Village of Rhinebeck

Annual Climate Progress Report 2023

Authored by: Vanessa Bertozzi, Village Trustee, Environmental Specialist, and Village Climate Smart Communities Task Force Coordinator

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INTRODUCTION

2023 was a rollercoaster with some projects and an opportunity to engage with the public around other new initiatives.

The Village is updating its comprehensive plan for the first time since the 1990s, and the Comprehensive Plan Committee (CPC) has been taking a lot of time and effort with this process, rightfully so. We are encouraged by the attention the CPC has been giving to sustainability elements. The 1990s plan had made no mention of climate change at all—what a difference a couple decades will make!

The early part of 2023 was spent on a fraught Town Planning Board process where we attempted to get approval to develop a municipal compost site at the Village's Highway Department property, which is located in the town. Ultimately, we regrouped around a Plan B: to partner with a local horse stable. Unfortunately we had to return the \$100,000 grant we received from the New World Foundation/Partners for Climate Action, but it's looking like our farm partnership is eligible to use the \$200,000 DEC grant. At the moment, we are in the final stage of drafting an agreement with the horse farm, Ellerslie Stable.

We held our second Rhinebeck Climate Week in September. This project had featured youth voices in 2022 and we revisited this theme. We received vociferous encouragement/criticism from the public to do more, quickly, regarding Safe Routes to School. The Village Board is applying for federal funding for the Transportation Alternatives Program (TAP), as well as exploring shorter term interventions at the intersection of South and S Parsonage.

Our work in the Climate Action Planning Institute (CAPI) continues, with the publication of our Greenhouse Gas Emissions Inventory and soon-to-be-published Climate Action Plan (both for government operations).

In 2023 we also tried our first Clean Energy Community Campaign, with a drive to get folks to purchase electric vehicles and plugin hybrids. We received notice that we won the \$5000 grant from NYSERDA.

We continue to make progress towards silver certification in the NY State Climate Smart Communities program.

OUR PEOPLE POWER

Our volunteers and the structure of our work

We thank the volunteers who have put countless hours into the Village's CSC projects in 2023. We are also happy to continue to partner with Marist College's Environmental Science and Policy program and Computer Engineering department. Mayor Bassett continues to chair the Hudson 7. We were honored by the Hudson Valley Regional Council in December 2023, winning two awards:

- Climate Stalwart, for sustained and exceptional contributions to climate action
- Bridge Builder, for making a significant commitment to collaboration and partnership in the Mid-Hudson Region as part of the Hudson River Drinking Water Intermunicipal Council (Hudson 7)

Rhinebeck Village's Climate Smart Task Force also won big in the 2023 Chronogrammies:

- Dan Shapley (honorary Task Force member and Riverkeeper employee) won first place for Environmental Advocate
- I (Vanessa Bertozzi) came in 3rd place
- Carli Fraccarolli was also in the top 5 finalists

About the NY State CSC Program

The Climate Smart Communities program is a NY State program requiring a municipality to work within their own level of government. That is why we have a Village CSC Task Force. Trustee Bertozzi is also on the Town's CSC task force, which received bronze certification in 2023. The Town is continuing to hire help from the Center for Economic and Environmental Partnership (CEEP). We had a collaboration with the Town on our joint CEC Community Campaign for electric vehicles.

Rhinebeck Village Climate Smart Community Task Force

Core active members: Vanessa Bertozzi (Coordinator) Mayor Gary Bassett Angela Basile Aurore Stanek Carli Fraccarolli Dorna Schroeter Katherine Killeffer Lawrence Miller Liz Roth Mary Burns Michael Forlenza Mimi Joh-Carnella Our larger CSC Task Force moved to meeting quarterly, while our Compost Subcommittee met weekly and our volunteers working on the CAPI project met about twice a month.

PROGRESS

This chart shows the projects we're working on and their status as we work towards silver.

Project	Progress	CSC points at play for silver @ 300
Bronze (we received 131 points, but some have expired)		357
Community Choice Aggregation	Proposed	27
VRF heat pump heating/cooling for Village Hall	Proposed	9
Complete Streets Policy	Proposed	4
Fleet efficiency policy	Proposed	3
Traffic calming	Proposed	3
Improve bike parking	Proposed	2
Purchase an electric vehicle for the municipal fleet	Proposed	2
Reuse Programs (support for Lending program at library?)	Proposed	1
Reduce GHG emissions from government facilities by 15-19% (Water Treatment Plant)	Planned	20
(2024) Climate Adaptation Plan	In progress	11
Adopt NRI as local law (along with new Comp Plan)	In progress	2
Expand and improve bike/walking paths, bike lanes, and sidewalks, signage. (We got points for bronze for sidewalk to Starr but now expired. Redo with sidewalk at VH, muni parking lot?)	In progress	5
Energy Benchmarking for Government Buildings Public Report (need to redo with more recent 2 years)	In progress	2
Community Repair (support for Repair Cafe)	In progress	4
Comprehensive Plan w/Sustainability Elements	In progress	18
Community GHG Inventory	In Progress	16
Community Climate Action Plan	In Progress	16
CAPI Climate Action Plan	In Progress	12
Municipal drop off compost facility	In progress	4
Source Water Protection Plan (Hudson 7)	In progress	6
Safe Routes to School	In Progress	3
Recycling in Public Places (got points for bronze now expired; redo)	In progress/ Expired/Redo	2

Residential Organic Waste Program (got points for bronze now expired; redo)	In progress/ Expired/Redo	4
Fleet inventory (got points for bronze now expired; redo)	In progress/ Expired/Redo	4
(2020) Launched Energy Navigators (must be within one year of filing. Redo for 5pts?)	Expired/ Redo?	
Watershed-based Flood Mitigation Plan (got 4 pts for bronze)	Expired	
Waste Reduction Education Campaign (got 2 pts for bronze)	Expired	
Climate Change Education & Engagement (expired, got 8 points for bronze)	Expired	
Rooftop Solar on Village Hall (we received 9 pts for 2020 certification)	Expired	
Sent monthly email newsletters (561 subscribers)	Done but not CSC	
Implemented salt brine / road salt reduction	Done but not CSC	
Banned spraying glyphosate on municipal property	Done but not CSC	
(2023) CAPI GHG inventory	Completed	16
(2022) FlexTech Energy Assessment for Village Hall	Completed	10
(2020) LED Streetlights	Completed	8
(2022) Natural Resources Inventory	Completed	8
(2020) Installed EV charging stations in muni lot	Completed	8
(2020) Climate Vulnerability Assessment	Completed	8
Composting Waste Water Treatment Plant sludge (innovative action?)	Completed	6
(2020) Resiliency Planning Tool (Evaluate Policies for Climate Resilience)	Completed	6
Energy Code Enforcement Training	Completed	5
Annual Progress Report	Completed	4
Environmentally Preferable Purchasing Policy	Completed	4
Compost Feasibility Study	Completed	4
(2018) Culverts and Dams Inventory and Management Plan	Completed	4
National/Regional Climate Program	Completed	3
Followed by ~350 on social media Instagram & FB	Completed	3
Updates for CSC website	Completed	3
Hosted CSC Public Events	Completed	3
Farmers' Market	Completed	3
(2023) Community Campaign for Electric Vehicles	Completed	3
Green Infrastructure Project Feasibility Plan	Completed	2
(2022) Compost drop-off pilot	Completed	2
(2023) Strategy to establish a municipally-run food waste recycling facility (e.g., anaerobic digestion or large-scale composting)	Completed	2
Energy Benchmarking for Government Buildings Policy	Completed	2
Landsman Kill research w/Marist	Completed	
Task Force	Approved	20

CSC Coordinator	Approved	10
Continued to plant trees and manage our urban forest (local forestry program) EXPIRES ON 08/31/25	Approved	8
Interior Lighting Upgrades (expires 8/26)	Approved	5
Unified Solar Permit (EXPIRES ON 08/31/25)	Approved	5
Outdoor Lighting Upgrades (EXPIRES ON 08/31/28)	Approved	4
Zoning for Protection of Natural Areas EXPIRES ON 08/31/25	Approved	4
Recycling Bins in Government Buildings (EXPIRES ON 08/31/25)	Approved	3
Riparian buffer plantings s/Marist & Trees for Tribs (EXPIRES ON 08/31/25)	Approved	1

We earned 131 with bronze certification but some of those actions have expired and so we have only 60 points "in the can". We have completed additional actions for which we think we'll get 117 points. We have projects in progress that would get us to 109 additional points. We need at least 300 points total to get to silver—but you want some wiggle room with your submission, and some of these projects may not be feasible soon. We'd like to get to silver in January 2025. Certification expires after 5 years, so our bronze will have lapsed in March 2025. We should recertify for bronze in July of 2024 if we're not yet to 300+ points, because that will buy us some time to get to silver.

With the update process for the Village's Comprehensive Plan, we hope to better understand which of these actions our community thinks should be the highest priority. The CAPI process has pointed to heat pumps in the Village Hall and CCA as the biggest impacts related to energy.

For a user-friendly summary of actions completed towards silver Climate Smart Communities filing, see this webpage:

www.climatesmartrhinebeck.org/our-silver-certification

For what we did for bronze:

www.climatesmartrhinebeck.org/our-bronze-certification

PROJECTS

Rhinebeck Climate Week 2023

2023 saw our second annual Climate Week, part of a region-wide effort to educate and inspire action. Task force member Angela Basile led the planning of a week's worth of public events, with something happening each day during September 17 - 26. We collaborated with Starr Library, Winnakee Land Trust, Upstate Films, Rhinebeck Farmers' Market, and Morton Library. Events included EV-Curious an electric vehicle chat and ride meetup that kicked off our community campaign, the Walking School Bus which caravanned kids to school and raised support for Safe Routes to School, a public meeting about Safe Routes to School, a screening of

2040 at Upstate Films, a food justice discussion at Starr Library, a community roundtable about resiliency in Rhinecliff, Winnakee's webinar about the role of land stewardship in climate change work, and more. We did 13 additional <u>public events</u> in 2023, including tabling at the Farmers' Market and at Taste of Rhinebeck and our Amphibians Migration Meetup at the Rose Hill Taproom.

We've summarized 2023 projects below into themes: Policy, Water, Energy & Reducing Waste & Emissions, Resiliency

POLICY

Comprehensive Plan Update with Sustainability Elements

The Comprehensive Plan Committee and its subcommittees have been working incredibly hard throughout 2023 to compile recommendations and engage the public for input. In 2024 we are looking forward to a public draft, which we anticipate will include many climate-forward recommendations. In January of 2023, the Village's Climate Smart Task Force co-hosted a Climate Action Toolkit workshop with Sustainable Hudson Valley at Starr Library. With a packed house, we broke out into groups to brainstorm how to connect climate actions highlighted by a regional plan to what we are doing in Rhinebeck and potentially our new Comprehensive Plan.

WATER

To protect our drinking water and move towards a beneficial relationship with our watershed and ecosystem.

Hudson 7

Mayor Gary Bassett is Chair of this seven municipality consortium. Town Supervisor Elizabeth Spinzia is also a member. In addition to advocating for the protection of drinking water, the group works with other organizations on disaster management and Drinking Source Water Protection for the Seven Hudson Communities of Towns of Esopus, Hyde Park and Lloyd, the City and Town of Poughkeepsie, and the Town and Village of Rhinebeck where they review programs and policies to protect drinking water supplies. The following is excerpted from Chair Bassett's annual Hudson 7 update.

Signs of a Paradigm Shift

There is increasing evidence that the Hudson 7's formation and ongoing work has created a paradigm shift in awareness about the Hudson River as a source of drinking water. To cite one example, prior to the formation of the Hudson 7, a cleanup plan for manufactured gas coal tar in Poughkeepsie was developed in close proximity to Poughkeepsie's water intake, with limited consideration of the potential to disturb contaminants that might impact drinking water. In 2023, in contrast, the DEC directed the entity responsible for a similar cleanup in Hudson, NY -

20-plus miles from the nearest intake – to consult with the Hudson 7 on its cleanup plan in its early stages of development.

- The Hudson 7 hires Source Water Protection Coordinator
- Salt Front Advancement in the Hudson River due to Climate Change receives \$500,000 funding for study by NYSDEC
- United States Coast Guard (USCG) Temporarily Pauses Anchorage Plan
- Hudson River PCB Superfund Site
- Hudson 7 receives "Building Bridges Award"
- Hudson 7 Source Water Protection Plan

Details on the above bullet points can be found at: www.hudson7.org/blog/hudson-7-highlights-in-2023

Road Salt Reduction

2023 was our first year of officially using salt brine as a tool in our toolkit to reduce road salt's impact on the environment. It went well, and Superintendent of Public Works, Kyle Eighmy, will continue to oversee brining into 2024. So far, it's been a very mild winter with minimal need.

ENERGY, REDUCING WASTE & EMISSIONS

To draw down our greenhouse gasses and take responsibility for our effluent and trash. To transition to a more efficient system with renewable sources.

Safe Routes to School

This project is to create a more walkable/bikeable route between the public school campuses and connect to downtown. In addition to safety for children, it provides numerous co-benefits: healthy activity, reduced emissions from cars, and a more neighborly community.

In the spring of 2023, Angela Basile and Trustees Bertozzi and Slaby worked with a middle school Civics class, focusing on Safe Routes to School. Teacher Henry Frischknecht has been very supportive of connecting students with hands-on projects in the community. The students created a map annotating the route and organized a popup breakfast on Walk to School Day for the middle schoolers at Lions Mini Park. The project culminated in the students giving a presentation to the Comprehensive Plan Committee in the spring and advocating for themselves at the September 26 public meeting and for safer pedestrian and bicycling to be included in the Comprehensive Plan.

Stemming from the September 26 public meeting, residents Roger Quon and Meredith Ferber assisted Trustee Lewit in a survey with over 500 respondents. Mayor Bassett has pushed for a more immediate intervention at the South St/S Parsonage intersection and the Village Board

funded a study of said intersection. We hope to see additional stop sign(s) there in 2024. Trustees Lewit and Bertozzi are working with engineering firm GPI to submit for a federal Transportation Alternatives Program grant for ADA compliant sidewalks and crosswalks along Knollwood and S Parsonage. Submission is January 9, 2024. Fingers crossed! In the meantime, the Walking School Bus continues to spread joy and pedestrian safety awareness!

Climate Action Planning

As part of our CAPI cohort, we published the Village's Government Operations GHG Inventory. Following quickly on that, we used ICLEI's Clearpath tool to create strategies to reach a 2040 goal for 30% reduction in emissions. In January 2024, Trustee Bertozzi will be requesting the Village Board formally adopt this goal as a target. This will enable us to draft a Climate Action Plan for government operations.

This fall, our CAPI cohort also commenced a Community GHG Emissions Inventory. This process mostly drew from regional data and estimates. In 2024, we will publish the results and kick off an engagement process with the public to create a Community Climate Action Plan.

Plan to Get Village Hall/Firehouse HVAC Off Fossil Fuels

We worked with M/E Engineering to build off of their FlexTech energy efficiency study and create a design/engineering plan for a VRF and insulation project at Village Hall/Firehouse. First, we did a comprehensive HAZMAT study to inform any future renovations. We are currently reviewing the plan with experts and trying to understand real cost estimates in search of a project scope within the Village's means. According to our Government Operations GHG Inventory, the Village Hall/Firehouse's oil furnace is the biggest contributor to Scope 1 emissions, in the biggest sector after Water and Wastewater processing.

Plan to Transition the Fleet to EVs

We received free consulting from the Electrification Coalition that analyzed our current fleet and provided recommendations for which to replace. Currently, we have pickup trucks that could be switched to EV trucks when they're ready to be replaced. We propose that Kyle as Superintendent of Public Works could swap his pickup with a Ford F150 Lightning and pass his old one to replace the next pickup that goes kaput.

Energy Efficient Machinery in the Water Treatment Plant

Delaware Engineering is working on designing upgrades to the Water Treatment Plant that would result in more energy efficiency. The EPA estimates that such upgrades to old equipment can result in a savings of 15-30%.

Compost Project

In the New Year 2023, we received word that the Village was awarded not just a \$200,000 DEC grant but also a \$100,000 grant from the New World Foundation/Partners for Climate Action to add an aerated static pile system (ASP) to the Village's Highway Department property, where we currently mulch yard waste, which could be used for the browns. We paid Tighe & Bond to help us with the next step: to get Town Planning Board approval, since the Highway Department is located in the town. Unfortunately, neighbors to the site organized against the project—threatening to sue—and the Town Board took their side. We decided to withdraw our application from the Planning Board. We returned the \$100,000 grant due to its stipulation that it be used in 2023 and only on municipal property. After regrouping and learning that the DEC grant could still be used in partnership with a farm, we decided to put out an RFP. We got one response from Ellerslie Stable, a horse barn with over 30 horses where they already compost manure and shavings. The plan is to use the \$200,000 grant to make ASP improvements to the Ellerslie site. It's a win-win since adding food scraps will increase the nutrients of the finished product. We hope to wrap up negotiations for the Ellerslie agreement in early 2024 and begin construction.

A huge thank you to volunteers on the Compost Subcommittee of the Climate Smart Rhinebeck Village Task Force, who endured this rollercoaster ride: Dorna Schroeter, Liz Roth, Mary Burns, Aurore Stanek, Katherine Killeffer. We also thank these composting professionals for their advice along the way: Amelia Legare from The O Zone, Angelina Brandt from UCRRA, Aleks Jagiello from Westchester's compost facility, Dan Rain from the Town of Bethlehem's composting site, and Peter Moon from O2. We continue to be grateful to village restaurants that pay to have their food scraps composted, the Woods HOA and also the Gardens HOA. The Rhinebeck Central School District has commence food scrap pickup from its kitchens.

Energy Benchmarking

We will publish our energy benchmarking reports for the years 2022 and 2023 as soon as possible in 2024.

CCA

In 2023 the Village Board had an excellent presentation from Mid Hudson Energy Transition, the nonprofit that Kingston selected to run their CCA. Their approach, dubbed CCA 3.0, enables the municipality and partner nonprofit to do far more than just renewable source electricity. The legislative framework enables other bulk purchasing opportunities for other climate transition and energy efficiency projects. I hope Rhinebeck Village can start drafting its enabling legislation in 2024. We have been waiting for MHET's Kingston project to receive approval from the Public Service Commission but we should pivot to work in parallel.

RESILIENCY

To use nature-based solutions to adapt to irreversible oncoming climate change impacts that are most relevant to Rhinebeck: flooding, heat, and degradation of biodiversity.

Amphibian Migration

2023 was our third event centered on the DEC's call for folks to count and assist migrating amphibians as they make their way across roads to vernal pools for breeding each spring. While we don't receive CSC points for this activity, it's a wonderful community event. This year we collaborated with Winnakee Land Trust to host a meetup at the Rose Hill Taproom for Rhinebeck and Red Hook participants. We also thank the Rhinebeck Village Police Department and Village and Town Highway Departments for their support during the event—which always happens on a dark and rainy night! In 2023, one of our proudest and most delightful actions was using the police department's blinky board traffic sign to caution drivers to go slow and avoid migrating amphibians, complete with an animated froggy face!

Study of the Landsman Kill

Our collaboration with Marist College students focuses on creating a predictive model to anticipate climate-induced more frequent and severe flooding on the Landsman Kill and Crystal Lake, as well as projects to reduce flooding. The collaboration proceeded January through May 2023 and then also Fall semester. Professor Richard Feldman's environmental science and public policy students and Professor Chris Algozzine's computer science students continued work on the web dashboard which displays data from a weather station, the tipping bucket, and the installed sensor in the Landsman Kill behind the Highway Garage. Mayor Bassett and I, Trustee Bertozzi, visited the classes for their final presentations. We have created signage to be installed at Crystal Lake, along with another sensor to be set into place in 2024.

Lawn Management: A Shift in Practices

This fall, the Village published a piece encouraging residents to think differently about their fall yard cleanup, to reduce the destruction of natural processes and pollution. For example, you can mow the leaves in place on your lawn as a fertilizer. This part of a larger push, including planting pollinator gardens. We published more info, including resources from the Pollinator Pathway group: <u>https://www.climatesmartrhinebeck.org/pollinators</u>

Big Things, But Not All at Once

2023 rocked our boat a bit. We have done some foundational planning and the projects that should be prioritized are clearly in focus. However, we need to pace ourselves with an eye towards what a small village with limited resources can handle at once.