Greenhouse Gas Emissions Inventory for the Government Operations Activities Year 2020

Town of North East, New York

First Environment was retained by the Town of North East to prepare a greenhouse gas (GHG) emissions inventory for the government operations activities with a base year of 2020. The inventory was prepared in accordance with (LGOP) using ICLEI's ClearPath Tool. The process was managed by the CSC Task Force with Green Team staff participation from the Town Bookkeeper and Highway Superintendent.

North East (pop. 3000) is a rural donut surrounding the historic Village of Millerton (pop. 900). As such, emissions sources do not include typical "downtown" functions such as many streetlights and water systems. Sources controlled by the Town are limited to highway vehicles, highway garage structures, the Town Hall building, and only 2 streetlights. The old Highway Garage is still in use. New highway department storage facilities located to the north will be joined by a new main highway building currently under construction which will replace the old garage and will impact future emissions. Importantly, the Town also owns a capped landfill. Inventory results highlight the predominance of the landfill as the major source of town GHG emissions.

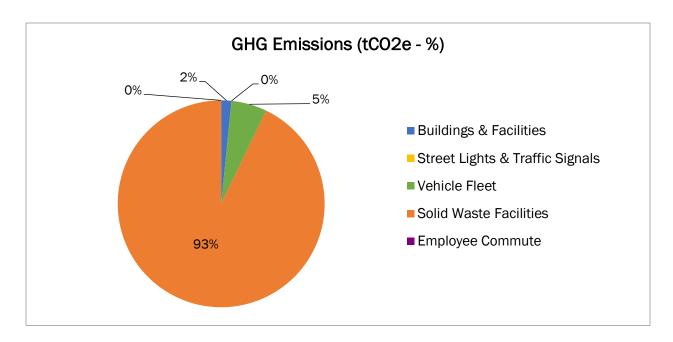
Task Force members worked with Town staff to collect data on fuel and electric usage and entered it into ClearPath. First Environment reviewed the categories and data, ran calculations, and identified key findings.

The GHG inventory assessed emissions of seven potential greenhouse gases inclusive of Scope 1 and Scope 2 GHG emissions from government operations and Scope 3 employee commutes.

Table 2, p. 2, presents the total emission by each Scope.

GHG Emissions tCO2e Scope 1 Emissions 2,487.87 Scope 2 Emissions 3.46 Scope 3 Emissions 0.52 Total 2,491.85

The Figure 2, p. 3, presents the breakdown of the total emissions by Sector. The Town's landfill (Solid Waste Facility), although closed since 1999, represents the largest source of GHG emissions. Details on the landfill and its emissions can be found in Sections 2.10 to 2.12 (pp. 10 -11).



Fuel for the remaining Scope 1 vehicles / buildings / facilities rank as the next two largest sources. Electricity for buildings and facilities ranks fourth, followed by a small amount from streetlights. Employee commutes are the smallest emission source.

The GHG Inventory forms the baseline data and meshes with 2 ongoing processes implemented through other CSC actions: PE3 Benchmarking and PE10 GHG tracking System. All 3 systems have been set up to inform a subsequent step (also funded in part by the same DEC OCC grant): the joint North East / Millerton Climate Action Plan. The CAP will cover 1, 5, and 10-year projections based on a variety of scenarios and suggest GHG reduction goals. Options to reduce emissions (with associated financial implications) will be evaluated for each municipality and for the community as a whole. The joint Climate Action Plan will detail the priorities and recommendations.

In addition to calculating a Base Year (2020) for tracking future reductions, this report also presents Business-As-Usual (BAU) GHG emissions projections. This 10 year scenario start from the year following the Base Year, out to 2031 (pp. 29-33). These projections consider future decarbonization of future fuel consumption and energy grid production. Figure 20 (p. 32) shows a projected 40% reduction in the Town's total emissions over the next 10 years. This reduction is primarily from the natural falloff of methane production from the Town's landfill. This is due to the on-going bio consumption of available organic material. The BAU scenario will be used to accurately assess the additional future impact of the climate actions identified in the CAP in regard to meeting the Town's emission reduction targets.