

Town of New Lisbon

Climate Smart Communities Progress Report #1

Introduction

This report summarizes the plans and accomplishments of the New Lisbon Climate Smart Communities (CSC) Task Force since its inception in March 2019. The Task Force intends to release annual updates to this Progress Report on or about each Earth Day hereafter.

The current Task Force members are: Town Councilwoman Nancy Martin-Mathewson (Chair), Town Councilwoman Flo Loomis, Town Supervisor Ed Lentz, Alyx Braunius, John Braunius, Vicky Lentz, and Tom Riso.

1. Brief history of the town's energy and climate work to date

Discussions regarding DEC's CSC program among town councilpersons and others in and outside of the town began in 2018. The attached timeline (Appendix A) shows significant dates in the process of becoming a CSC as well as the dates of Task Force meetings and of completion of selected actions.

The Town started down the path towards becoming a certified CSC for the reasons described in the CSC Pledge in Resolution #1 of 2019 (Appendix B). In brief, the Town recognizes the threat to civilization posed by manmade global warming and desires to do its part to slow the pace of global warming and to mitigate its effects.

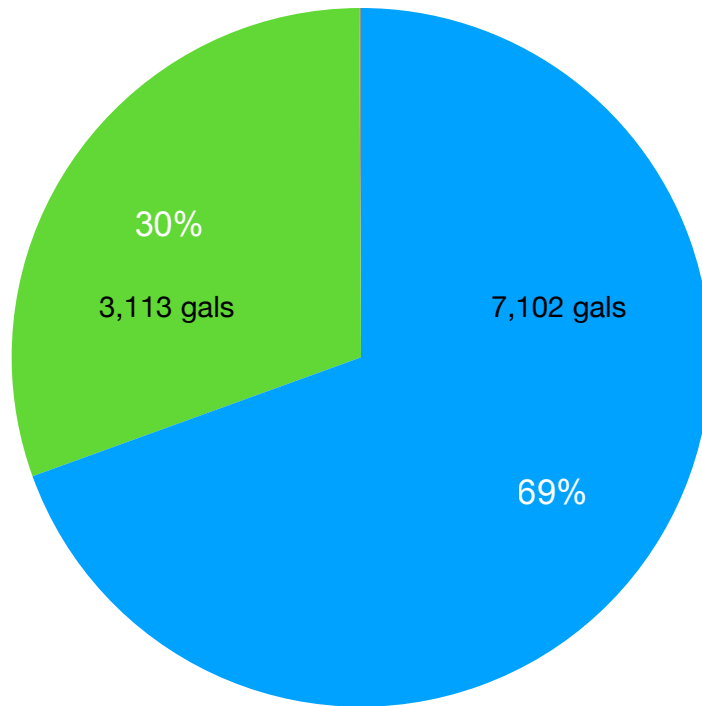
Although the Town had taken steps to reduce its greenhouse gas (GHG) emissions prior to making the CSC pledge and forming the CSC Task Force, for purposes of creating a baseline Government Operations GHG Emissions Inventory, calendar year 2020 was selected as the baseline year for before and after comparisons with emissions in future years. In the baseline year, town government operations consumed the following amounts of fuel and electricity.

Diesel (gallons)	Gasoline (gallons)	Propane (gallons)	Heating Oil (gallons)	Electricity (KWH)
10,215	2,150	445	2,705	20,711

Consumption in 2020 was likely below normal due to COVID-19 restrictions, particularly with respect to restrictions on use of the town hall. In any event, not surprisingly, as is evident from the following charts, most of the consumption was due to Highway Department operations.

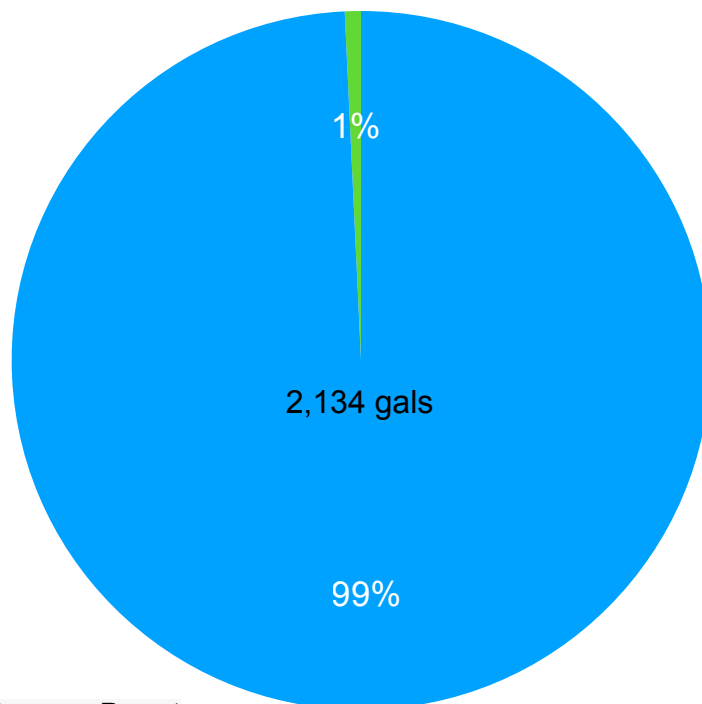
● Plow Trucks ● Heavy Equipment ● Light Equipment

Diesel



Gasoline

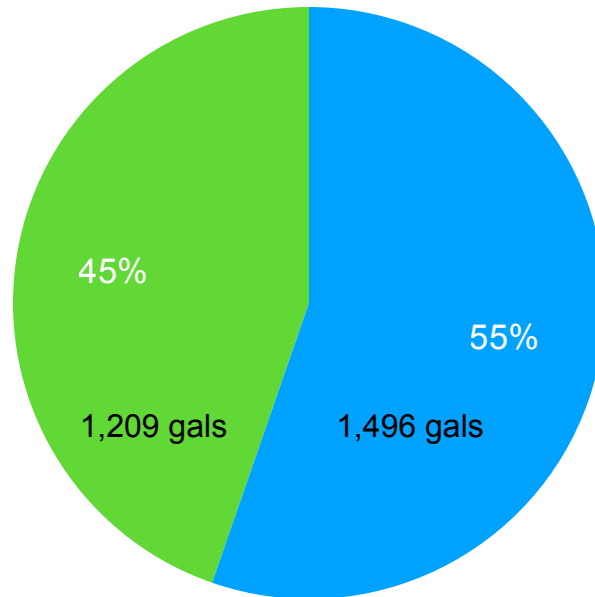
● Pickup Trucks ● Light Equipment



● Highway Facility

● Town Hall

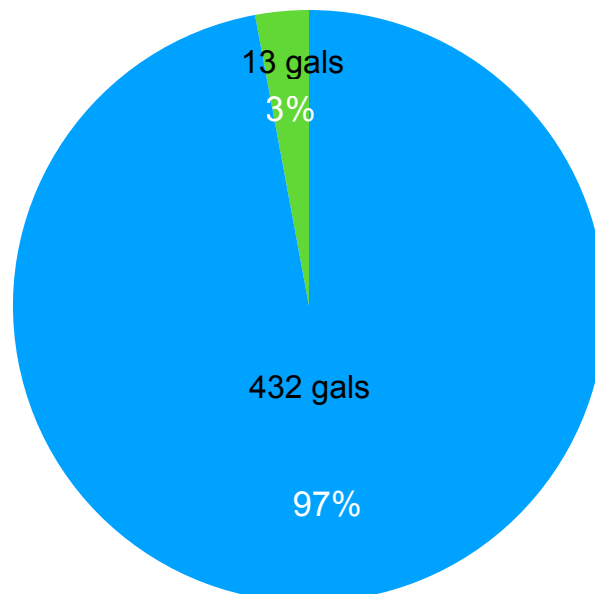
Heating Oil

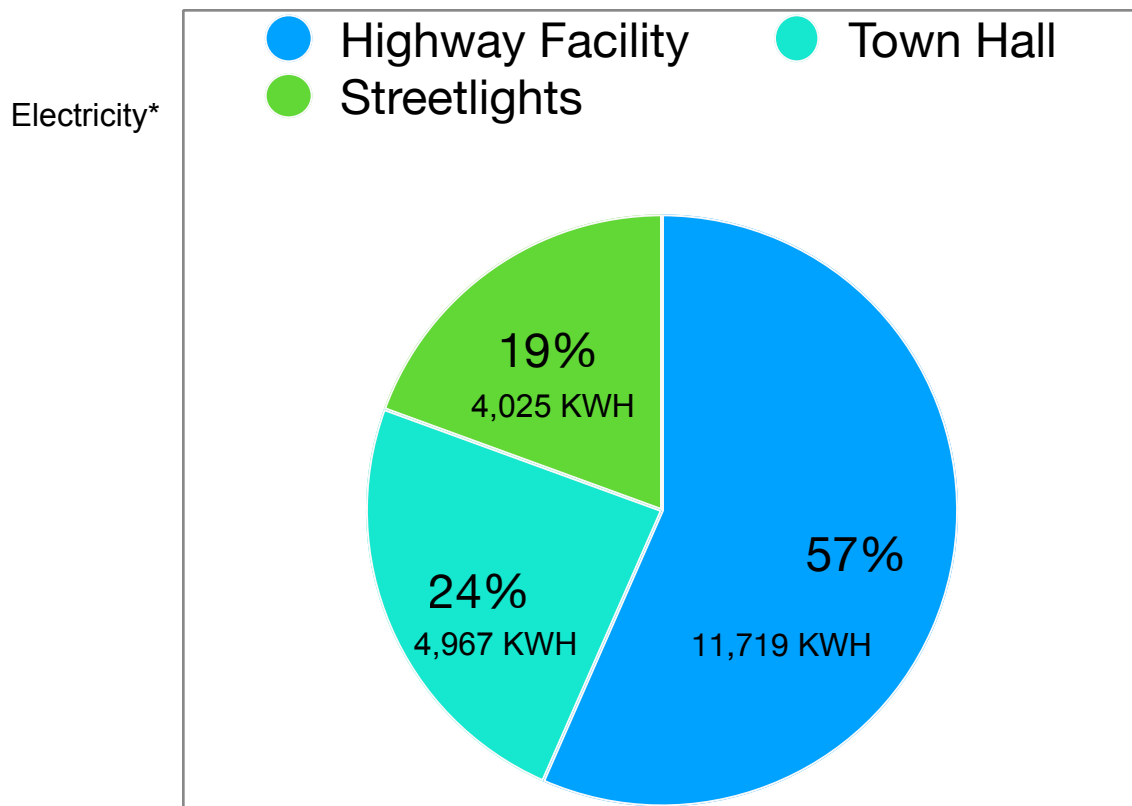


● Highway Facility

● Town Hall

Propane





Streetlights were converted to LED in June 2020.

When the GHG emissions inventory is completed, we will know approximately how large the town's GHG emissions footprint is, i.e., approximately how many tons of GHG are emitted in the course of town government operations.

In addition to establishing baseline data, other actions undertaken by the town along with an indication of their status are listed in Appendix C. Completed (or nearly completed) actions include, among others:

- presenting educational displays and handouts at various public events
- setting up a Facebook page, "Climate Smart New Lisbon"
- setting up a website with a link on the town's website, townofnewlisbon.com
- creating a fleet management policy to guide the town towards lower emissions from town trucks
- replacing indoor and outdoor lighting with LED lights
- replacing the Garrattsville streetlights with LED lights
- developing a bike route connecting Texas Schoolhouse State Forest with Gilbert Lake State Park
- installing a walking trail in Texas Schoolhouse State Forest with interpretive signage
- monitoring water quality in the Butternut Creek (ongoing)
- participating in the development of a Butternut Creek watershed management plan (nearly completed)
- collecting data on sites of erosion and from a culvert assessment of the Butternut Creek and its tributaries
- "right sizing" several culverts including the large culvert on Gross Road
- joined the Climate Smart Institute, a consortium of municipalities in Otsego County that have adopted the CSC pledge.

More details on these and other actions, including documentation being submitted to DEC demonstrating completion of these actions, are available by request to Task Force Chairwoman, Nancy Martin-Mathewson.

Many of these accomplishments were achieved by or with the assistance of persons not on the CSC Task Force. For example, the opening of the walking trail in Texas Schoolhouse State Forest was spearheaded by town resident Stacey Kazacos with assistance from others including DEC Forester Nathan Funk, the bike route was done in collaboration with the Butternut Valley Alliance (BVA) and Central New York Cycling (CNYC), the Butternut Creek watershed management plan and water quality monitoring are being led by the Otsego County Conservation Association (OCCA), *etc.*

2. Results and implementation status

Inasmuch as the baseline year is <4 months behind us, before and after GHG emissions and energy cost comparisons are difficult.

As shown in the attached table (Appendix D), conversion of the streetlights in Garrattsville reduced consumption and operating costs by approximately 2,097 KWH

(65%) and \$616 (50%) in June to December 2020 compared to the same period in 2019. That translates to an annualized savings of ~4,000 KWH and ~\$1,200.

In 2018, the town plow/dump truck fleet comprised 1997, 2001, 2004, 2008, and 2009 model year dump trucks with a 2018 model year being added to the fleet in December of 2018. That year, the plow/dump truck fleet traveled 34,013 miles and consumed 11,644 gallons of diesel for a fleet mileage rate of 2.9 mpg diesel.

In 2020, the plow/dump truck fleet comprised 2008, 2009, 2018 and 2019 model year dump trucks, which traveled 24,008 miles and consumed 7,995 gallons of diesel for a mileage rate of 3.0 mpg, and a 350 size pickup truck, which traveled 14,311 miles and consumed 1,541 gallons of gasoline for a mileage rate of 9.3 mpg, raising the fleet mileage rate to 4.0 mpg diesel+gasoline.

3. Challenges encountered

The biggest challenges encountered by the town as it strives to achieve bronze certification are:

- inability to hold Task Force meetings in person and to participate in community events due to the COVID-19 pandemic restrictions
- difficulty in recruiting volunteers to participate in the CSC Task Force
- underappreciation of the seriousness of the global warming problem among many town residents
- unavailability of funding needed to replace existing heating systems with “green” HVAC systems and to switch from grid-tied electricity to photovoltaic electricity generation
- difficulty reducing GHG emissions because most of the town’s GHG emissions result from operation of plow/dump trucks and heavy equipment for which zero or low emissions models are not yet available.

4. Next steps

In 2021, the CSC Task Force expects to achieve bronze certification.

Goals and actions are set out in the Town’s Climate Action Plan, which is in progress and will be completed in June 2021. In brief, goals and actions include, among others:

- to increase awareness and interest among residents
- to explore the feasibility of replacing a gasoline fueled pickup truck with an electric truck
- to build a new town garage using “green” technology whenever practicable including investigating the feasibility of air source or ground source heat pumps for heating and cooling
- to explore air conditioning (with heat pump) of the town hall so that it can be used in the event of a heat emergency

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- to install energy savings devices in the town hall, e.g., an on demand hot water heater and programmable thermostats.

Actions in furtherance of achievement of these goals are listed in Appendix C. The Priority Actions, in addition to the Government Operations GHG Emissions Inventory, are: development of a Natural Resources Inventory and a Government Operations Climate Action Plan, both of which are currently in progress.

Longer term, the Town hopes to eliminate, first, GHG emissions from government buildings and, second, GHG emissions from Highway vehicles and equipment.

At this time, the CSC Task Force believes these longer term goals are achievable, assuming continued technology development with regard to electric trucks and heavy equipment and adequate funding.

5. New funding sources per action

To date, the town has not identified specific sources of funding for actions that are in progress or not yet started. The Town will continue to seek out such sources of funding, in particular, from DEC and NYSERDA.

6. Table of Appendices

Appendix A - Timeline

Appendix B - CSC Pledge in Resolution #1 of 2019

Appendix C - Actions

Appendix D - Streetlight Conversion

7. Additional Information

For additional information, interested persons can:

- consult the town's CSC website at the town website at townofnewlisbon.com or directly at <http://townofnewlisbon.com/csc/>.
- consult the CSC Task Force Facebook page, "Climate Smart New Lisbon," at <https://www.facebook.com/NewLisbonCSC>
- contact CSC Task Force Chairperson Nancy Martin-Mathewson at nancymmtowncouncil@gmail.com.

Town of New Lisbon

Climate Smart Communities Progress Report #1

Appendix A

Presentation to Town Board (TB)	1/5/19
Pledge made by TB (Resolution #1 of 2019)	2/13/19
Task Force appointed by TB	3/12/19
Acknowledgement by DEC Commissioner Seggos	3/28/19
Task Force meeting 1	3/28/19
Task Force meeting 2	5/19/19
Facebook page launched	5/31/19
Task Force meeting 3	7/18/19
Exhibit at GFC Labor Day BBQ & Bake Goods Auction	9/1/19
Task Force meeting 4	10/10/19
Task Force meeting 5	12/5/19
Task Force and Coordinator Resolution formally adopted by TB	3/10/20
Action PE3: LED Streetlights, completed in Garrattsville	6/10/20
Task Force meeting 6	8/27/20
Walking trail with interpretive signage opened at Texas Schoolhouse State Forest	10/15/20
Task Force meeting 7	10/29/20
Task Force meeting 8	2/4/21
Task Force meeting 9	3/4/21
Task Force meeting 10	4/1/21
First Annual Progress Report presented to Town Board	4/13/21
Progress Report released	4/22/21
New Lisbon CSC website launched	4/22/21
Priority Action PE1: Government GHG Inventory completed	May 2021 (expected)
Grand opening of Bike Route connecting TSSF and Gilbert Lake State Park	May 2021 (expected)

Appendix B - CSC Pledge

**TOWN OF NEW LISBON
RESOLUTION #1 OF 2019**

Councilmember Robert Eklund moved and Councilmember John Pegg seconded that

WHEREAS, the Town of New Lisbon, Otsego County, NY (hereinafter "local government") believes that climate change poses a real and increasing threat to our local and global environments and is primarily due to the burning of fossil fuels; and

WHEREAS, the effects of climate change will endanger our infrastructure, economy and livelihoods; harm our farms, orchards, and ecological communities, including native fish and wildlife populations; spread invasive species and exotic diseases; reduce drinking water supplies and recreational opportunities; and pose health threats to our citizens; and

WHEREAS, we believe that our response to climate change provides us with an unprecedented opportunity to save money, and to build livable, energy-independent and secure communities, vibrant innovation economies, healthy and safe schools, and resilient infrastructures; and

WHEREAS, we believe the scale of greenhouse gas (GHG) emissions reductions required for climate stabilization will require sustained and substantial efforts; and

WHEREAS, we believe that even if emissions were dramatically reduced today, communities would still be required to adapt to the effects of climate change for decades to come,

IT IS HEREBY RESOLVED that the Town of New Lisbon, in order to reduce greenhouse gas emissions and adapt to a changing climate, adopts the New York State Climate Smart Communities pledge, which comprises the following ten elements:

- 1) **Build a climate-smart community.**
- 2) **Inventory emissions, set goals, and plan for climate action.**
- 3) **Decrease energy use.**
- 4) **Shift to clean, renewable energy.**
- 5) **Use climate-smart materials management.**
- 6) **Implement climate-smart land use.**
- 7) **Enhance community resilience to climate change.**
- 8) **Support a green innovation economy.**
- 9) **Inform and inspire the public.**
- 10) **Engage in an evolving process of climate action.**

Passed in regular session of the New Lisbon Town Board on February 13, 2019

A handwritten signature in dark ink, appearing to read 'Charlene R. Wells', is written over a horizontal line.

Charlene R. Wells, New Lisbon Town Clerk

Town of New Lisbon, Climate Smart Communities Progress Report #1 - Appendix C - Actions

Action*		Points Expected	Status	Estimated Points Earned
PE1	CSC Task Force	20	Completed	20
PE1	CSC Coordinator	10	Completed	10
PE1	Partnerships with Other Entities	3	Completed	3
PE2 ⁺	Government GHG Inventory	16	In Progress	
PE2 ⁺	Government Operations Climate Action Plan	12	In Progress	
PE3	Fleet Inventory	4	Completed	4
PE3	Fleet Efficiency Policy	2	Completed	2
PE3	LED Street Lights	10	Completed	10
PE3	Outdoor Lighting Upgrades	4	In progress	
PE3	Interior Lighting Upgrades	2	In progress	
PE4	Renewable Energy Feasibility Studies	5	Completed	5
PE5	Recycling Bins in Government Buildings	3	Completed	3
PE6	Planning & Infrastructure for Bicycling & Walking	10	In progress	
PE6 ⁺	Natural Resources Inventory	8	In Progress	
PE7	Watershed Plan for Water Quality	2	In progress	
PE7	Hazard Mitigation Plan	3	Completed	3
PE7	Culverts & Dams	12	In progress	
PE9	Local Climate Action Website	3	In progress	
PE9	Social Media	3	Completed	3
PE10	Annual Progress Report	4	In progress	
Total		136		63
* Detailed descriptions of each action can be found at https://climatesmart.ny.gov/actions-certification/actions/				
⁺ Priority Action				

Town of New Lisbon, Climate Smart Communities Progress Report #1

Appendix D - Garrattsville Streetlight Conversion

	2019		2020	
June	\$	KWH	\$	KWH
Bill	\$171.99	426	\$89.72	152
Savings	---	---	\$82.27	274
% Reduction	---	---	52%	64%
July				
Bill	\$174.95	385	\$87.99	137
Savings	---	---	\$86.96	248
% Reduction	---	---	50%	64%
August				
Bill	\$178.28	405	\$87.60	144
Savings	---	---	\$90.68	261
% Reduction	---	---	49%	64%
September				
Bill	\$169.71	457	\$92.69	163
Savings	---	---	\$77.02	294
% Reduction	---	---	55%	64%
October				
Bill	\$173.25	508	\$84.04	153
Savings	---	---	\$89.21	355
% Reduction	---	---	49%	70%
November				
Bill	\$179.61	513	\$85.17	178
Savings	---	---	\$94.44	335
% Reduction	---	---	47%	65%
December				

Bill	\$181.66	519	\$86.16	189
Savings	---	---	\$95.50	330
% Reduction	---	---	47%	64%
Total	\$1229.45	3213	\$613.37	1116
Savings			\$616.08	2097
% Reduction			50%	65%
Installation Costs			\$732.34	---
Total (Jun-Dec) + Installation	\$1229.45	3213	\$1345.71	1116