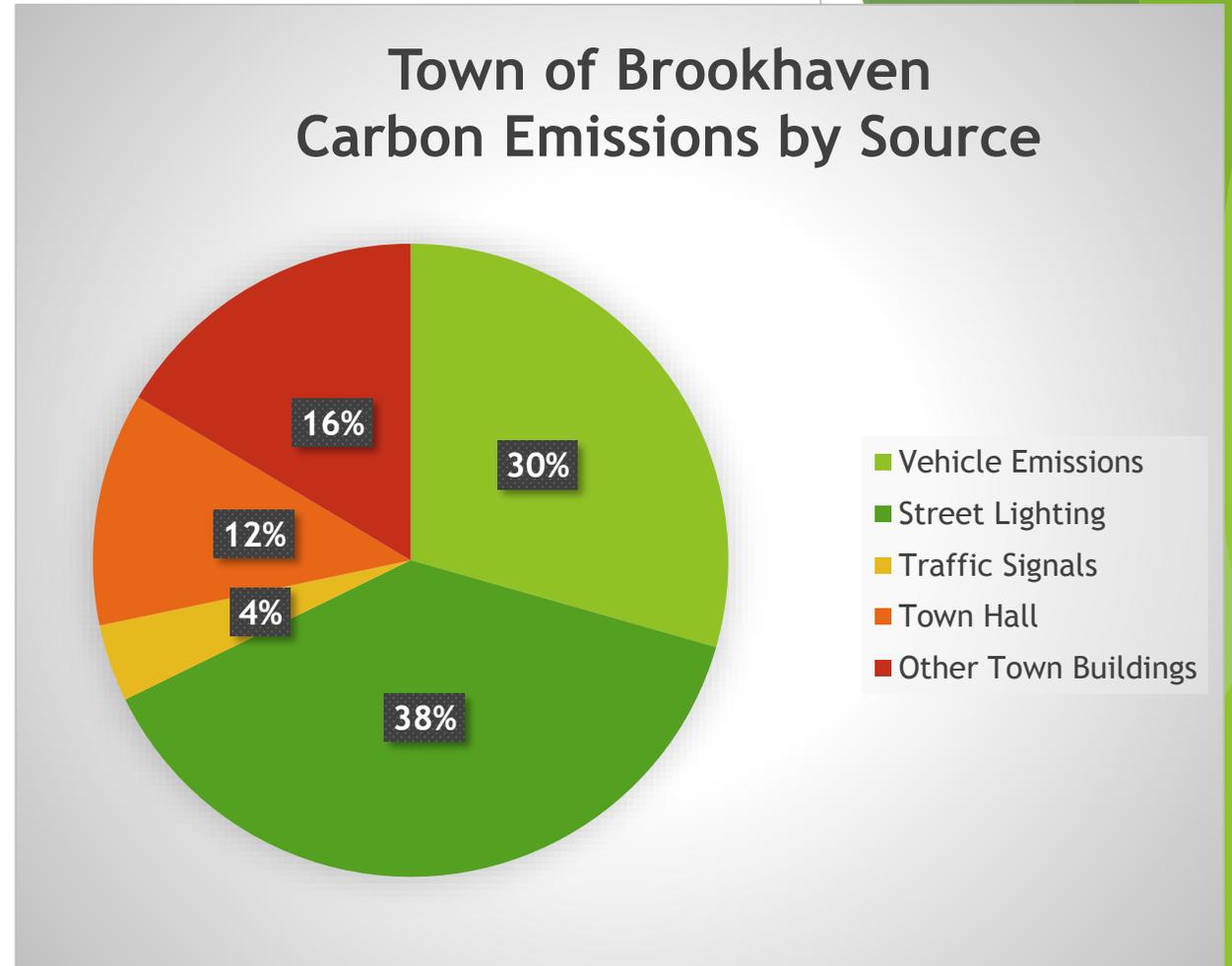
Good News!

- ▶ Comparing 2018 to 2005 (baseline):
 - Annual electric consumption down 2,392,298 KWh.
 - CO2e reduction = 7,396.55 tons.
 - Annual gasoline consumption down 122,077 gallons.
 - CO2e reduction = 1,413.55 tons.

- ▶ Well on our way to realizing 50% goal by end of 2020.

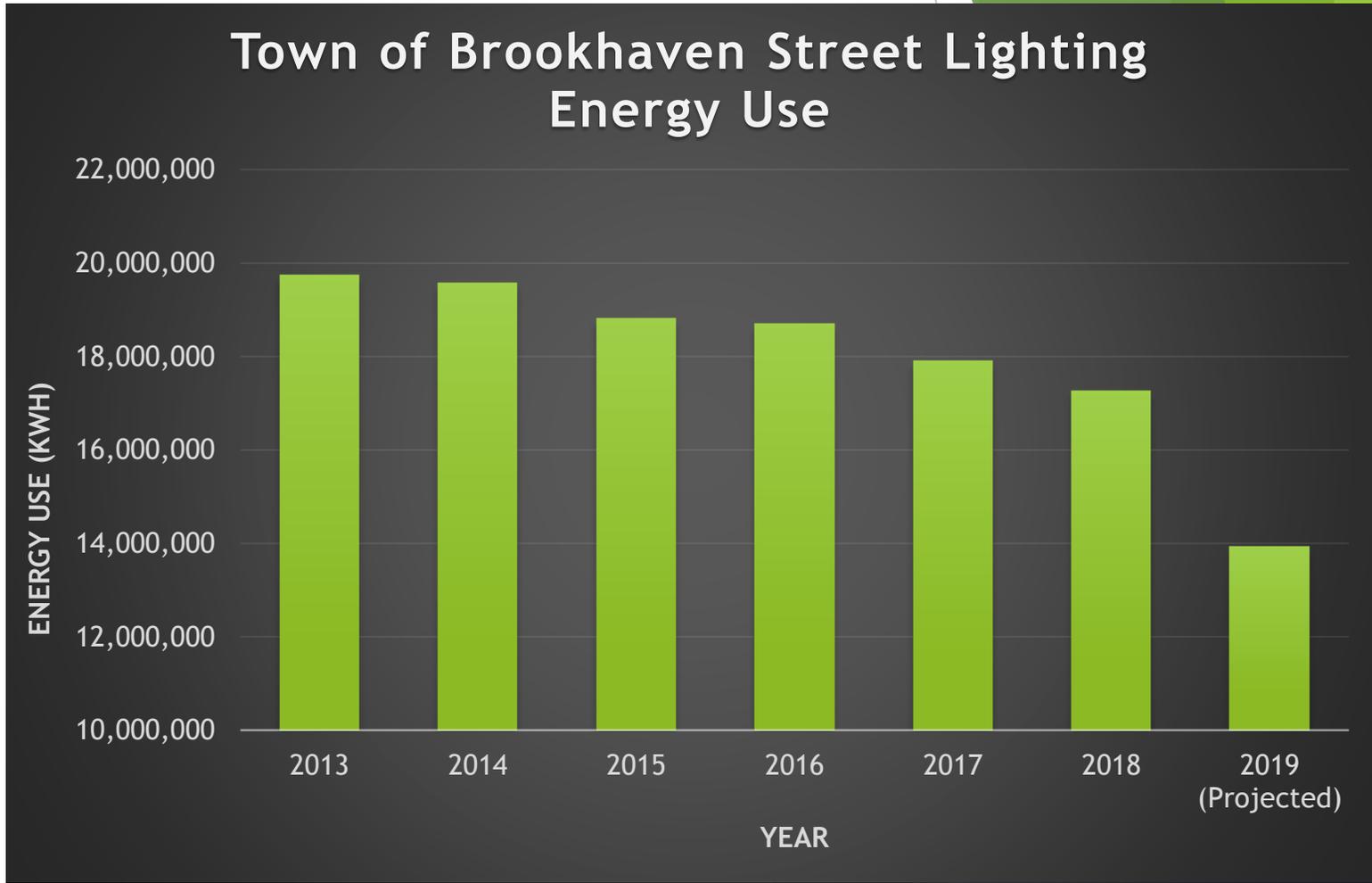
Municipal Energy Use

- Continued efforts are underway to reduce street lighting and vehicle emissions - two of the Town's largest sources of emissions.



Street Lighting

- ▶ LED Conversion - began in 2014.
- ▶ Realized 12.5% decrease in energy use compared to 2013.
- ▶ Highway Department to continue aggressive conversion to LED bulbs over the remainder of this year and next.
- ▶ Projected 29.5% decrease in energy use 2013 to 2019.



Green Fleet

- ▶ Town anti-idling policy and minimum MPG standard (33mpg) were implemented in 2015.
- ▶ 7 Hybrid Ford Fusions are utilized in the fleet.
- ▶ First all electric vehicle purchased in early 2017.
- ▶ Two additional all electric vehicles are to be delivered by May 2019.
- ▶ Gasoline consumption from Town fleet has decreased by 29.2% from 2005-2018



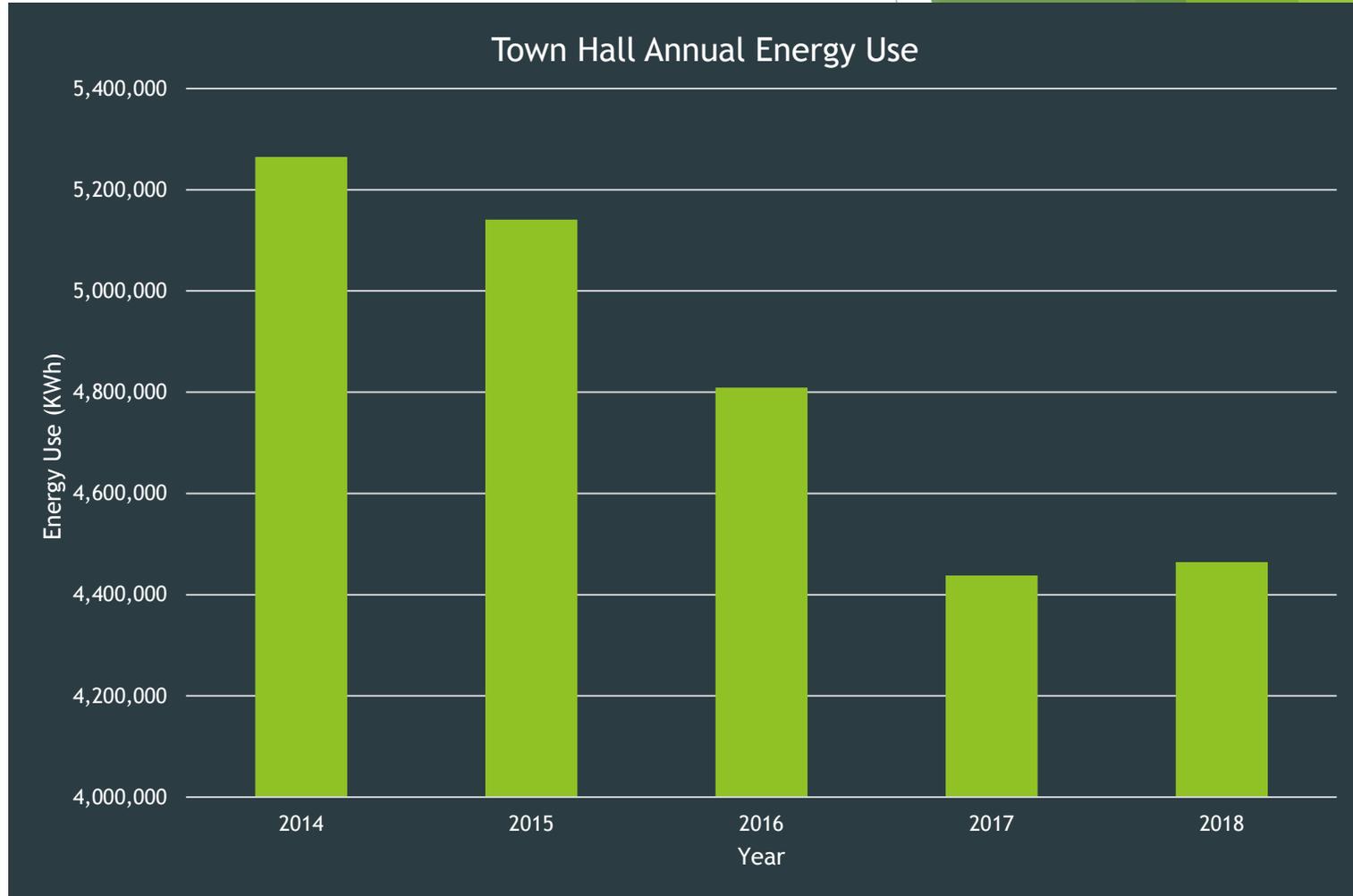
Green Fleet (Continued)

- ▶ Electric vehicle charging stations have been installed at:
 - ▶ Parks and Recreation Building, Centereach
 - ▶ Heritage Park, Mt. Sinai
 - ▶ Moriches Bay Recreation Center, Center Moriches
- ▶ Additional electric vehicle charging stations will be installed at Town Hall in 2019.
- ▶ Actively seeking grants for additional charging stations.
- ▶ Planning staff recommending charging stations at commercial sites.



Town Hall

- ▶ Conversions to efficient LED fixtures began August 2015
 - ▶ 2,166 fluorescent troffer lights.
 - ▶ Approximately \$188,000 in PSEG rebates received.
 - ▶ All parking lot lighting and outside floodlights.
 - ▶ Town Hall auditorium lighting.
- ▶ Looking ahead:
 - ▶ solar on roof (Fall 2019).
- ▶ Estimated that lighting in building will be 95% LED by end of 2019.
- ▶ Electric water heaters have been replaced with gas-fired heaters.



Renewable Energy Production

- ▶ Solar Energy:
 - ▶ Town Hall (1.32 MW)
 - ▶ Manorville (1.35 MW)
 - ▶ Holtsville (1.75 MW)
- ▶ Future renewable energy at other Town properties:
 - ▶ Brookhaven Energy Park
 - ▶ 7.4 MW fuel cell in the planning stage.
 - ▶ Solar development
 - ▶ Partnership with American Organic Energy
 - ▶ Exploring battery storage option.
 - ▶ Continue working with PSEG.
 - ▶ Brookhaven Amphitheater
 - ▶ Ground breaking expected April 2019
 - ▶ Calabro Airport
 - ▶ Received FAA approval.
 - ▶ Ground breaking expected April 2019.



Continued Recycling Initiatives

▶ Brew to Moo

- ▶ Spent grain from local Breweries is being used as food for animals at local farms. From the programs start in August 2017 to the end of 2018, over 405,000 lbs of spent grain has been used as animal feed.
- ▶ An additional 37,500 lbs of grain and coffee have been used as a compost supplement.
- ▶ Received DEC Grant for equipment dedicated for this program.

▶ Half Shells for Habitat

- ▶ 25 restaurants participating across the region.



Sustainability

▶ Native Species Restoration

▶ Shellfish Restoration

- ▶ The Town of Brookhaven has been awarded a New York State Department of Environmental Conservation grant to expand and upgrade the Town's Mariculture Facility at Cedar Beach in Mount Sinai
- ▶ The Town of Brookhaven's Mariculture Facility annually grows:
 - ▶ Approximately 1.5 million Oysters
 - ▶ Approximately 1 million Clams



Sustainability

▶ Native Species Restoration

▶ Eel Grass

- ▶ Two eelgrass restoration projects were completed in 2018 within Brookhaven Town waters in partnership with Cornell Cooperative Extension Marine Program and area volunteers.
- ▶ One site on the shoal, north of the Bellport Bay channel has replaced the former John Boyle Island site and the second eelgrass plantings were added to the 2017 plantings in Moriches Bay, west of Swan Island where the past plantings are thriving.
- ▶ The project areas will be surveyed late Spring 2019.

▶ Trees - Trees for Tribs Program

- ▶ Funding was secured in 2018 for the 2019 Reforestation of Bay Avenue Farm in East Moriches consisting of a 100-foot planted buffer along the wetland areas of the property adjacent to the Terrell River, a tributary to the Moriches Bay. Trees - Trees for Tribs Program

▶ Tree City USA

- ▶ Town of Brookhaven designated a Tree City by the Arbor Day Foundation as result of Supervisor Romaine's "Greening Brookhaven" initiative to plant 10,000 trees by 2020.
- ▶ Goal to plant 10,000 trees by 2020 was met in May 2018.

Sustainability Initiatives

- ▶ Native Species Restoration
 - ▶ Bobwhite Quail raise and release
 - ▶ Partnered with Seatuck Environmental Association
 - ▶ Next release - July/August



Open Space Preservation

- ▶ In 2018 more than 70 Open Space acquisitions were completed.
- ▶ A total of 81.6 acres were preserved.
- ▶ This program helps protect drinking water supplies, surface water quality and protects habitat for a myriad of species.



Upcoming Environmental Programs

- ▶ April 13 10am Earth Day Event at Coram Fire Department
 - ▶ April 13 2pm Nature Walk with Boy Scout Troop Cedar Beach
 - ▶ April 18 10am BNL Earth Day Event -Recycling and Environmental
 - ▶ April 20 10am TOB Earth Day Celebration Cedar Beach
 - ▶ April 20 2pm Nature Walk at West Meadow Beach
 - ▶ April 24 1pm Centereach Rec Center Themed Project Ocean Water
 - ▶ April 26 Town Hall Tree Giveaway
 - ▶ April 27 10am Earth Day Fair at Longwood Public Library
 - ▶ May 18 Great Brookhaven Clean-up
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- ▶ **Free Dump Weeks for Residents**
 - ▶ Week of April 22
 - ▶ Week of October 7

Thank You for Your Support!

