

Town of Kent NY Climate Action Plan 2024-2029

Executive Summary

Introduction

This climate action plan details actions that the Town of Kent, NY intends to undertake over the next three to five years to reduce municipal greenhouse gas emissions and increase its preparedness for the consequences of climate change. The plan is framed around the Pledge Elements (PEs) of the NYS DEC Climate Smart program <https://climatesmart.ny.gov/>. The Kent Town Board joined the Climate Smart Communities program in 2021 and has been working towards certification, taking actions in multiple pledge areas including decreasing energy usage, shifting to renewable energy, using land and materials in a “climate smart” manner, and enhancing the community’s resilience to climate change.

Assessment of Greenhouse Gas Emissions due to Municipal Operations

As part of their initial steps towards certification, the Kent Climate Smart Task Force completed [municipal](#) and [community](#) greenhouse gas inventories. The municipal inventory revealed that about three quarters of the town’s “carbon footprint” arises from vehicle emissions, and about one quarter from buildings and facilities. The chart below from the municipal greenhouse gas inventory illustrates that for the vehicle fleet, all emissions, equivalent to 635 metric tons of CO₂ (MTCO₂e) annually, arise from combustion of fossil fuels, so-called “scope 1 emissions.” For buildings and facilities, close to two thirds of greenhouse gas emissions arise from combustion of fossil fuels. The remaining 74 MTCO₂e are “scope 2” emissions due to use of electrical power for lighting and machinery.

Table 1: Summary of total municipal emissions by sector and scope, 2021

Sector	Scope 1 (MTCO ₂ e)	Scope 2 (MTCO ₂ e)	Scope 3 (MTCO ₂ e)	Total (MTCO ₂ e)
Buildings and facilities	131	74	-	205
Streetlights	-	9	-	9
Vehicle fleet	635	-	-	635
Water and Sewage Facilities	-	16	-	16
Total	766	99	-	865

Goals for Reduction of Greenhouse Gas Emissions

The Town's emissions reduction targets for this Climate Action Plan are modeled after New York State's [Scoping Plan](#) for the Climate Leadership and Community Protection Act (CLCPA) which was passed in 2019. The Scoping Plan outlines the following goals:

- 70% renewable energy by 2030
- 100% zero-emission electricity by 2040
- 40% reduction in statewide GHG emissions from 1990 levels by 2030
- 85% reduction in statewide GHG emissions from 1990 levels by 2040
- net zero emissions statewide by 2050.

Strategies for Reduction of Greenhouse Gas Emissions

Achieving these ambitious goals will require significant efforts both to reduce energy consumption and to make a transition to renewable energy. These correspond to PE 3, "Decrease energy use" and PE 4, "Shift to clean, renewable energy." The sections below outline planned actions in these areas as well as in the areas of other pledge elements. Details and specific roles and timelines may be found in the table below.

The primary area of effort should be the vehicle fleet. Significant reductions in greenhouse gas emissions can be attained by "right-sizing" the vehicle fleet and changing as town vehicles to hybrid or preferably full electric vehicle (EV) technology. Full replacement of the fleet will have to take place over one or more decades, but capital planning and initial purchases of the lighter-duty vehicles currently available as EVs can and should be done in the near term. This will also require the town to build infrastructure for charging EVs and to ensure that staff receive training so they are prepared to repair them. The town will be installing its first EV charging stations this year and will need to obtain funding for more.

To reduce greenhouse emissions from buildings, the town will undertake energy benchmarking and then target improvements in selected buildings. The three main town-owned buildings at the Town Center complex (Town Hall, Library, and Police Department) already are heated and cooled via ground-source heat pumps, but other town facilities are still heated via fuel oil. One opportunity for a changeover to a heat pump system will be the renovation of the Old Town Hall as the Kent Community Hall, which will also serve as an emergency shelter and cooling center. Funding for a heat pump system for that building is pending. The planned conversion of lighting to LED in all town buildings will also yield significant reductions in Scope 2 (electrical) energy usage.

The plan outlines multiple other planned improvements in areas such as PE 5, "Climate smart materials management" and PE 6 "Climate smart land use." The main actions to be undertaken in these categories include Food scrap composting (initially as a pilot drop-off program, with a goal of town-wide curbside pickup within three to five years.) In the area of Climate Smart Land Use, a key focus is completing two newly-funded projects, namely an open space plan and a pedestrian and cycling plan, as well as a groundwater protection plan. Even more important will

be the updating of the town's 2008 comprehensive plan, incorporating the information compiled in the town's recently-completed [natural resource inventory](#) and biodiversity inventory and planning for "smart growth" and sustainability.

In the area of climate resilience, PE 7, one of the critical areas is dams and culverts. The Lake Carmel Dam is "Class C" (high hazard) dam and a recent assessment showed it to be in poor condition. The increased severity of storms due to climate change has increased the urgency of repair. Engineering for the planned repairs will begin this year, and the town is seeking additional funding to pay for this. In addition, the Kent Highway Department has been working to replace culverts and bridges at stream crossings throughout the town, in some cases with funding from Bridge New York. The town plans to continue with culvert replacements and stormwater mitigation projects. The town should also work in concert with Putnam County Emergency Management to assess climate vulnerability, update flood maps, and ensure that the town is fully prepared for climate-related emergencies.

As the carbon footprint of Kent's municipal operations is brought under control, the focus can shift to reducing greenhouse gas emissions from Kent's approximately 4,750 households. The town needs to create a community climate action plan and expand on efforts such as its community solar campaign. Sustainable Putnam, a county-level non-profit organization, has been doing an outstanding job educating residents and providing information, resources, repair cafes, etc. and has working in partnership with Kent Climate Smart on the solar campaign and planning for food scrap composting. Kent would benefit from continuing to work closely with Sustainable Putnam to extend its programs to town residents through community outreach, consistent with PE 9, "Inform and Inspire the public."

Implementation

As stated in the Kent Municipal Operations Greenhouse Gas inventory, "Kent has shown a strong community capacity for innovation, planning, and funding acquisition, and these are an essential foundation for progress." The consultants who developed the inventories also provided the town with a cost-effectiveness analysis for making the transition to EVs, which is appended to this document. As indicated in the plan, most of the actions will be completed with the help of the Kent Climate Smart Task Force, the Kent Conservation Advisory Committee, and town staff, often working consultation with environmental consultants and/or engineers. Some of the target timelines in the plan are estimates that will likely change, and so will some of the actual project plans. Going forward, this plan will be updated by the Climate Smart Task Force and shared with the Town Board and the public on an annual basis. This is consistent with PE 10, "Engage in an evolving process of climate action."

Five-Year Climate Action Plan Based on Pledge Elements

PE2. Inventory emissions, set goals, and plan for climate action.

PE2 Action	Emissions Reduction	Description	Start Date	Target Date	Responsible Parties
Community Climate Action Plan	N/A	Develop Community Climate Action Plan	1/25	12/25	Task Force with Town Staff support, Sustainable Putnam, Putnam County Climate Smart

PE3. Decrease Energy Use

PE3 Action	Emissions Reduction	Description	Start Date	Target Date	Responsible Parties
Benchmarking - Municipal Buildings	N/A	Complete benchmarking of all town-owned buildings in accordance with the resolution adopted by the town board on Dec. 5, 2023. If successful, may yield 15k funding to the town.	4/ 24	12/24	Task Force with Town Staff support and assistance from Hudson Regional Council
Government Building Energy Audits	N/A	Conduct level 1, 2, or 3 audits of one or more town buildings	1/25	6/25	Need to assess cost; possibly level 1 can be done by CCE “Energy Navigator” at no charge.
Clean Energy Upgrades	High	After completing benchmarking, document the energy use reduction of the highway building renovation. Plan additional energy-saving improvements.	1/25	12/25	Task Force with Town Staff support and assistance from Hudson Regional Council
Water-efficient Fixtures	Low	Ensure that water efficient fixtures are installed at all town facilities.	1/26	12/26	Town staff
Interior Lighting Upgrades	High	Convert light fixtures in all town offices to LED	6/24	12/24	Contractor and/or staff
Fleet Inventory, Policy, and “right-sizing.”	N/A	Complete fleet inventory that meets climate smart criteria	6/24	12/24	Municipal Repairs dept., task force
	High	Use inventory to inform capital planning; “right-size” the fleet.	1/25	12/25	Town staff, possibly a fleet consultant if no cost to town.

Advanced vehicles	High	As part of capital plan for the fleet, plan for future purchases of high-efficiency, hybrid and or full EVs where applicable and as appropriate for needs.	1/25	12/28	Town staff
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PE 4. Shift to clean, renewable energy

PE4 Actions	Emissions Reduction	Description	Start Date	Target Date	
Heat Pumps	Moderate	Upgrade the HVAC system at Old Town Hall to heat pump.	6/24	12/24	50k Senate CREST funding
Solar Energy Installation	High	Explore possible sites for a future town solar installation.	6/24	12/24	Task force using solar energy calculation tool. Possibly roof of hwy garage?

PE 5. Use climate-smart materials management.

PE5 Actions	Emissions Reduction	Description	Start Date	Target Date	
Recycling bins	Low	Place recycling bins at all town locations that have trash cans	6/24	12/24	Mostly complete; need to verify and add as needed.
Food scrap composting	Pilot- low Full town-wide program: High	Begin drop-off food scrap composting pilot program, possibly with CCE, at new Town Hwy property. Need to give Richie info on space requirement. Goal of town-wide collection program within 5 years	6/24	12/25	CCE might provide volunteers, would make it an education/demonstration project. Funds from solar campaign can pay for shed, initial purchase of bins, and pick up fees for first year.

PE 6. Implement climate-smart land use.

PE6 Actions	Emissions Reduction	Description	Start Date	Target Date	
Comprehensive Plan with Sustainability Elements	N/A	Update Kent Comprehensive Plan to incorporate sustainability components/smart-growth principles.	1/25	12/26	Town ARPA funding proposed
	High	Install EV charging stations at:	5/24	6/24	Library: 23k funding,

Alternative-fuel Infrastructure		Kent Library			
		Town Hall, Kent Community Hall (Old Town Hall) and/or KPD)	6/24	12/24	CREST senate funding pending
		Huestis Park Ryan's field Arts on the Lake	1/25	12/25	Reapply for NYS DEC ZEV funding
		I-84 at 311 and/or Ludingtonville (Level 3)	1/25	12/26	Federal program? Tesla?
Planning for Biking and Walking	Medium	Develop Pedestrian and Cycling Plan	3/24	12/24	Consultant and a steering committee 45 k funding 45 k Town ARPA funds

PE 7. Enhance community resilience to climate change.

PE7 Actions	Emissions Reduction	Description	Start Date	Target Date	
Conserve Natural Areas	Low	Develop Open Space plan	4/24	12/25	KCAC, Steering committee, Town Assessor, Consultant 40k funding, 15% town match = \$7,200 and/or in-kind.
Zoning for Protection of Natural Areas	Medium	As part of comprehensive plan revision, update zoning code and modify town code to implement recommendations in NRI such as conservation subdivisions and community preservation fund.	1/25	12/28	Town board, KCAC, consultants
Watershed-based Flood Mitigation Plan	N/A	The plan should clearly demonstrate consideration of current and future conditions, community engagement, field work, hydrologic/hydraulic assessment, and flood mitigation strategies. Specify and illustrate whether the assessment covers more or less than 75% of the community area. The plan must have been created or revised within ten years from the application date.	6/24	12/25	Task force, town staff, County Emergency Services
Culverts and Dams	N/A	Assess all road-stream crossings that re town purview using the NAAC protocol	5/24	12/24	Task force, Kent Hwy, Bruce Barber

		Create a road-stream crossing management plan	1/25	6/25	Task force, Kent Hwy, Bruce Barber
		“Right-size” one or more culverts	1/25	12/26	1 M funding for Lake Louise, two more grants in process.
Heat Emergency Plan	N/A	Develop heat emergency plan detailing coverage area, locations of vulnerable residents, means for transportation to cooling centers, communication system.	1/25	12/26	Town staff, County EMS
Cooling Centers	N/A	Establish one to two cooling centers at locations with back-up generators	6/24	7/24	Town staff, EMS Coordinator to formalize what is already in place
Source Water Protection	N/A	Develop groundwater protection plan and maps	6/24	12/24	Consultant 36k CREST funding pending

PE 8. Support a green innovation economy.

PE8 Actions	Emissions Reduction	Description	Start Date	Target Date	
Community Campaigns	Medium	Re-open Community Solar Campaign. If successful, may yield 15k funding to the town for other energy efficiency projects	3/24	12/24	Task force with Sustainable Putnam’s help

PE9 Inform and inspire the public.

PE9 Actions	Emissions Reduction	Description	Start Date	Target Date	
Climate Change Education & Engagement		Develop an information campaign about the need to pump septic systems at least every 5 years as a first step towards enforcement of this regulation. Work to promote a three-year interval for systems close to watercourses and water bodies	6/24	12/25	Town staff, task force
		If a food scrap composting program is developed with CCE, use it to educate the public.	6/24	12/25	Task force, CCE staff and volunteers