

TOWN OF WOODSTOCK CLIMATE SMART TASK FORCE

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Application for 45 Points

June 8, 2021

Performance: Reduce GHGs from Government Facilities

15 – 45 Points

Introduction

The purpose of this revision is to bring Woodstock’s documentation for the reduction of GHG emissions from government facilities into full conformance with the new requirements of the PE12 action item. The previous submission was based on Climate Smart Communities (CSC) Certification Action Checklist - Version 3.6 (Jan. 3, 2020). Since then, requirements have changed. This submission is based on the requirements contained in Climate Smart Communities (CSC) Certification Action Checklist - Version 4.1 (April 8, 2021).

Version 3.6 of PE12 explicitly excluded from consideration government owned vehicles and municipal street lighting. The following paragraph established this exclusion.

Note that the scope of this CSC action does not cover emissions from government-owned vehicles; for the action related to vehicle-emission reductions, see [Performance: Reduce GHGs from Government Vehicles](#). This action also does not cover GHG emissions from outdoor lighting (such as street lights and traffic signals) owned by the local government. Interior lighting and any exterior lighting directly associated with government buildings is included, however.

Woodstock’s original submission was consistent with the above exclusions. But the provision has since been revised to require the inclusion of streetlighting in calculations of reduced GHG emissions for government facilities. This submission includes emissions from Woodstock’s Lighting Districts.

EPA eGRID2019

Since Woodstock’s last submission, the EPA has issued GHG emission data for 2019. GHG emissions for the town’s electrical usage are determined using emission factors from eGRID for the Upper New York Sub-region, adjusted for the contribution of local hydroelectric generation. The eGRID reports provide GHG emissions for grid generated electricity that represent the average emissions rate of electric generators supplying power to the

eGRID Emissions by Version

	CO2e lbs/MWh	CO2 lbs/MWh	Methane lbs/GWh	Nitrous Oxide lbs/GWh
eGRID2019	233.0	232.3	17.0	2.0
eGRID2018	253.9	253.1	18.0	2.0
eGRID2016	295.9	294.7	21.0	3.0
eGRID2014 V2	367.6	365.7	30.7	4.1
eGRID2014	379.2	377.2	32.3	4.4
eGRID2012	410.31	408.80	15.59	3.83
eGRID2010	548.37	545.79	16.30	7.24
eGRID2009	500.35	497.92	15.94	6.77

PE12: Reductions in Government Facility GHG Emissions

grid in the region.

Because of the timing and sequencing of EPA eGRID releases and LGOP guidance to use the most recent data, there are differences in versions of Woodstock’s GHG emissions estimates for the year 2019. For Action Items PE2, Governmental GHG Inventory, and PE10, GHG Tracking System, emissions factors from eGRID2018 were used to calculate 2019 GHG emissions. For this PE12 submission, emission factors from eGRID2019 are used to determine the emissions of electricity used in 2019. There’s about an 8% drop in CO2e in eGRID2019 compared to eGRID2018.

Summary Conclusions

During the period of 2011 to 2019, Woodstock reduced GHG emissions attributed to government buildings and facilities by 41.2%. In 2011, GHG emissions from government facilities were 232.5 MTCO2e, and by 2019, the emissions had been reduced to 136.6 metric tons. The reductions for the government sectors are listed below.

Town of Woodstock
 Government Facility GHG Emissions
 Local Government Operations Protocol (LGOP)
 Using eGRID2019 for Scope 2 Emissions (Electrical)
 Metric Tons CO2e Equivalent

		2011	2019	Reduction	Percent
Woodstock Government Facilities	Buildings & Other Facilities	112.8	75.5		
	Water District	32.2	14.6		
	Waste Water Treatment Facility	71.6	40.2		
	Lighting Districts	15.9	6.3		
	Sum of Town Facilities ^Σ	232.5	136.6	(95.9)	41.2%

GHG emissions data for 2011 and 2019 are attached as an appendix. An explanation describing how these GHG emission inventories were created is available under PE2, Government GHG Inventory for 2019. For this submission, 2019 GHG emissions from electricity have been determined using emission factors from eGRID2019. The protocol used to calculate GHG emissions are consistent with the relevant provisions of the Local Government Operations Protocol (LGOP).

The explanations offered below for actions taken at each major facility have not been recalibrated to LGOP MTCP2e, but continue to show only carbon dioxide emissions. The totals presented above are LGOP compliant.

The Three Basic Steps

Step 1 – Baseline Government Inventory: The year 2011 is Woodstock’s base line year, the first year Woodstock has complete record of fossil fuel usage by facility and electric usage by meter. The energy usage data was recalibrated in PE2, Government GHG Inventory, to be compliant with LGOP.

Step 2 - Actions that Reduced GHG Emissions from Government-Owned Facilities: A systemic conversion of fossil fuel heating systems to electric heat-pumps reduced emissions. Ground-based geothermal systems at the highway garage and town hall, and air-sourced heat pumps at the community center reduced building GHG emissions and energy costs.

State policy that closed coal-fired generators significantly reduced emissions in EPA’s eGRID Upstate New York Sub-region. In 2011, eGRID emissions attributed to electricity were 498 Lbs. CO₂ / MWh; by 2019, emissions were 232.3 Lbs. CO₂ / MWh.¹ Woodstock subscribed to a local Community Distributed Generator (CDG) offering zero-carbon, hydroelectric power that also contributed to overall lower emissions in 2019.² (This offering is not considered renewable; no RECs are available.) Replacing fossil fuels with low carbon electricity allowed Woodstock to substantially reduce its carbon footprint from government buildings.

Step 3 - Measure the reductions in GHG emissions resulting from upgrades to government-owned buildings. The following sections contain detailed calculations for emissions in 2011 and 2019 for the identified building groups. Details about the Woodstock Lighting Districts has been added.

The Details – Woodstock Lighting Districts

By 2019 through normal maintenance, approximately 20% of the Lighting District’s fixtures had been replaced with **LEDs reducing usage by about 10,000 kWh**. The use of LEDs and the reduction in CO₂e emissions in the grid electric supply contributed to the drop in GHG emissions attributed to municipal streetlighting. The expenditures identified under Scope 2 include the rental fees for fixtures and poles.

Town of Woodstock
Local Government Operations Protocol
Using eGRID2019 for Scope 2 GHG Emissions
Sector:Lighting Districts

			2011				2019							
			Expenditures	Volume	Metric Tons CO ₂ e equivalent	Metric Tons CO ₂	Methane Kgm	Nitrous Oxide Kgm	Expenditures	Volume	Metric Tons CO ₂ e equivalent	Metric Tons CO ₂	Methane Kgm	Nitrous Oxide Kgm
Scope 1	Stationary Combustion	Fuel Oil (gals)			0.0	0.0	0.0000	0.0000			0.0	0.0	0.0000	0.0000
		Propane (gals)			0.0	0.0	0.0000	0.0000			0.0	0.0	0.0000	0.0000
	Mobile Combustion	Gasoline (gals)			0.0						0.0			
		Diesel Fuel (gals)			0.0						0.0			
		Kerosene (gals)			0.0						0.0			
Scope 2	Grid Electricity (kWh)			70,014	15.9	15.8	0.5176	0.2198		59,759	6.3	6.3	0.4712	0.0554
	Hydro Electricity (kWh)													
	Sum of Scope 2 (Electricity) Σ		\$23,938	70,014	15.9	15.8	0.5176	0.2198	\$29,749	59,759	6.3	6.3	0.4712	0.0554
Total by Year Σ			\$23,938		15.9	15.8	0.5176	0.2198	\$29,749		6.3	6.3	0.4712	0.0554

¹ Action item PE10, Woodstock’s GHG Tracking System

² Natural Power Group.

The Details – Town Hall

The Town Hall, in addition to its public areas, houses the court and the offices of the police department and dispatch, each of which had its own heating system. Fuel oil was used in the public part of the building and propane heating systems were used by the court, police, and dispatch. **In 2013, a major renovation replaced the fossil fuel heating systems with a ground-based geothermal system.** Although electrical usage increased, the results documented in PE4 Geothermal Installation, showed a significant decrease in emissions.

Woodstock Town Hall CO2 Emissions and Expenditures 2011 and 2019

		2011					2019				
		Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons	Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons
Town Hall Totals	Town Hall	#2 Fuel Oil, Gallons	\$7,363.23	2,290	51,286	23.263			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
		Electricity, Total kWh		36,960	18,406	8.349		87,600	22,172	10.057	
		Electricity Source									
		Electricity Grid kWh		36,960				87,600	22,172		
	Hydroelectric kWh								0		
	Department Total	\$7,363.23			31.612		\$0.00			10.057	
	Town Hall, Court	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons	\$1,742.17	758	9,624	4.365			0	0.000	
		Electricity, Total kWh				0.000			0	0.000	
		Electricity Source									
		Electricity Grid kWh		0					0		
	Hydroelectric kWh								0		
	Department Total	\$1,742.17			4.365		\$0.00			0.000	
	Town Hall, Police	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons	\$1,903.62	828	10,516	4.770			0	0.000	
		Electricity, Total kWh				0.000			0	0.000	
		Electricity Source									
		Electricity Grid kWh		0					0		
	Hydroelectric kWh								0		
Department Total	\$1,903.62			4.770		\$0.00			0.000		
Sum of Town Hall	#2 Fuel Oil, Gallons	\$7,363.23	2,290	51,286	23.263			0	0.000		
	Propane, Gallons	\$3,645.79	1,586	20,140	9.135			0	0.000		
	Electricity, Total kWh		0	0	8.349			0	10.057		
	Electricity Source		0	0	0.000			0	0.000		
	Electricity Grid kWh		0		0.000			0	0.000		
Hydroelectric kWh		0		0.000			0	0.000			
Department Total	\$11,009.02			40.747	40.747	\$0.00			10.057	10.057	

The Details – Community Center/Andy Lee Field

The Community Center is a complex of buildings located at the town’s Andy Lee Field. Included in this complex is the community center, a swimming pool, picnic pavilion, and craft barn. The community center heating system used fuel oil, and each of the other facilities had its own electric service. **A major renovation initiated in 2014 replaced the fossil fuel heating system with an air-sourced heat pump for heating and cooling**, substantially reducing the carbon footprint and energy expenses for the complex. Individual electric services for the other facilities were consolidated into community center.

Woodstock Community Center CO2 Emissions and Expenditures 2011 and 2019

		2011					2019				
		Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons	Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons
Community Center Totals	Community Center	#2 Fuel Oil, Gallons	\$5,506.39	1,712	38,353	17.397			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
		Electricity, Total kWh		22,305	11,108	5.038		55,200	13,971	6.337	
		Electricity Source		22,305				55,200	13,971		
		Hydroelectric kWh							0		
	Department Total	\$5,506.39			22.435		\$0.00			6.337	
	Summer Rec Swimming Pool	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
		Electricity, Total kWh		7,461	3,716	1.685			0	0.000	
		Electricity Source		7,461				0	0		
		Hydroelectric kWh							0		
	Department Total	\$0.00			1.685		\$0.00			0.000	
	Pavilion	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
		Electricity, Total kWh		31	15	0.007			0	0.000	
		Electricity Source		31				0	0		
		Hydroelectric kWh							0		
	Department Total	\$0.00			0.007		\$0.00			0.000	
	Craft Barn	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
Electricity, Total kWh			851	424	0.192			0	0.000		
Electricity Source			851				0	0			
Hydroelectric kWh								0			
Department Total	\$0.00			0.192		\$0.00			0.000		
Sum of Community Center Totals	#2 Fuel Oil, Gallons	\$5,506.39	1,712	38,353	17.397		0	0	0.000		
	Propane, Gallons	0	0	0	0.000		0	0	0.000		
	Electricity, Total kWh	0	0	0	6.923		0	0	6.337		
	Electricity Source	0	0	0	0.000		0	0	0.000		
	Hydroelectric kWh	0	0	0	0.000		0	0	0.000		
Department Total	\$5,506.39			24.320	24.320	\$0.00			6.337	6.337	

The Details – Waste Water Treatment Facility

The waste water treatment facility is a heavy user of electricity and benefited from the reduction of emissions associated with the electricity supply. All external lighting and most internal lights were replaced with LED fixtures.

Waste Water Treatment Facility CO2 Emissions and Expenditures 2011 and 2019

		2011					2019				
		Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons	Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons
Waste Water Treatment Facility	#2 Fuel Oil, Gallons	\$5,185.90	1,613	36,121	16.384		\$3,046.96	1,430	32,039	14.533	
	Propane, Gallons		0	0	0.000				0	0.000	
	Electricity, Total kWh	\$23,111.72	241,400	120,217	54.530		\$22,665.33	236,360	59,823	27.135	
	Electricity Source		241,400					236,360	59,823		
									0		
	Department Total		\$28,297.62			70.914	70.914	\$25,712.29			41.668

The Details – Water District

The two water district buildings house water treatment equipment for the well pumps. The pumps are heavy users of electricity and benefited from the reduction of emissions in the electricity supply. A major repair action in 2013 reduced electricity used by pump house #2

Woodstock Water District CO2 Emissions and Expenditures 2011 and 2019

		2011					2019				
		Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons	Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons
Water District Totals	Pump House #1	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons	\$349.83	152	1,933	0.877	\$32.07	28	351	0.159	
		Electricity, Total kWh	\$21,303.27	66,529	33,131	15.028	\$16,860.65	64,389	16,297	7.392	
		Electricity Source		66,529				64,389	16,297		
									0		
		Department Total		\$21,653.10			15.905	\$16,892.72			7.551
	Pump House #2	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
		Electricity, Total kWh		69,812	34,766	15.770		46,077	11,662	5.290	
		Electricity Source		69,812				46,077	11,662		
									0		
		Department Total		\$0.00			15.770	\$0.00			5.290
Sum of Water Department Totals	#2 Fuel Oil, Gallons		0	0	0.000		0	0	0.000		
	Propane, Gallons	\$349.83	152	1,933	0.877	\$32.07		0	0.159		
	Electricity, Total kWh	\$21,303.27		0	30.798	\$16,860.65		0	12.682		
	Electricity Source		0	0	0.000		0	0	0.000		
			0		0.000		0	0	0.000		
	Department Total		\$21,653.10			31.675	31.675	\$16,892.72		12.841	12.841

The Details – Highway Department

The highway garage was converted to ground-based geothermal heating and cooling in 2006, well before the 2011 baseline for this analysis. The geothermal system is a prodigious user of electricity, and the highway garage has benefited from the reductions in emission in EPA’s Upstate New York electricity supply. Heating at the highway landfill storage facility was converted from fuel oil to propane in 2014, cutting in half its carbon footprint. All exterior lighting was converted to LED fixtures.

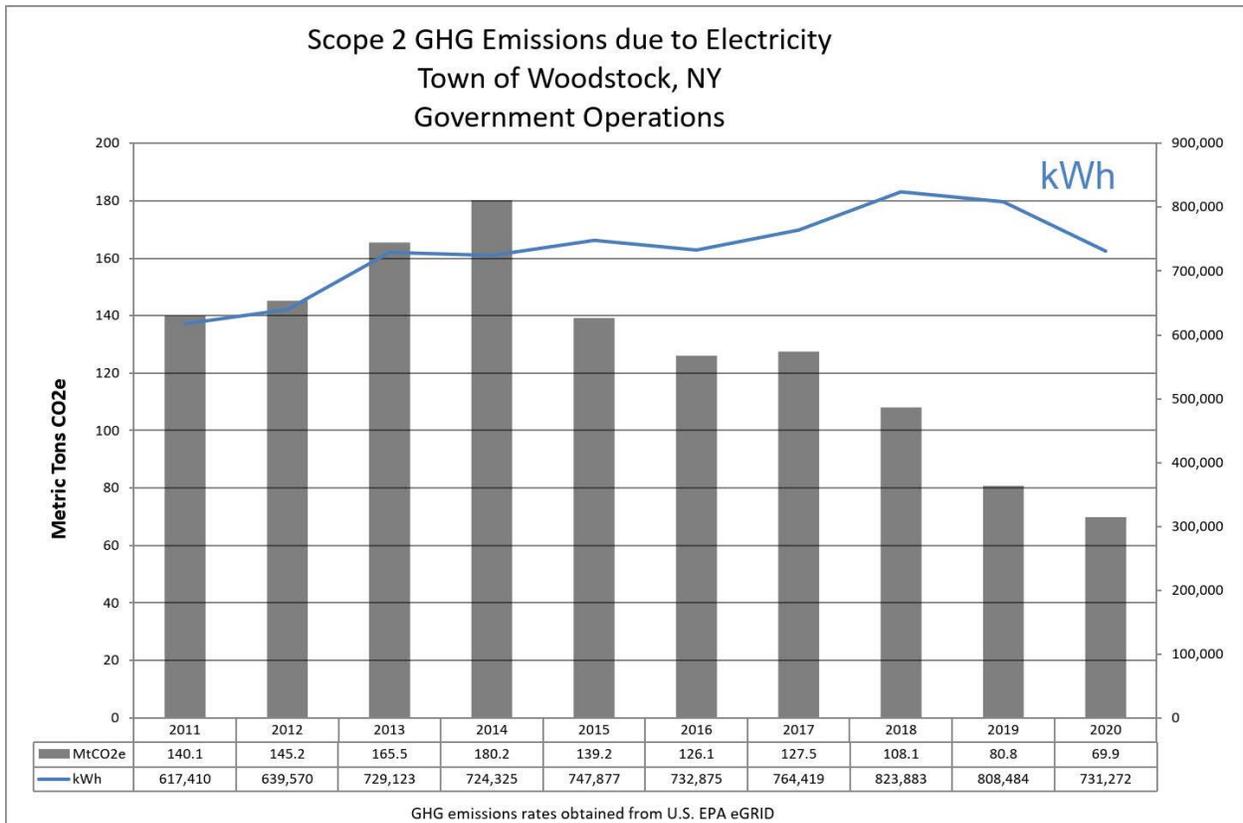
Highway Department Facilities CO2 Emissions and Expenditures 2011 and 2019

		2011					2019				
		Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons	Expense (Actual)	Quantity	CO2 Lbs	CO2 Metric Tons	Facility Metric Tons
Highway Department Totals	Highway Garage	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
		Electricity, Total kWh	\$19,846.35	134,640	67,051	30.414	\$19,315.39	150,000	37,965	17.221	
		Electricity Source		Electricity Grid kWh	134,640				150,000	37,965	
			Hydroelectric kWh						0		
	Department Total	\$19,846.35			30.414		\$19,315.39			17.221	
	Highway Sand & Salt Shed	#2 Fuel Oil, Gallons		0	0	0.000			0	0.000	
		Propane, Gallons		0	0	0.000			0	0.000	
		Electricity, Total kWh		3,317	1,652	0.749		529	134	0.061	
		Electricity Source		Electricity Grid kWh	3,317				529	134	
			Hydroelectric kWh						0		
	Department Total	\$0.00			0.749		\$0.00			0.061	
	Highway Landfill Storage	#2 Fuel Oil, Gallons	\$3,006.78	935	20,943	9.499			0	0.000	
		Propane, Gallons		0	0	0.000	\$789.90	616	7,826	3.550	
		Electricity, Total kWh		5,490	2,734	1.240		4,589	1,161	0.527	
		Electricity Source		Electricity Grid kWh	5,490				4,589	1,161	
		Hydroelectric kWh						0			
Department Total	\$3,006.78			10.740		\$789.90			4.077		
Sum of Highway Department Totals	#2 Fuel Oil, Gallons	\$3,006.78	935	20,943	9.499	\$0.00		0	0.000		
	Propane, Gallons	0	0	0	0.000	\$789.90		0	3.550		
	Electricity, Total kWh	\$19,846.35		0	32.403	\$19,315.39		0	17.808		
	Electricity Source		Electricity Grid kWh	0		0.000		0	0.000		
		Hydroelectric kWh	0		0.000			0	0.000		
Department Total	\$22,853.13			41.903	41.903	\$20,105.29			21.358	21.358	

Scope 2 GHG Emissions due to Electricity

Since 2011, the town’s electrical usage for governmental operations has grown by over 30%, and during this period, carbon dioxide emissions attributable to electricity have dropped by about 40%. Woodstock’s increase in electricity usage has been driven by geothermal and air-sourced heat pumps used for heating and cooling the town’s buildings. Usage is expected to reach 900,000 kWh by 2022 after renovation of the town offices on Comeau.

Closing of upstate coal-fired generators and the town’s contracts for hydroelectric power from the Natural Power Group, a local operator of hydroelectric generators, has reduced the town’s carbon dioxide emissions attributed to electricity.



Appendix

Government GHG Emissions for 2011

Government GHG Emissions for 2019, using eGRID2019

Town of Woodstock
 Local Government Operations Protocol
 Using eGRID2019 for Scope 2 GHG Emissions
 Year: '2019'

			Expenditures	Volume	Metric Tons CO2e equivalent	Metric Tons CO2	Methane Kgm	Nitrous Oxide Kgm		
Buildings & Other Facilities	Scope 1	Stationary Combustion	Fuel Oil (gals)	\$2,938	1,384	14.2	14.1	2.0762	0.1384	
			Propane (gals)	\$5,837	4,758	26.8	26.6	0.6661	0.4758	
		Mobile Combustion	Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
	Scope 2	Grid Electricity (kWh)			326,984	34.6	34.5	2.5781	0.3033	
		Hydro Electricity (kWh)			44,000					
		Sum of Scope 2 (Electricity)		Σ	\$51,909	370,984	34.6	34.5	2.5781	0.3033
		Total by Year		Σ	\$60,685		75.5	75.2	5.3204	0.9175
	Water District	Scope 1	Stationary Combustion	Fuel Oil (gals)			0.0	0.0	0.0000	0.0000
Propane (gals)				\$32	28	0.2	0.2	0.0039	0.0028	
Mobile Combustion			Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
Scope 2		Grid Electricity (kWh)			136,341	14.4	14.4	1.0750	0.1265	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ	\$16,861	136,341	14.4	14.4	1.0750	0.1265
		Total by Year		Σ	\$16,893		14.6	14.5	1.0789	0.1293
Waste Water Treatment Facility		Scope 1	Stationary Combustion	Fuel Oil (gals)	\$3,047	1,430	14.7	14.6	2.1450	0.1430
	Propane (gals)					0.0	0.0	0.0000	0.0000	
	Mobile Combustion		Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
	Scope 2	Grid Electricity (kWh)			241,400	25.5	25.4	1.9033	0.2239	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ	\$22,665	241,400	25.5	25.4	1.9033	0.2239
		Total by Year		Σ	\$25,712		40.2	40.0	4.0483	0.3669
	Lighting Districts	Scope 1	Stationary Combustion	Fuel Oil (gals)			0.0	0.0	0.0000	0.0000
Propane (gals)						0.0	0.0	0.0000	0.0000	
Mobile Combustion			Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
Scope 2		Grid Electricity (kWh)			59,759	6.3	6.3	0.4712	0.0554	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ	\$29,749	59,759	6.3	6.3	0.4712	0.0554
		Total by Year		Σ	\$29,749		6.3	6.3	0.4712	0.0554
Vehicles		Scope 1	Stationary Combustion	Fuel Oil (gals)			0.0	0.0	0.0000	0.0000
	Propane (gals)					0.0	0.0	0.0000	0.0000	
	Mobile Combustion		Gasoline (gals)	\$39,991	20,390	179.0	179.0			
			Diesel Fuel (gals)	\$49,396	23,555	240.5	240.5			
			Kerosene (gals)			0.0	0.0			
	Scope 2	Grid Electricity (kWh)				0.0	0.0	0.0000	0.0000	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ		0	0.0	0.0	0.0000	0.0000
		Total by Year		Σ	\$89,388		419.5	419.5	0.0000	0.0000
	Woodstock Totals	Scope 1	Stationary Combustion	Fuel Oil (gals)	\$5,985	2,814	28.9	28.7	4.2212	0.2814
Propane (gals)				\$5,870	4,786	26.9	26.8	0.6701	0.4786	
Mobile Combustion			Gasoline (gals)	\$39,991	20,390	179.0	179.0			
			Diesel Fuel (gals)	\$49,396	23,555	240.5	240.5			
			Kerosene (gals)			0.0	0.0			
Scope 2		Grid Electricity (kWh)			764,484	80.8	80.6	6.0277	0.7091	
		Hydro Electricity (kWh)			44,000	0.0	0.0			
		Sum of Scope 2 (Electricity)		Σ	\$121,184	808,484	80.8	80.6	6.0277	0.7091
		Total by Year		Σ	\$222,426		556.1	555.6	10.9189	1.4692

Town of Woodstock
Local Government Operations Protocol
Year:'2011'

			Expenditures	Volume	Metric Tons CO2e equivalent	Metric Tons CO2	Methane Kgm	Nitrous Oxide Kgm		
Buildings & Other Facilities	Scope 1	Stationary Combustion	Fuel Oil (gals)	\$16,564	5,154	52.9	52.6	7.7303	0.5154	
			Propane (gals)	\$8,991	3,912	22.0	21.9	0.5476	0.3912	
		Mobile Combustion	Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
	Scope 2	Grid Electricity (kWh)			166,783	37.9	37.7	1.2330	0.5237	
		Hydro Electricity (kWh)			0					
		Sum of Scope 2 (Electricity)		Σ	\$32,146	166,783	37.9	37.7	1.2330	0.5237
		Total by Year		Σ	\$57,701		112.8	112.2	9.5109	1.4302
	Water District	Scope 1	Stationary Combustion	Fuel Oil (gals)			0.0	0.0	0.0000	0.0000
Propane (gals)				\$350	152	0.9	0.9	0.0213	0.0152	
Mobile Combustion			Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
Scope 2		Grid Electricity (kWh)			137,979	31.3	31.2	1.0201	0.4332	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ	\$21,303	137,979	31.3	31.2	1.0201	0.4332
		Total by Year		Σ	\$21,653		32.2	32.0	1.0414	0.4485
Waste Water Treatment Facility		Scope 1	Stationary Combustion	Fuel Oil (gals)	\$5,185.90	1,613.471	16.6	16.5	2.4202	0.1613
	Propane (gals)					0.0	0.0	0.0000	0.0000	
	Mobile Combustion		Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
	Scope 2	Grid Electricity (kWh)			242,634	55.1	54.8	1.7938	0.7619	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ	\$23,112	242,634	55.1	54.8	1.7938	0.7619
		Total by Year		Σ	\$28,298		71.6	71.3	4.2140	0.9232
	Lighting Districts	Scope 1	Stationary Combustion	Fuel Oil (gals)			0.0	0.0	0.0000	0.0000
Propane (gals)						0.0	0.0	0.0000	0.0000	
Mobile Combustion			Gasoline (gals)			0.0				
			Diesel Fuel (gals)			0.0				
			Kerosene (gals)			0.0				
Scope 2		Grid Electricity (kWh)			70,014	15.9	15.8	0.5176	0.2198	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ	\$23,938	70,014	15.9	15.8	0.5176	0.2198
		Total by Year		Σ	\$23,938		15.9	15.8	0.5176	0.2198
Vehicles		Scope 1	Stationary Combustion	Fuel Oil (gals)			0.0	0.0	0.0000	0.0000
	Propane (gals)					0.0	0.0	0.0000	0.0000	
	Mobile Combustion		Gasoline (gals)	\$70,666	23,150	203.3	203.3			
			Diesel Fuel (gals)	\$80,595	23,500	239.9	239.9			
			Kerosene (gals)	\$4,910	882	8.9	8.9			
	Scope 2	Grid Electricity (kWh)				0.0	0.0	0.0000	0.0000	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ		0	0.0	0.0	0.0000	0.0000
		Total by Year		Σ	\$156,171		452.1	452.1	0.0000	0.0000
	Woodstock Totals	Scope 1	Stationary Combustion	Fuel Oil (gals)	\$21,750	6,767	69.5	69.1	10.1505	0.6767
Propane (gals)				\$9,341	4,064	22.9	22.7	0.5689	0.4064	
Mobile Combustion			Gasoline (gals)	\$70,666	23,150	203.3	203.3			
			Diesel Fuel (gals)	\$80,595	23,500	239.9	239.9			
			Kerosene (gals)	\$4,910	882	8.9	8.9			
Scope 2		Grid Electricity (kWh)		\$100,499	617,410	140.1	139.4	4.5645	1.9386	
		Hydro Electricity (kWh)								
		Sum of Scope 2 (Electricity)		Σ	\$100,499	617,410	140.1	139.4	4.5645	1.9386
		Total by Year		Σ	\$287,762		684.6	683.4	15.2839	3.0217