



**New Lebanon, NY  
Greenhouse Gas Inventory for Government Operations  
Summary Report  
August 12, 2020**

**I. Background**

In April 2020, the town board of New Lebanon NY voted to become a Climate Smart Community (CSC). As one of its first actions, the town's Climate Smart Task Force began calculating greenhouse gas emissions for town operations. The inventory establishes a baseline for government operations that can be used to guide strategies to reduce greenhouse gas (GHG) emissions. This inventory is more comprehensive than the energy benchmarking for town buildings that was started in 2016 for NYSERDA's Clean Energy Communities program.

**II. Data Gathering**

The CSC Task Force delegated the collection of GHG data to Marc Anthonisen, a masters student at the Cornell Institute of Public Affairs (CIPA) and volunteer advisor to the task force. New Lebanon is a fairly small town with limited buildings and operations, so the data gathering exercise was small compared to other communities.

It was decided, in consultation with the Town Supervisor Tistrya Houghtling and Jill Falchi, a Sustainability Planner from the Capitol District Regional Planning Commission (CDRPC) that the town should use 2019 as its baseline year for the inventory. This was because:

- The pandemic hadn't hit yet in 2019 so it would provide a more consistent baseline. The pandemic is likely to dampen energy usage for the town during 2020.
- The town had yet to install LED lights for streetlights, which went into effect in March 2020. The lights significantly reduced power usage by the streetlights.
- Billing records from 2019 were readily available
- The electric energy usage trends in the CEC reports had been fairly stable over 2016-2019, so we felt comfortable using 2019 as a baseline.

The town had already collected data for larger government buildings (town hall and town garage) for the CEC benchmarking. This data was downloaded from the EPA Portfolio Manager system for 2019. For other energy accounts, scanned copies of other energy bills were kindly provided by Deputy Town Clerk Ashley Saviano.

The GHG inventory included:

- Town hall and town garage meter (NYSEG)\*
- Park pavilion meter (NYSEG)
- Park shed meter (NYSEG)
- Street lights (NYSEG)
- Fuel oil for town hall (John Ray & Sons)\*
- Fuel oil for town garage (John Ray & Sons)\*
- Kerosene for town garage (John Ray & Sons)
- Diesel for town vehicles (John Ray & Sons)

\*included in CEC government buildings benchmarking. Going forward, the kerosene heater will also be added to the CEC energy benchmarking for the town garage. This was newly identified as part of the inventory data collection process.

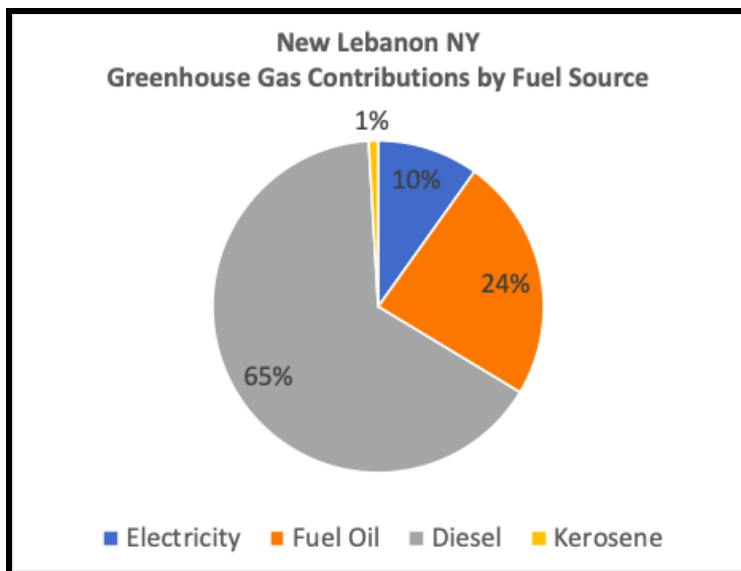
### Process Improvements

As part of the inventory process, the town board agreed to set up online accounts for electric and fuel suppliers so that data could be gathered online in the future. This will reduce the workload for town hall staff.

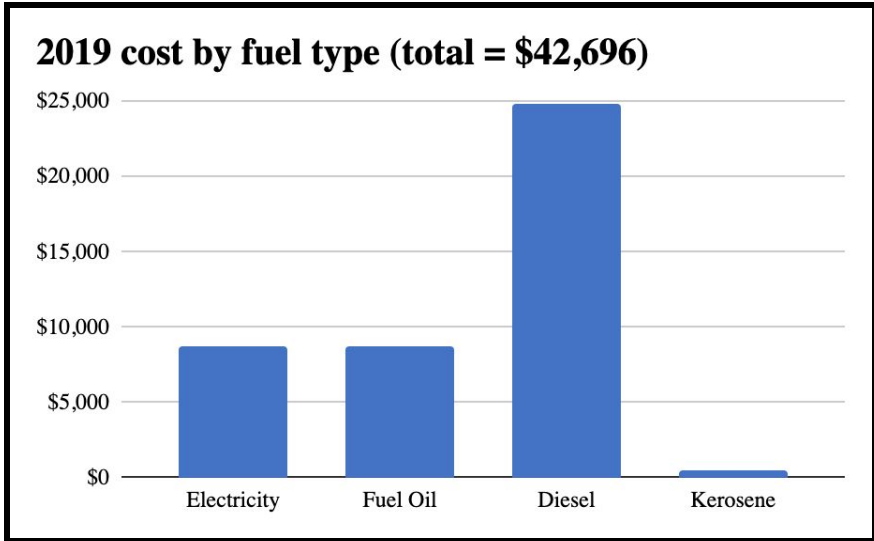
### III. Key Findings

The town government produces 185 US tons of greenhouse gas emissions annually.

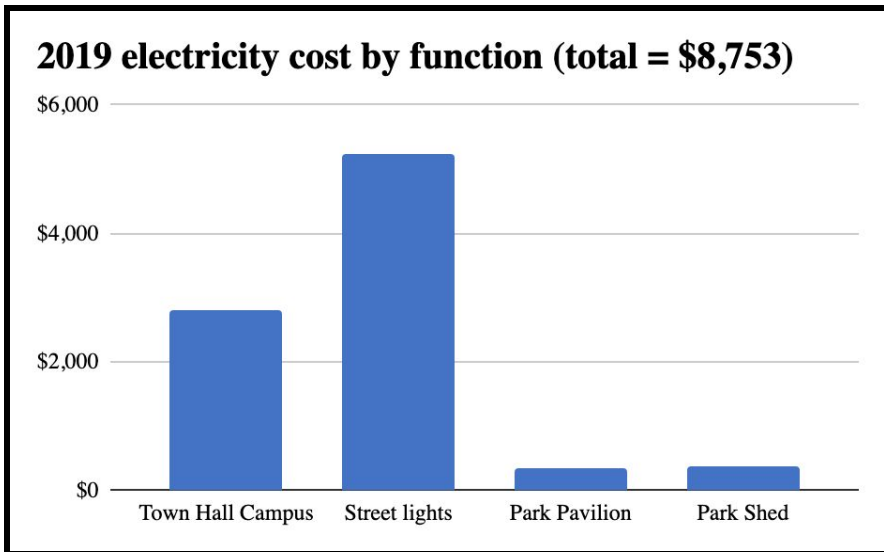
The largest contribution, at 65%, is from diesel fuel for the town vehicles, followed by fuel oil for heating the town hall and garage. Electricity accounts for 10% of GHG emissions.



Overall the town spent \$42,696 on energy in 2019. The largest expense was on diesel for vehicles.



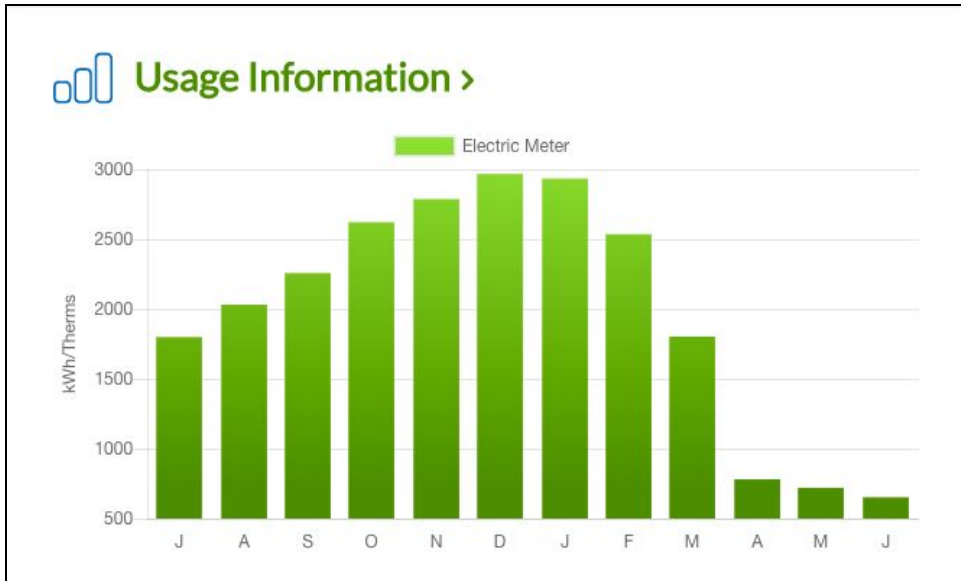
Looking specifically at electricity, the largest expense was on street lights followed by the Town Hall and Garage, which are on a shared meter. However, the cost of the street lights is now expected to fall by about half as a result of the conversion of the LED lamps in March 2020.



#### IV. Opportunities to reduce Greenhouse Gases

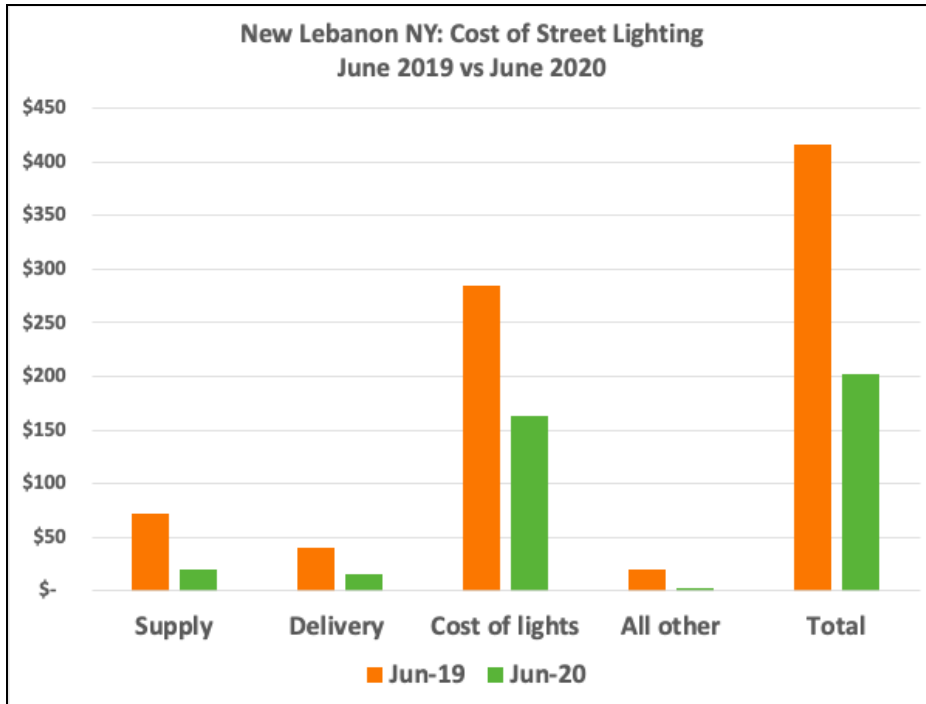
##### Street lights

The switch to LED streetlights in March 2020 is a good example of a strategy that can be used to reduce greenhouse gas emissions while reducing costs for the town. Compared to same-period data for 2019, the town's streetlights used 62% less electricity in April-June of 2020.



**Power consumption by street lights in New Lebanon from June 2019-June 2020. LED lamps were installed in March 2020. Source: NYSEG.**

Comparing June 2019 to June 2020, the overall cost of street lighting fell by 52%. On an annualized basis, this would equate to an estimated \$2,500 cost savings for the town.



The inventory can be used to guide additional strategies to reduce GHG emissions and energy costs. These could include switching the upstream source of the town’s electricity supply to renewable sources. There may also be opportunities to reduce use of fuel oil through energy efficiency initiatives or exploring alternative energy sources.

**V. Additional Reporting Opportunities**

The inventory did not include emissions from town employee vehicles or landfill emissions. These can be added for a more complete inventory. Additionally, this inventory only accounts for town government operations. Greenhouse gas emissions for the broader community are another CSC action that can be pursued to guide strategies for reducing the carbon footprint of New Lebanon.