

Climate Action Planning Institute Dutchess County Cohort Presentation

May 15, 2024

CAPI is a project of the Hudson Valley Regional Council and is funded by the DEC Climate Smart Communities Grant Program.



Table of Contents

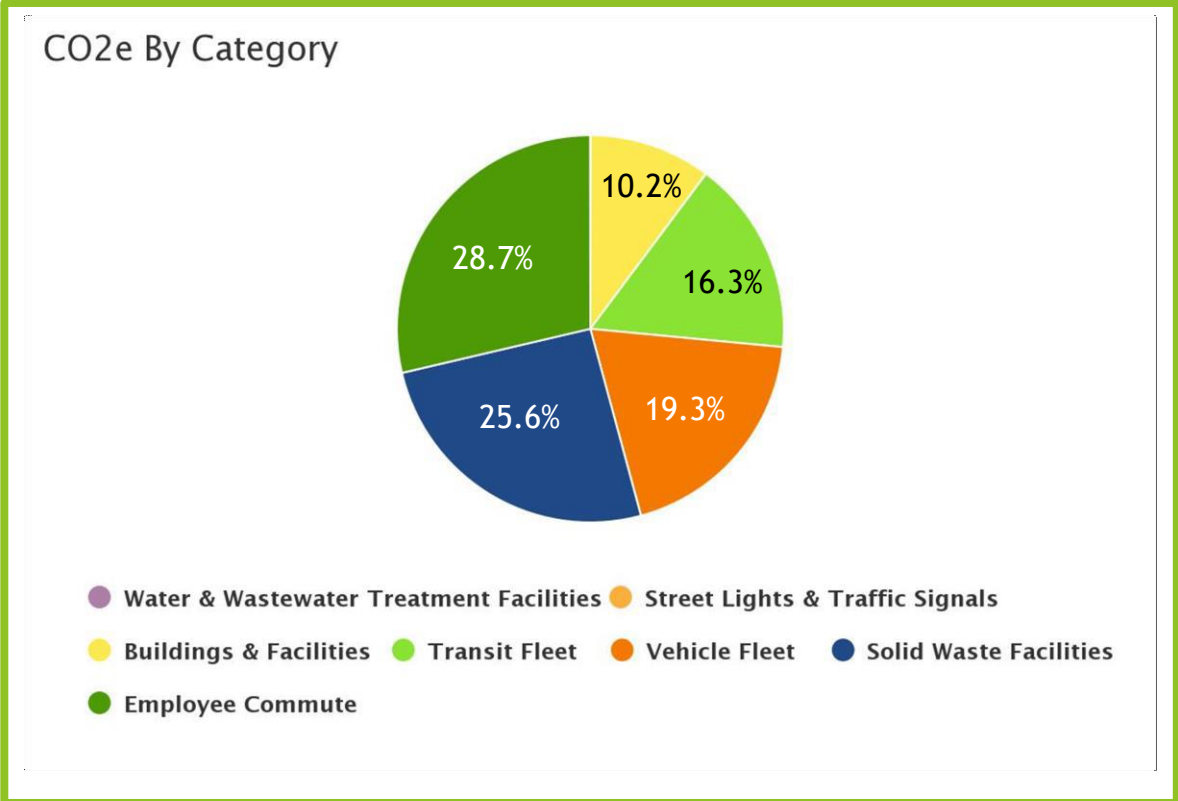
- ▶ Draft Vision Statement
- ▶ Emissions by sector
- ▶ Public Outreach documented
- ▶ Emissions Reduction Goal(s) + Mitigation Objectives
- ▶ Recommended Strategies (initiatives/actions) Overview
- ▶ Recommended Strategies with Lead Actors / Owners and Metric / KPIs
- ▶ Implementation Plan with priorities / timeline
- ▶ Reduction Measure Modeling
- ▶ Next Steps

Draft Vision Statement

Dutchess County leads by example through sustainable improvements to government operations that mitigate greenhouse gases. Dutchess County fosters resilient communities that thrive amid a changing climate, as collaborative endeavors and innovative adaptation strategies advance a sustainable environment for future generations.

Note: this vision statement is in draft form and is subject to change with additional public input.

Emissions by Sector



<https://www.dutchessny.gov/Departments/Planning/Climate-Smart-Communities.htm>

Key Stakeholder Meetings

Key Stakeholders	Meetings
County Executive's Office	December 2023, May 2024 + ongoing communication
Department of Public Works	November 2023, April 2024
Climate Smart Communities Task Force	Quarterly meetings beginning in 2023
Environmental Management Council	Monthly meetings beginning in 2023
Department of Planning and Development	Ongoing communication
Division of Solid Waste	Multiple meetings + ongoing communication
County Legislature	April 2024 CAP Presentation

GHG Emissions Reduction Goal

Dutchess has chosen to align its reduction goals with statewide goals. The Climate Leadership and Community Protection Act (CLCPA) sets goals to reduce emissions to 40% below 1990 levels by 2030 and then to 85% below 1990 levels by 2050.

When modeled in ClearPath, the emissions forecasting and reduction modeling software utilized by Dutchess County, these percentages were further modified to 33% and 78%, given the energy reduction improvements New York State has already made to the grid since 1990.

Recommended Strategies Overview

Total Emissions Goal: 12,169 MTCO₂e by 2030		1990:	19,907 MTCO ₂ e	2019:	18,604 MTCO ₂ e	2030:	12,465 MTCO ₂ e
Total Emissions Reduction Goal: 40% from 1990 Levels							
Buildings & Facilities		1990:	3,199 MTCO ₂ e	2019:	1,896 MTCO ₂ e	2030:	1,075 MTCO ₂ e
Develop policy for future HVAC upgrades to consider electric options first, and high efficiency non-electric options as the backup.		Goal:	2025	Cost:	\$		
Develop policy for future lighting purchases to be LEDs; replacements will be made as existing equipment reaches end of life.		Goal:	2025	Cost:	\$		
Install a building energy management system at the County courthouse building.		Goal:	2026	Cost:	\$\$\$		
Conduct govt. building energy audits.		Goal:	2026-2027	Cost:	\$\$		
Buildings & Facilities Emissions Reduction Goal: 10% of 2019 Levels							
Transportation		1990:	11,948 MTCO ₂ e	2019:	11,948 MTCO ₂ e	2030:	7,810 MTCO ₂ e
Develop and maintain a fleet inventory.		Goal:	2024	Cost:	\$		
Conduct an employee commute survey.		Goal:	2025	Cost:	\$		
Develop a fleet efficiency policy to consider EVs first, PHEVs second, high MPG rated gasoline vehicles third, and other/diesel vehicles last.		Goal:	2025	Cost:	\$		
Conduct a public transit electrification study.		Goal:	2024-2025	Cost:	\$\$\$		✓
Develop an EV charger plan.		Goal:	2025	Cost:	\$		
Assess feasibility of County employee free loop fares and hybrid working schedules.		Goal:	2025	Cost:	\$		
Purchase County's first electric lawn mower.		Goal:	2024	Cost:	\$\$		✓
Transportation Emissions Reduction Goal: 15% of 2019 Levels							
Solid Waste		1990:	4,757 MTCO ₂ e	2019:	4,757 MTCO ₂ e	2030:	3,372 MTCO ₂ e
Conduct a County employee waste reduction campaign.		Goal:	2026	Cost:	\$		
Conduct a methane trapping analysis at County landfill.		Goal:	2025	Cost:	\$\$		
Conduct a community compost grant pilot.		Goal:	2024-2025	Cost:	\$\$\$		✓
Implement biofilter solution at County landfill.		Goal:	2025-2026	Cost:	\$\$		
Solid Waste Emissions Reduction Goal: 75% of 2019 Levels							

Buildings and Facilities Strategies

Strategy Number	Strategy	Timeline	Cost	Staffing	Metrics	Completed?
BF1S1	Conduct government building energy audits	2026-2027	\$\$	DC DPW, support from CSC Task Force	Completed energy audits	
BF2S1	Develop policies for future HVAC upgrades to consider electric options first, and high-efficiency non-electric options as the backup.	2025	\$	CSC Task Force, County Legislation	Adopted policy	
BF2S2	Develop policies for future lighting purchases to be LEDs	2025	\$	CSC Task Force, County Legislation	Adopted Policy	
BF3S1	Replace lighting with LED bulbs as existing equipment reaches the end of life per the developed policy.	2025	\$\$	DC DPW	# of bulbs replaced	
BF3S2	Install a building energy management system at the County courthouse building	2026	\$\$\$	DC DPW	Installed BMS	

Transportation Strategies

Strategy Number	Strategy	Timeline	Cost	Staffing	Metrics	Completed?
VF1S1	Develop and maintain a fleet inventory	2024	\$	DC DPW	Annually updated fleet inventory	
VF1S2	Develop a fleet efficiency policy to consider EVs first, PHEVs second, high MPG-rated gasoline vehicles third, and other/diesel vehicles last.	2025	\$	CSC Task Force, County Legislation	Fleet efficiency policy adopted	
VF1S3	Develop an EV charger plan.	2025	\$	DC DPW, DCTC	Completed EV Charger Plan	
VF2S1	Purchase the County's first electric lawn mower.	2024	\$\$	DC DPW	Purchase of mower	In progress
PT1S1	Conduct a public transit electrification study.	2024-2025	\$\$\$	DC DPW	Completed study	In progress
EC1S1	Conduct an employee commute survey	2025	\$	DC Dpt. Of Planning & Development	Completed survey	
EC1S2	Assess the feasibility of County employee free loop fares and hybrid working schedules.	2025	\$	DC Dpt. Of Planning & Development, DC County Executive Office	Completed feasibility study	

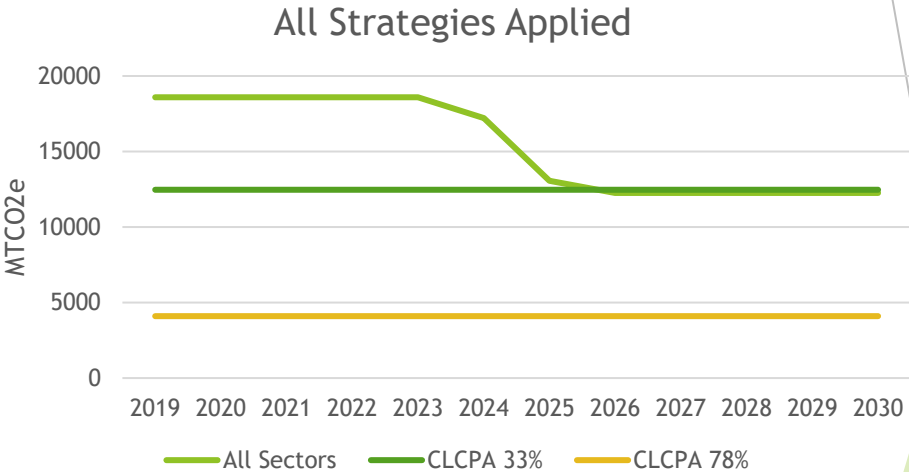
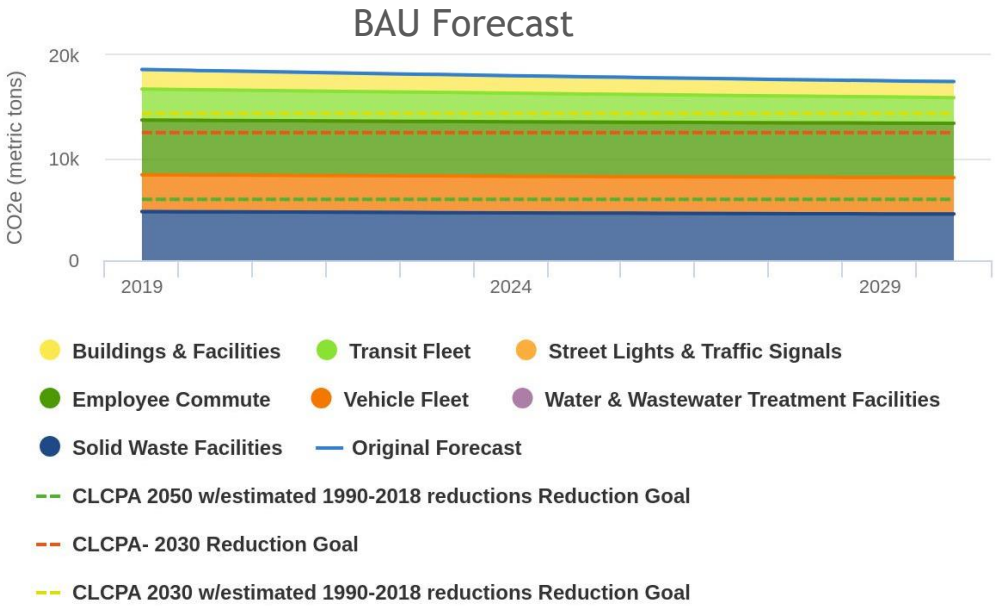
Solid Waste Strategies

Strategy Number	Strategy	Timeline	Cost	Staffing	Metrics	Completed?
SW1S1	Conduct a County employee water education campaign.	2026	\$	DC Dept. of Planning & Development, DC Division of Solid Waste	Education campaign executed	
SW2S1	Conduct a methane trapping analysis at the County landfill.	2025	\$	DC Dept. of Planning & Development	Completed methane trapping analysis	
SW2S2	Implement a biofilter solution at the County Landfill	2025-2016	\$\$	CSC Task Force, County Legislation	Percent emissions eliminated	
SW2S3	Conduct a community compost grant pilot program	2024	\$\$\$	DC Division of Solid Waste	Tons of composted materials	In progress

Implementation

- ▶ Strategies are ordered by priority in each sector's chart
- ▶ Timeline is included in each strategy chart
- ▶ Implementation status and progress will be reported annually
- ▶ The GHG inventory will be updated every 5 years.

Reductions Scenario



Next Steps

- ▶ Gathering bids for contracted services and equipment.
- ▶ Conducting additional surveys and inventories needed to inform policies and programs.
- ▶ Making necessary changes to local policies or existing programs, including staffing.
- ▶ Engaging with NYSERDA's Clean Energy Communities programs to complete climate action strategies and leverage funding opportunities.
- ▶ Exploring additional funding options for identified strategies.
- ▶ Continue to participate in CAPI Adapt

Acknowledgments

- ▶ Dutchess County Executive Office
- ▶ Dutchess County Planning & Development
- ▶ Dutchess County Department of Public Works
- ▶ Dutchess County Solid Waste Management
- ▶ Cornell Cooperative Extension Dutchess County

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Thank you!

