

PE3 Action: Energy Benchmarking for Government Buildings

In order to track energy use in municipal buildings owned by the Village of Saranac Lake, energy use data has been entered into the Energy Star Portfolio Manager. The energy use data is from two sources: Fuel oil #2 and electricity. For each Village building, the data from these two energy sources was inputted for the period between December of 2015 and December 2018. The data for each building was then used to create metrics summaries that included site and source EUI, energy costs, GHG emissions intensity, and net emissions. A summary report was completed for each building for 12 consecutive months in the years 2016, 2017, and 2018. The report was publicly disclosed by posting it on the Village of Saranac Lake website, on the Clean Energy Communities project page. The webpage also includes charts that depict energy costs, GHG emissions, and EUI in each building over the three-year period. The energy benchmarking process was also introduced to the public during an Earth Week presentation put on by the Climate Smart Communities Task Force.

Link to the Clean Energy Communities project page: <https://saranaclakeny.gov/index.php?section=projects-module&projectsection=14&project=12>

Link to the Earth Week presentation: <https://us02web.zoom.us/rec/>

**Business of the Village Board
Village of Saranac Lake**

SUBJECT: Energy Benchmarking

Date: 9-25-17

DEPT OF ORIGIN: John Sweeney

Bill # 120-2017

DATE SUBMITTED: _____

EXHIBITS: _____

APPROVED AS TO FORM:

Village Attorney

Village Administration

EXPENDITURE
REQUIRED

AMOUNT
BUDGETED:

APPROPRIATION
REQUIRED

SUMMARY STATEMENT

MOVED BY: Catillaz SECONDED BY: Shapiro

VOTE ON ROLL CALL:

MAYOR RABIDEAU

TRUSTEE SHAPIRO

yes

TRUSTEE CATILLAZ

yes

TRUSTEE VAN COTT

yes

TRUSTEE PELLETIERI

absent

**RESOLUTION TO ADOPT ENERGY BENCHMARKING POLICY REQUIREMENTS
FOR CERTAIN MUNICIPAL BUILDINGS IN THE VILLAGE OF SARANAC LAKE**

WHEREAS, buildings are the single largest user of energy in the State of New York, and the poorest performing buildings typically use several times the energy of the highest performing buildings, for the exact same building use; and

WHEREAS, this local policy will use Building Energy Benchmarking to promote the public health, safety, and welfare by making available good, actionable information on municipal building energy use to help identify opportunities to cut costs and reduce pollution in the Village of Saranac Lake; and

WHEREAS, collecting, reporting, and sharing Building Energy Benchmarking data on a regular basis allows municipal officials and the public to understand the energy performance of municipal buildings relative to similar buildings nationwide; and

WHEREAS, equipped with this information, the Village of Saranac Lake will be able to make smarter, more cost-effective operational and capital investment decisions, reward efficiency, and drive widespread, continuous improvement; and

WHEREAS, the following definitions will apply:

- (1) "Benchmarking Information" shall mean information generated by Portfolio Manager, as herein defined including descriptive information about the physical building and its operational characteristics.
- (2) "Building Energy Benchmarking" shall mean the process of measuring a building's Energy use, tracking that use over time, and comparing performance to similar buildings.
- (3) "Covered Municipal Building" shall mean a building or facility that is owned or occupied by the Village of Saranac Lake that is 1,000 square feet or larger in size.
- (4) "Department" shall mean the Community Development Department, in partnership with Adirondack North Country Association.
- (5) "Energy" shall mean electricity, natural gas, steam, hot or chilled water, fuel oil, or other product for use in a building, or renewable on-site electricity generation, for purposes of providing heating, cooling, lighting, water heating, or for powering or fueling other end-uses in the building and related facilities, as reflected in Utility bills or other documentation of actual Energy use.

(6) "Energy Performance Score" shall mean the numeric rating generated by Portfolio Manager that compares the Energy usage of the building to that of similar buildings.

(7) "Energy Use Intensity (EUI)" shall mean the kBTUs (1,000 British Thermal Units) used per square foot of gross floor area.

(8) "Gross Floor Area" shall mean the total number of enclosed square feet measured between the exterior surfaces of the fixed walls within any structure used or intended for supporting or sheltering any use or occupancy.

(9) "Portfolio Manager" shall mean ENERGY STAR Portfolio Manager, the internet-based tool developed and maintained by the United States Environmental Protection Agency to track and assess the relative Energy performance of buildings nationwide, or successor.

(10) "Utility" shall mean an entity that distributes and sells Energy to Covered Municipal Buildings.

(11) "Weather Normalized Site EUI" shall mean the amount of Energy that would have been used by a property under 30-year average temperatures, accounting for the difference between average temperatures and yearly fluctuations; and

WHEREAS, this local policy is applicable to all Covered Municipal Buildings as defined in item 3 above; and

WHEREAS, the Mayor or authorized individual may exempt a particular Covered Municipal Building from the benchmarking requirement if he determines that it has characteristics that make benchmarking impractical; and

WHEREAS, no later than December 31, 2017, and no later than May 1 every year thereafter, the Mayor or authorized individual or his designee shall enter into Portfolio Manager the total energy consumed by each Covered Municipal Building, along with all other descriptive information required by Portfolio Manager for the previous calendar year; and

WHEREAS, for new Covered Municipal Buildings that have not accumulated 12 months of Energy use data by the first applicable date following occupancy for inputting Energy use into Portfolio Manager, the Mayor or authorized individual or his designee shall begin inputting data in the following year; and

WHEREAS, the Department shall make available to the public online Benchmarking Information for the previous calendar year:

- (a) no later than December 31, 2017 and by September 1 of each year thereafter for Covered Municipal Buildings; and

WHEREAS, the Department shall make available to the public online and update at least annually, the following Benchmarking Information:

- (a) Summary statistics on Energy consumption for Covered Municipal Buildings derived from aggregation of Benchmarking Information; and
- (b) For each Covered Municipal Building individually:
 - (i) The status of compliance with the requirements of this Local Policy; and
 - (ii) The building address, primary use type, and gross floor area; and
 - (iii) Annual summary statistics, including site EUI, Weather Normalized Source EUI, annual GHG emissions, and an Energy Performance Score where available; and
 - (iv) A comparison of the annual summary statistics (as required by this Local Policy) across calendar years for all years since annual reporting under this Local Policy has been required for said building; and

WHEREAS, the Department shall maintain records as necessary for carrying out the purposes of this Local Policy, including but not limited to Energy bills and other documents received from tenants and/or Utilities. Such records shall be preserved by the Department for a period of three (3) years; and

WHEREAS, the Mayor or authorized individual or his or her designee shall be the Administrator of this Local Policy; and

WHEREAS, the Administrator of this Local Policy may promulgate procedures necessary for the administration of the requirements of this Local Policy; and

THEREFORE BE IT RESOLVED THAT within thirty days after each anniversary date of the effective date of this Local Policy, the Administrator of the Benchmarking Policy shall submit a report to the Village Board, including but not limited to summary statistics on Energy consumption for Covered Municipal Buildings derived from aggregation of Benchmarking Information, a list of all Covered Municipal Buildings identifying each Covered Municipal Building that the Mayor or authorized individual determined to be exempt from the benchmarking requirement and the reason for the exemption, and the status of compliance with the requirements of this Local Policy; and

BE IT ALSO RESOLVED THAT this Local Policy shall be effective immediately upon adoption by the Village of Saranac Lake; and a copy of this resolution shall be provided to the Mayor or authorized body assigned the responsibility of administering the Energy Benchmarking Program.

Jamie Konkoski

From: erda.sm.clean.energy.communities <cec@nyserda.ny.gov>
Sent: Friday, October 20, 2017 1:21 PM
To: Jamie Konkoski
Cc: jrogers@adirondack.org
Subject: NOTIFICATION: NYSERDA Clean Energy Communities | Village of Saranac Lake | Benchmarking

Hello Jamie,

The Village of Saranac Lake recently submitted documentation demonstrating completion of the **Benchmarking High Impact Action** under NYSERDA's [Clean Energy Communities](#) program.

Congratulations, your submission has been approved.

This is your **FOURTH** approved High Impact Action. Please note that in order to be designated as a Clean Energy Community, you need to complete four high impact actions and at least two of your actions need to be completed after August 1, 2016. Our records indicate that **THREE** of the actions submitted were completed after this date.

If you have any questions, please do not hesitate to contact your local Clean Energy Communities Coordinator who is working on NYSERDA's behalf to help you navigate the program:

Jamie Rogers
Adirondack North Country Association
(518) 891-6200
jrogers@adirondack.org

Thank you for your interest in becoming a Clean Energy Community. Keep up the good work!

Clean Energy Communities Team

NYSERDA

17 Columbia Circle | Albany, NY 12203-6399

nyserda.ny.gov

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Electric Vehicle (EV) charging station in use at the parking lot next to 3 Main St.

Clean Energy Communities Program

Saranac Lake is a Designated Clean Energy Community

The Village of Saranac Lake is committed to building a more sustainable community. One of the ways that commitment is demonstrated is through participation in NYSERDA's Clean Energy Communities Program. By completing four of the 10 High Impact Actions Saranac Lake became a dedicated Clean Energy Community in 2017. That designation came with a \$50,000 incentive award that is being used to complete more high impact actions.

High Impact Actions in Progress

The Village is planning to use the \$50,000 incentive award toward the cost of converting street lights to energy efficient LED technology, which will result in both a reduction in energy usage and cost savings. The Village Board has taken a pledge to achieve Climate Smart Communities Certification, which is another high impact action in progress. Learn more about that initiative on the [Climate Smart Communities project page](#).

High Impact Actions Completed by the Village of Saranac Lake

- Energy Code Enforcement Training
- Unified Solar Permit which is designed to streamline the approval process for installing solar
- Solarize Community Campaign to promote clean energy
- Clean Fleets- the village has installed one electric vehicle charging station for public use
- Benchmarking which is a commitment to reducing energy use in buildings. The village has converted to LED interior lights in most municipal buildings.

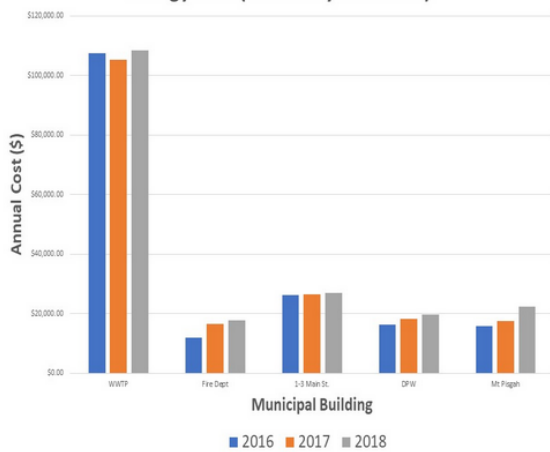
Energy Performance Measures for Village Buildings in 2016-2018

The benchmarking data from 2016-2018 is summarized in the charts below. [For a full report on Energy Performance Measures for Village Buildings, click HERE.](#)

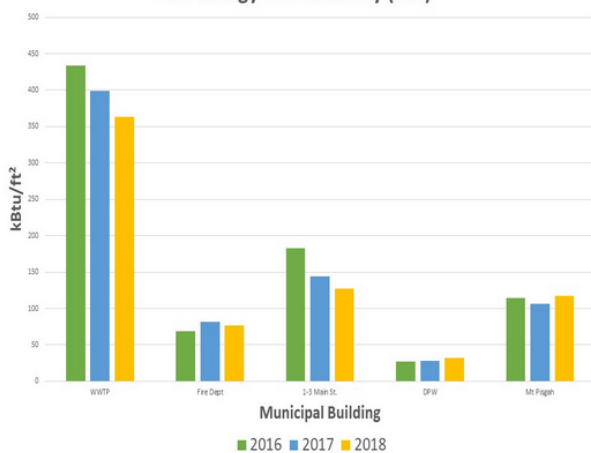
Total Green House Gas Emissions Intensity



Energy Cost (electricity & fuel oil)



Site Energy Use Intensity (EUI)*



* EUI expresses a building's energy use as a function of its size or other characteristics. EUI is expressed as energy per square foot per year. Generally, a low EUI signifies good energy performance. However, certain property types will always use more energy than others.



Clean Energy Communities

Saranac Lake

Benchmarking

Energy Used in Municipal Buildings
2016 - 2018

Published June 2020

17 Main

Date Downloaded: 05/08/2020 03:25 PM EDT

Date Generated: 05/08/2020 03:25 PM EDT

Number of properties in report: 1

| Property Id | Property Name | Year Ending | Fuel Oil #2 Use (kBtu) | Site EUI (kBtu/ft ²) | Source EUI (kBtu/ft ²) | % Difference from National Median Source EUI | % Difference from National Median Site EUI | National Median Source EUI (kBtu/ft ²) | National Median Site EUI (kBtu/ft ²) | Energy Cost (\$) | Electricity (Grid Purchase) Cost (\$) | Fuel Oil (No. 2) Cost (\$) | Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | Net Emissions (Metric Tons CO ₂ e) |
|-------------|---------------|-------------|------------------------|----------------------------------|------------------------------------|--|--|--|--|------------------|---------------------------------------|----------------------------|--|---|
| 10542993 | 17 Main St. | 12/31/2018 | 513097.8 | 134.4 | 137.2 | 53.7 | 53.7 | 89.3 | 87.5 | 9249.82 | 349.62 | 8900.2 | 9.9 | 38.2 |
| 10542993 | 17 Main St. | 12/31/2017 | 483621 | 126.1 | 127.6 | 43 | 43 | 89.3 | 88.2 | 7213.7 | 271.64 | 6942.06 | 9.4 | 35.9 |
| 10542993 | 17 Main St. | 12/31/2016 | 505632 | 131.7 | 133 | 49 | 49 | 89.3 | 88.4 | 5382.4 | 218.45 | 5163.95 | 9.8 | 37.5 |

Central Garage

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Number of properties in report: 1

| Property Id | Property Name | Year Ending | Fuel Oil #2 Use (kBtu) | Site EUI (kBtu/ft ²) | Source EUI (kBtu/ft ²) | % Difference from National Median | % Difference from National Median Site EUI | National Median Source EUI (kBtu/ft ²) | National Median Site EUI (kBtu/ft ²) | Energy Cost (\$) | Electricity (Grid Purchase) Cost (\$) | Fuel Oil (No. 2) Cost (\$) | Total GHG Emissions Intensity | Net Emissions (Metric Tons CO ₂ e) |
|-------------|---|-------------|------------------------|----------------------------------|------------------------------------|-----------------------------------|--|--|--|------------------|---------------------------------------|----------------------------|-------------------------------|---|
| 6748818 | Village of Saranac Lake Central Garage | 12/31/2018 | 592751.4 | 31.6 | 49.2 | -49.2 | -49.2 | 96.9 | 62.2 | 19647.12 | 9414.34 | 10232.78 | 2 | 54.2 |
| 6748818 | Village of Saranac Lake Central Garage | 12/31/2017 | 421327.8 | 27.7 | 49.5 | -48.9 | -48.9 | 96.9 | 54.1 | 18212.26 | 12028.12 | 6184.14 | 1.6 | 44.1 |
| 6748818 | Village of Saranac Lake Central Garage | 12/31/2016 | 361311.6 | 27.1 | 52 | -46.4 | -46.4 | 96.9 | 50.6 | 16363.84 | 12613.04 | 3750.8 | 1.5 | 41.4 |

Fire Department

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Number of properties in report: 1

| Property Id | Property Name | Year Ending | Fuel Oil #2 Use (kBtu) | Site EUI (kBtu/ft ²) | Source EUI (kBtu/ft ²) | % Difference from National Median Source EUI | % Difference from National Median Site EUI | National Median Source EUI (kBtu/ft ²) | National Median Site EUI (kBtu/ft ²) | Energy Cost (\$) | Electricity (Grid Purchase) Cost (\$) | Fuel Oil (No. 2) Cost (\$) | Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | Net Emissions (Metric Tons CO ₂ e) |
|-------------|--|-------------|------------------------|----------------------------------|------------------------------------|--|--|--|--|------------------|---------------------------------------|----------------------------|--|---|
| 6751577 | Village of Saranac Lake Volunteer Fire | 1/31/2019 | 670721.4 | 77.1 | 101.5 | -18.7 | -18.7 | 124.9 | 94.8 | 17845.69 | 6473.59 | 11372.1 | 5.3 | 55.2 |
| 6751577 | Village of Saranac Lake Volunteer Fire | 12/31/2017 | 715833.6 | 81.8 | 107 | -14.3 | -14.3 | 124.9 | 95.5 | 16568.41 | 6361.64 | 10206.77 | 5.6 | 58.7 |
| 6751577 | Village of Saranac Lake Volunteer Fire | 12/31/2016 | 581794.2 | 68.8 | 93.6 | -25.1 | -25.1 | 124.9 | 91.9 | 12010.68 | 6176.59 | 5834.09 | 4.6 | 48.7 |

Mt Pisgah

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Number of properties in report: 1

| Property Id | Property Name | Year Ending | Fuel Oil #2 Use (kBtu) | Site EUI (kBtu/ft ²) | Source EUI (kBtu/ft ²) | % Difference from National Median Source EUI | % Difference from National Median Site EUI | National Median Source EUI (kBtu/ft ²) | National Median Site EUI (kBtu/ft ²) | Energy Cost (\$) | Electricity (Grid Purchase) Cost (\$) | Fuel Oil (No. 2) Cost (\$) | Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | Net Emissions (Metric Tons CO ₂ e) |
|-------------|------------------------------------|-------------|------------------------|----------------------------------|------------------------------------|--|--|--|--|------------------|---------------------------------------|----------------------------|--|---|
| 10537975 | Village of Saranac Lake Mt. Pisgah | 12/31/2018 | 357613.2 | 117.6 | 227.5 | 103.1 | 103.1 | 112 | 57.9 | 22313.88 | 16495.08 | 5818.8 | 6.6 | 41.6 |
| 10537975 | Village of Saranac Lake Mt. Pisgah | 12/31/2017 | 305352.6 | 106.5 | 211.3 | 88.7 | 88.7 | 112 | 56.4 | 17403.94 | 13309.94 | 4094 | 5.9 | 37 |
| 10537975 | Village of Saranac Lake Mt. Pisgah | 12/31/2016 | 336347.4 | 114.7 | 225.5 | 101.3 | 101.3 | 112 | 57 | 15786.77 | 12327.51 | 3459.26 | 6.4 | 40.1 |

Police Department/3 Main St

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Number of properties in report: 1

| Property Id | Property Name | Year Ending | Fuel Oil #2 Use (kBtu) | Site EUI (kBtu/ft ²) | Source EUI (kBtu/ft ²) | % Difference from National Median Source EUI | % Difference from National Median Site EUI | National Median Source EUI (kBtu/ft ²) | National Median Site EUI (kBtu/ft ²) | Energy Cost (\$) | Electricity (Grid Purchase) Cost (\$) | Fuel Oil (No. 2) Cost (\$) | Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | Net Emissions (Metric Tons CO ₂ e) |
|-------------|--------------------------------|-------------|------------------------|----------------------------------|------------------------------------|--|--|--|--|------------------|---------------------------------------|----------------------------|--|---|
| 6704204 | Village of Saranac Lake Police | 12/31/2018 | 682561.8 | 124.7 | 235.9 | 88.9 | 88.9 | 124.9 | 66 | 26931.13 | 15216.15 | 11714.98 | 7.1 | 76.7 |
| 6704204 | Village of Saranac Lake Police | 12/31/2017 | 900174 | 144.5 | 255.3 | 104.5 | 104.5 | 124.9 | 70.7 | 26494.58 | 13900.34 | 12594.24 | 8.6 | 92.7 |
| 6704204 | Village of Saranac Lake Police | 12/31/2016 | 1346314.2 | 182.9 | 288.6 | 131.2 | 131.2 | 124.9 | 79.1 | 26175.58 | 12553.04 | 13622.54 | 11.5 | 124.6 |

Waste Water Treatment Plant

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Number of properties in report: 1

| Property Id | Property Name | Year Ending | Fuel Oil #2 Use (kBtu) | Site EUI (kBtu/ft ²) | Source EUI (kBtu/ft ²) | % Difference from National Median Source EUI | % Difference from National Median Site EUI | National Median Source EUI (kBtu/ft ²) | National Median Site EUI (kBtu/ft ²) | Energy Cost (\$) | Electricity (Grid Purchase) Cost (\$) | Fuel Oil (No. 2) Cost (\$) | Total GHG Emissions Intensity | Net Emissions (Metric Tons CO ₂ e) |
|-------------|------------------------------------|-------------|------------------------|----------------------------------|------------------------------------|--|--|--|--|------------------|---------------------------------------|----------------------------|-------------------------------|---|
| 6751843 | Village of Saranac Lake Wastewater | 12/31/2018 | 429083.4 | 363.5 | 891.7 | Not Available | Not Available | Not Available | Not Available | 108439.72 | 96195.63 | 6897.4 | 16.8 | 168.4 |
| 6751843 | Village of Saranac Lake Wastewater | 12/31/2017 | 808528.2 | 398.6 | 930.8 | Not Available | Not Available | Not Available | Not Available | 105303.02 | 89625.61 | 11675.1 | 19.4 | 193.7 |
| 6751843 | Village of Saranac Lake Wastewater | 12/31/2016 | 790326 | 434.1 | 1022.6 | Not Available | Not Available | Not Available | Not Available | 107407.66 | 94561.11 | 9051.68 | 20.9 | 209.3 |