

Town of Saugerties

2025 Community Climate Action Plan





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to lose in
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EXECUTIVE SUMMARY

The 2025 Community Climate Action Plan (CCAP) was prepared by the Conservation Advisory Commission (CAC) Climate Smart Task Force. It contains a 2022 Community Greenhouse Gas (GHG) Inventory prepared by ICLEI-Local Government for Stainability USA and provided to the town by the Ulster County Department of the Environment. The inventory identifies GHG emission sources in the town and is the foundation for the 2025 CCAP. The CCAP sets goals, initiatives, and strategies to reduce GHG emissions.

Benefits of a Community GHG Inventory and Community Climate Action Plan

A Community GHG Inventory is an action of the NYS Department of Environmental Conservation Climate Smart Communities (CSC)
Program that results in a report of the GHG emissions resulting from

transportation fuels, waste, energy usage in buildings, and other sources within a given geographic boundary.

A CCAP is a strategy document that sets goals for emissions reduction, identifies priority actions, and outlines a set of initiatives and strategies to guide the town in reducing its emissions. The town's 2010 Community GHG Inventory Narrative Report recommended that a Community GHG Inventory be conducted in 2021, and a Community Climate Action Plan be prepared in 2023. The town's 2021 Comprehensive Plan Goal 14.6 states, "Conduct a comprehensive Community Greenhouse Gas Inventory for the Town/Village."

Ulster County received an NYS Climate Smart Communities Grant to fund, in part, a Countywide Community GHG Inventory and County Climate Action Plan. This 2022 inventory for the Town of Saugerties is a product of that effort. The inventory reveals that Saugerties emitted 250,445 metric tons of carbon dioxide (MTCO2e), a 16,842 metric ton reduction of overall emissions from the 2010 baseline year. The protocol used to generate this community scale breakdown adheres to the US Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions.

Local Effects of Climate Change

The threatening climate effects for the Town of Saugerties include dangerous warming, increase storm intensity and flooding, droughts, effects on our drinking water and air quality, increases in health-related problems such as breathing problems, allergies, vector-borne diseases, and the fiscal impact on town budgets due to climate-related events.

In Saugerties, because of the semi-rural nature of the town, the proximity of New York City, and the attractiveness of the area, the trend toward development and modest job growth will continue to result in increased stresses on the environment and climate change. We need to take steps now to plan for the future by reducing GHG producing activities. We also need to mitigate the impact of extreme weather events in the Northeast and contribute our share of the solutions.

Regional Impacts of Climate Change

The Northeast National Climate Assessment reported that the Northeast has populations highly vulnerable to climate hazards such as heat waves, ice storms, floods, droughts, and hurricanes.

Tropical Storm Irene (August 27-29, 2011) wreaked such havoc that streams and rivers wiped out bridges, displaced people and livestock, destroyed property, and took lives. Clearly, local infrastructure was not equipped to handle the excessive amounts of precipitation that flooded the area. Between 1958 and 2010, the Northeast experienced more than a 70% increase in the amount of precipitation falling in very heavy rain events.

In July 2023, a major heat wave covered much of the United States. More than 85% of Americans experienced temperatures above 90 degrees Fahrenheit while millions of people across the southern United States experienced temperatures above 100 degrees. Scientists say that these high temperatures were made five times more likely by climate change.

According to a 2014 New York State Energy Resource and Development Authority (NYSERDA) overview of climate change risks to New York, overall temperatures have already risen about 2.4 degrees Fahrenheit (or 1.3 degrees Celsius) in the last 50 years in the state, with warmer winters and more cooling degree days in summers, e.g. days when the temperature exceeds 65 degrees, may require energy use to make living and working environments comfortable.

The Town of Saugerties noted in its <u>2019 Climate Action Plan for Government Operations</u> "Clear proof of significant impacts of climate change on the environment and people worldwide were first fully confirmed by scientists in 1989."

Summary of Goals

The Town of Saugerties seeks to align its goals to reduce community greenhouse gas emissions with the goals of New York State. Because the town lacks data for 1990, the baseline year used by the state, the town will use its 2010 Community GHG Inventory in which 267,287 MTCO2e were emitted as the baseline from which to measure reductions. Using 2010 as the baseline, the town adopts the goals to reduce greenhouse gas emissions 30% by 2030, 40% by 2040, and at least 85% by 2050, and to achieve 100% zero emissions generation of electricity by 2050.

Initiatives, Strategies, Outreach, Implementation

Twenty initiatives implemented by the town in recent years and enumerated in the Next Steps section of this plan help inform the initiatives going forward and strategies to meet the town's goals to reduce greenhouse gas emissions. To help achieve the plan's objectives, the Conservation Advisory Commission (CAC) will serve as the Outreach Team charged with informing the public about the plan and soliciting feedback. A person designated by the Town Board - partnering with department heads, the CAC, and community groups - will implement the plan.

Introduction

Climate change has already caused widespread impacts and related losses and damages on human systems and altered terrestrial, freshwater and ocean ecosystems worldwide. Physical water availability includes balance of water available from various sources including ground water, water quality, and demand for water.

The threatening climate effects for the town include dangerous warming, increasing storm intensity and flooding, droughts, effects on our drinking water and air quality, and increases in health-related problems such as breathing problems, allergies and vector-borne diseases.

Our planet is experiencing more intense heat, bigger storms, longer droughts, increased flooding, raging wildfires, melting glaciers, devastating tornadoes, and rising sea levels. And yes, manmade greenhouse gases are causing our climate to change. According to the Intergovernmental Panel for Climate Change (IPCC), "climate change is a threat to human well-being and planetary health (very high confidence). There is a rapidly closing window of opportunity to secure a livable and sustainable future for all (very high confidence)."

The earth's climate is dominated by atmospheric temperature. Certain naturally-occurring gases dispersed in the atmosphere increase temperatures in its lower regions by blocking the escape back to space (as infra-red) of solar energy that has hit the planet. This phenomenon is known as the greenhouse effect and supports the Earth's habitable atmosphere. However, overwhelming evidence shows that human activities are increasing the concentration of greenhouse gases (GHGs) and changing the global climate. The most significant contributor is burning fossil fuels for transportation, electricity generation, and other purposes, introducing large amounts of carbon dioxide and other greenhouse gases into the atmosphere. Collectively, these gases intensify the natural greenhouse effect, causing the global average surface and lower atmospheric temperatures to rise threatening the safety, quality of life, and economic prosperity of global communities.

An (IPCC) report produced by the United Nations in February and April of 2022, tells us that the world must drastically reduce its release of greenhouse gases produced by the burning of fossil fuels to 1.5 degrees Celsius by 2030 to have any chance of restricting a global rise in temperature.

IPCC Climate Change 2023 Synthesis Report, Summary for Policy Makers, states, "Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850-1900 in 2011-2020. Global greenhouse gas emissions have continued to increase, with unequal historical and ongoing contributions arising from unsustainable energy use, land use and land-use change, lifestyles and patterns of consumption and production across regions, between and within countries, and among individuals (high confidence)."

BACKGROUND

Saugerties is a semi-rural community located in the northeastern section of Ulster County. A town of 67.96 square miles, Saugerties borders the Hudson River to the east and provides views of the scenic Catskill Mountains to the west. The town's 2021 Comprehensive Plan Goal 14.6 calls for a comprehensive Community Greenhouse Gas Inventory.

Ulster County received a NYS CSC Grant to fund in part a Countywide Community GHG Inventory and Climate Action Plan, including generating local jurisdiction GHG inventory memos for all Ulster County municipalities. The Community GHG Inventory 2022 and the 2025 CCAP for the Town of Saugerties is a product of that effort. The 2022 inventory reveals that the Saugerties community emitted 250,445 MTCO2e.

A Community GHG Inventory is a CSC action that results in a report of the GHG emissions resulting from transportation fuels, waste, energy usage in buildings, and other sources within a given geographic boundary. A CCAP is a strategy document that sets goals and outlines a set of initiatives to reduce greenhouse gas GHG emissions. Using a GHG emissions inventory as the foundation, a CCAP defines GHG reduction goals, initiatives and strategies to achieve goals.



Climate Smart Task Force

In 2018, the Town Board appointed the Conservation Advisory Commission (CAC) as the Climate Smart Task Force. The task force has participated in the CSC program and the Clean Energy Communities program (CEC) to assist the town in reducing its GHG emissions.

Bronze Recertification

In 2020 the town received CSC recognition at the Bronze level, the first town in Ulster County to achieve Bronze. In 2024 the town was recertified at the Bronze level with twenty-four approved actions and 189 points.



A Community Greenhouse Gas (GHG) Inventory, conducted in 2010 by New York State, identifies and quantifies the sources of GHG emissions from the town's community activities. It establishes a baseline from which future emission reductions and progress can be measured. The 2010 Community GHG Inventory shows the total community GHG emissions were 267,287 MTCO2e. Mobile energy was the community's largest source of greenhouse gas emissions. Mobile energy represented approximately 45% of the community's emissions.

Protocol

The protocol used to generate the 2022 GHG Inventory community scale breakdown adheres to the US Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions and includes three GHGs: carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). Table 1, following the Key Findings, represents emissions in "carbon dioxide equivalent" (CO2e) values, calculated using the Global Warming Potentials (GWPs) for methane and nitrous oxide from the IPCC 5th Assessment Report.

KEY FINDINGS

Town of Saugerties Data

19,038 Residents 8,123 Households

Semi-Rural Neighborhood Community Type

Per Capita Emissions

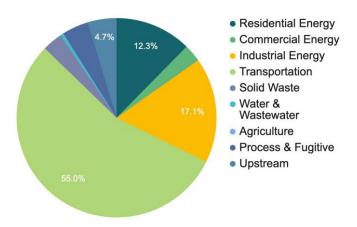
11.8 MTCO2e/person in the County 13.2 MTCO2e/person in Saugerties

Community Emissions at a Glance

Figure 1 Community-wide Emissions by Sector.

Figure 1 shows community-wide emissions by sector. Transportation & Mobile Sources Sector is the largest contributor, with 55.0% of emissions, followed by Industrial Energy (17.1%), Residential Energy (12.3%), and Upstream Impacts (4.7%).

Commercial Energy, Process & Fugitive, Solid Waste, Agriculture, and Water & Wastewater account for the remaining (less than 9%) emissions.



This template was developed by ICLEI-Local Government for Stainability USA in 2024

Table 1 below outlines a detailed profile of emissions sources within the Town of Saugerties

Table 1: Detailed Profile of Emissions Sources in metric tons carbon dioxide equivalent (MTCO2e) by Sector and Fuel

Sector	Item	Usage	Usage unit	MTCO2e
	Electricity	30,153	MWh	4,111
Residential Energy	Natural Gas	115,881	MMBtu	8,231
	Distillate Fuel Oil No. 2	216,043	MMBtu	16,086
	Propane	40,156	MMBtu	2,492
Residential Energy Tota	Ī			30,920
	Electricity	15,655	MWh	1,957
Commercial Energy	Natural Gas	67,703	MMBtu	3,601
	Distillate Fuel Oil No. 2	115,852	Gallons	1,190
	Propane	351	Gallons	351
Commercial Energy Total 7,181				
	Distillate Fuel Oil	8,596	Gallons Tons	88
Industrial Energy	Coal	18,179		42,661
Industrial Energy Total				42.740
industrial Energy Total	Gasoline	239,326,148	VMT	42,749 96,381
Transportation	Diesel	28,676,257	VMT	41,133
	Public Transit			159
Transportation Total	Public Hallsit			137,673
Transportation rotal	Waste Sent to Landfill Waste	9,853	Tons	7,924 199
Solid Waste	Transport	9,853	Tons	7,324 133
Solid Waste Total		,		8,123
Water &	Central Treatment Emissions Septic	5,213	Population	10
Wastewater	Emissions	4,104	Households	1,211
Water & Wastewater Total 1,221				
	Enteric Fermentation Manure	12	Acres	12
Agriculture	Management	386	Acres	105
	Crop Residue	688	Acres	18
Aminulaum Takal				425
Agriculture Total	Natural mandishribution lands as			135
Process & Fugitive	Natural gas distribution leakage Refrigerants			386 8,029
				,
	Sulfur Hexafluoride (SF6)			378
Process & Fugitive Emissions Total 10,73				
Upstream Impacts	Electricity			1,806
	Natural gas of			2,696
Activities	Fuel oil			6,607
	Propane			599
Upstream Impacts Tota				11,708
Total Gross Emissions				250,445

NEXT STEPS

This section of the 2025 Community Climate Action Plan sets forth goals, initiatives, and strategies to address climate change.

As stated in the introduction, ".... the world must drastically reduce its release of greenhouse gases produced by the burning of fossil fuels by 2030 to have any chance of restricting a global rise in temperature to 1.5 degrees Celsius." We have no time to lose in adopting climate smart solutions. Urgent action is needed. The extent to which we achieve reductions in greenhouse gas emissions depends on choices made now.

GOALS

The state uses 1990 as the baseline year from which to measure statewide reduction levels: 40% reduction from 1990 levels by 2030, at least 85% below 1990 levels by 2050. The act also commits to 100% zero-emissions electricity grid by 2040. Ulster County set goals that align with the state's climate act.

The Town of Saugerties seeks to align its goals with those of New York State and Ulster County. Because the town lacks data for 1990, the town will use its 2010 inventory as the baseline. In 2010, the total GHG emissions amounted to 267,287 MTCO2e. The 2022 inventory shows 250,445 MTCO2e emitted.

Using the 2010 Saugerties Community GHG Inventory as the baseline, the town adopts the goals to reduce greenhouse gas emissions 30% by 2030 below 2010 levels, 40% by 2040, and at least 85% by 2050. The goal is also to achieve 100% zero-emissions generation by electricity by 2040.

A goal to preserve forested lands in their natural state, as defined in the town Zoning Law Forest Preserve Lands, benefits public health and the environment by sequestering CO2. According to *Global Forest Watch*, "the data show that keeping existing forests standing remains our best hope for maintaining the vast amount of carbon forests store and continuing the carbon sequestration that, if halted, will worsen the effects of climate change."

According to the New York Forest Carbon Summary Report Climate and Applied Forest Research Institute at the State University of New York College of Environmental Science and Forestry June 2023, "Achieving New York's net zero emissions goal will require substantial and sustainable growth of the statewide forest carbon sink – the amount of greenhouse gas sequestered annually by all natural and working forest lands – to offset future from hard-to-decarbonize sectors and reduce carbon risk."

INITIATIVES

Saugerties has taken numerous actions to address the climate crisis dating back to 2009 when the Town Board unanimously passed a resolution to take the CSC pledge to reduce GHG emissions. In 2010, the town established a Green Task Force, and in 2018 the town established the CAC as the Saugerties Climate Smart Task Force. Actions completed by the town in recent years and documented by the task force for approval by the CSC program or the CEC program, or both, include:

- Participated in the Community Choice Aggregation program offering a 100% renewable energy option to eligible residents and small business owners
- Installed a 2 megawatt solar array at the closed landfill
- Adopted a Government GHG Inventory for Government Operations
- Adopted a Climate Action Plan for Government Operations
- Adopted a requirement that 10% of parking space in new multi-family buildings have EV Charging Stations
- Converted streetlights, off street lighting, and Town Hall lighting to LED
- Installed five EV Charging Stations
- Conducted a Rooftop Solar Campaign
- Installed solar panels at the Greco Senior Center
- Partnered with Ulster County to offer Community Solar
- Established a Food Scrap Recycling Program
- Established a Zero Waste Program for the annual Garlic Festival
- Organized a *Go Smart Go Green Fair* to inform the public on a variety of climate smart products, services, and actions.
- Installed a state-of-the-art air-cooled chiller at the Kiwanis Ice Arena
- Acquired an electric vehicle, a hybrid vehicle, two battery-operated electric light-duty trucks and electric landscaping equipment
- Created a Saugerties Climate Smart Website
- Installed a Rain Garden at the Greco Senior Center
- Installed Energy Star appliances at the Greco Senior Center
- Participated in the Third Thursday series with a climate-related presentation
- Presented a three-part series on climate change at the Saugerties Public Library
- Established a Pollinator Meadow and created a pollinator meadow and an informational website page
- Started a Repair Café Program

Priority Initiatives

- Require most new residential and commercial construction to be all electric.
- Participate in Community Choice Aggregation and state programs for municipalities to reduce energy usage and GHG emissions such as DEC's CSC and NYSERDA's CEC.
- Promote Rooftop Solar and Community Solar.
- Transition from internal combustion engine vehicles (passenger, municipal fleets, etc.) to electric-powered.
- Inform the public about the benefits of all-electric heating, cooling, sustainable design techniques, and EVs,

STRATEGIES

Prior initiatives help inform strategies adopted to meet the town's goals. The 2022 inventory shows Transportation and Mobile Sources are the largest contributors to greenhouse gas emissions with 55% of emissions, followed by Industrial Energy 17.1%. Residential Energy is 12.3%. Strategies for emissions reduction in the Transportation, Residential and Industrial sectors follow.

TRANSPORTATION and MOBILE SECTOR The 2022 inventory shows emissions were 137,673 MTCO2e or 55% of the total emissions. In 2010, transportation and mobile emissions were 120,027 MTCO2e and accounted for 45% of emissions.

Continue to install additional EV Charging Stations, support programs to adopt zero-emissions vehicle technologies for busses and trucks, inform the public about benefits of electric vehicles, available incentives and rebates for the purchase of EVs, partner with local car dealerships to promote EV's, partner with Ulster County, regional and local groups, school district, and Chamber of Commerce to promote electric vehicle fleets, encourage walking and biking by adding bike routes and pedestrian walkways where appropriate.

Actions taken by the town include installing five EV Charging Stations, adding biking routes, acquiring an electric vehicle, a hybrid vehicle, two battery operated electric light-duty trucks, and electric landscaping equipment for government operations.

Cooperation among local, state and federal officials and agencies is needed to address emissions from the Transportation and Mobile Sector for a town like Saugerties due to the town's proximity to the NYS Thruway. For example, the New York Truck Voucher Incentive Program (NYTVIP), administered by the New York State Energy Research and Development Authority (NYSERDA), helps make it easier for fleets to adopt zero-emission vehicle technologies while removing the oldest, dirtiest diesel engines from roads.

RESIDENTIAL SECTOR The 2022 inventory shows residential emissions were 30,920 MTCO2e or 12.3% of the total emissions. The 2010 inventory shows 51,913 MTCO2e or 19% of the total emissions from the Residential Sector.

Adopt the most stringent code for buildings. Require most new residential and commercial construction to be all electric with building-specific measures for efficiency, all-electric heating and cooling. Heat pumps are a clean and efficient way to heat and cool a building. Incentives and lower operational costs can make them a cost-effective solution.

A 2023 NYS law prohibits fossil fuel equipment in building systems in any new buildings seven stories or less in height starting in 2026, and in 2029 for larger buildings. Commercial or industrial buildings larger than 100,000 square feet will be exempt from the prohibition until 2029. Beginning on January 1, 2029, all new buildings will be subject to the fossil-fuel equipment prohibition with few exemptions. Goal 14 of the 2021 Comprehensive Plan calls for reducing the use of fossil fuels by exploring more energy-efficient ways of heating and cooling buildings.

According to NYSERDA, "The shift to all electric buildings will slash greenhouse gas emissions, improve energy resilience, and add thousands of local clean energy and energy-efficiency jobs across New York State. Designing buildings to be efficient and all-electric from the start can cut construction costs and provide long-term savings from reduced energy consumption."

Ensure new buildings are weatherized and energy efficient. The 2021 Comprehensive Plan Goal 10.8 states, "Encourage energy efficiency and weatherizing buildings for energy savings." According to NYSERDA, "Having a well-insulated, weatherized home is an important step before making other energy upgrades such as heat pumps, since a more efficient home could be sized for a smaller, lower-cost system."

Ensure inclusion of electric vehicle charging infrastructure in multi-family and commercial buildings, ensure sustainable design techniques, like air sealing, insulation, passive design, and LED lighting. These features can dramatically reduce homes'and buildings'energy bills and their carbon footprint while improving comfort and safety. Designing and developing climate-friendly and resilient buildings are good for both businesses and residents. Goal 17.7 of the 2021 Comprehensive Plan states, "Encourage EV charging stations within multi-family housing developments."

Increase the amount of renewable energy by continuing to participate in the Community Choice Aggregation program. During the period from July 2021 – 2022, there were 3,893 initially eligible participants in the program. They have used over 29.6 million KWH of 100% renewable energy sourced. 3,330 metric tons of carbon dioxide were avoided.

Continue participation in state programs for municipalities to reduce energy usage and GHG emissions such as CSC and NYSERDA's CEC program, increase participation in Community Solar, and increase rooftop solar installations through community education and outreach.

Partnering with Ulster County in its Solarize Ulster initiative, the town offered a Community Campaign for Community Solar resulting in ten accounts subscribing to solar farms. A Solarize Saugerties Campaign was launched in 2016 that resulted in 66 rooftop solar installations. In the ten-year period from 2014 - 2024, 500 rooftop solar permits were issued.

INDUSTRIAL SECTOR Northeast Solite on Kings Highway is a lightweight aggregate manufacturing facility that makes up the Industrial Sector emissions referenced in Table 1 on page 7. It accounts for 42,749 MTCO2e or 17.1% of the total community GHG emissions. Shale, either quarried on site or off site, is processed on site in three rotary kilns to produce lightweight aggregate. The three rotary kilns are fired with bituminous coal and distillate fuel oil resulting in the 42,749 MTCO2e emissions. Establish a task force to recommend measures to reduce GHG emissions at the Northeast Solite manufacturing facility.

OUTREACH PLAN

The process of soliciting and gathering feedback for the town's Community Climate Action Plan (CCAP) will aim to be transparent, inclusive and collaborative, creating a robust outreach process for community climate planning efforts.

The objectives of the Outreach Plan include informing the community about the town's CCAP, soliciting feedback from community stakeholders, local organizations, and the community-at-large, including those parts of the community that may be disproportionately impacted or unfairly burdened by climate change.

To achieve the plan's objectives, the Conservation Advisory Commission (CAC) will serve as the Outreach Team charged with informing the public about the draft plan and soliciting feedback.

The CAC will present the plan at a minimum of two of its public monthly meetings and compile the feedback.

The draft plan will be posted for review and comment on the town's website, the Climate Smart Saugerties Website, and notice that the plan is available for public review and comment will also be posted on the local Cable TV Bulletin Board and the town's Facebook page.

Following approval of the Community Climate Action Plan by the Town Board, the CAC will keep the public informed of progress toward meeting greenhouse gas emissions reduction goals. Updates will be presented at CAC meetings and posted on the Town of Saugerties website and the Climate Smart Saugerties website as they become available.

IMPLEMENTATION

A person designated by the Town Board - partnering with the CAC, department heads, and community groups - will be responsible for overseeing the implementation of the CCAP. The town will seek to engage community partners including the Chamber of Commerce, Saugerties Central School District, and local organizations in the process of implementing the plan.

The CCAP will be implemented in stages with the intent of reaching the plan's goals to reduce greenhouse gas emissions 30% by 2030 below 2010 levels, 40% by 2040, at least 85% by 2050, and to achieve 100% zero-emissions generation by electricity by 2040.

Progress toward achieving the community-wide GHG reduction targets will be measured by obtaining a subsequent GHG inventory in five years. The town has relied on NYS and Ulster County governments to provide data on the town's community GHG emissions by which to measure progress.

METHODOLOGY

See the <u>Ulster County Inventory</u> report for more details on methodology, data gaps, and assumptions.

Activity	Data source/approach
Residential, commercial and industrial electricity	Utility Energy Registry. For Central Hudson April was not included, so usage scaled by 12/11.
Residential fuel oil and propane	American community survey, US Energy Information Administration. Households using propane and heating oil were scaled so that totals would match county propane and oil households.
Commercial fuel oil and propane	Downscaled from county based on population per local municipality
Industrial fuel oil and coal	EPA Facilities Reporting
On-road gasoline/diesel VMT	VMT per jurisdiction provided by Ulster County
Public transit	Downscaled from county based on population per local municipality
Waste sent to landfill	Downscaled from county based on population per local municipality
Waste transport	Downscaled from county based on population per local municipality
Wastewater central treatment	Based on total local municipality population minus septic population
Septic systems	Population calculated from number of parcels per local municipality with septic systems
Enteric fermentation	Downscaled from county based on acres of cattle and dairy per local municipality
Manure management	Downscaled from county based on acres of livestock per local municipality
Crop residue	Downscaled from county based on acres of field crops per local municipality
Natural gas distribution leakage	Calculated from natural gas consumption
Refrigerants and SF6	Based on population
Upstream impacts of electricity/fuel usage	Calculated from electricity/fuel usage

ACKNOWLEDGEMENTS

Town Board

Supervisor Fred Costello, Jr.
Councilwoman Leeanne Thornton
Councilman Zach Horton
Councilman Mike Ivino
Councilwoman Peg Nau

CAC Climate Smart Task Force

Skip Arthur, Chairperson

Linda Armour

Carole Furman

Ken Goldberg

Mike Harkavy

Nicole Roskos

Elizabeth Shafer

Stephen Shafer

Leslie Surprenant

Mary O'Donnell, Chairperson Emerita

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Layout: Mary O'Donnell

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