

SESSION PRESENTATIONS

Regional CCAP Overview

Todd Fabozzi

Director of Sustainability, CDRPC

Greenhouse Gas Inventories

Tara Donadio

Assistant Director of Sustainability, CDRPC

Local Climate Action Planning

Haley Balcanoff

Sustainability Planner, CDRPC



CAPITAL DISTRICT
**Regional
Planning
Commission**



CAPITAL REGION COMPREHENSIVE CLIMATE ACTION PLAN



CLIMATE ACTION COLLABORATIVE



Municipal Partners

Regional Agencies

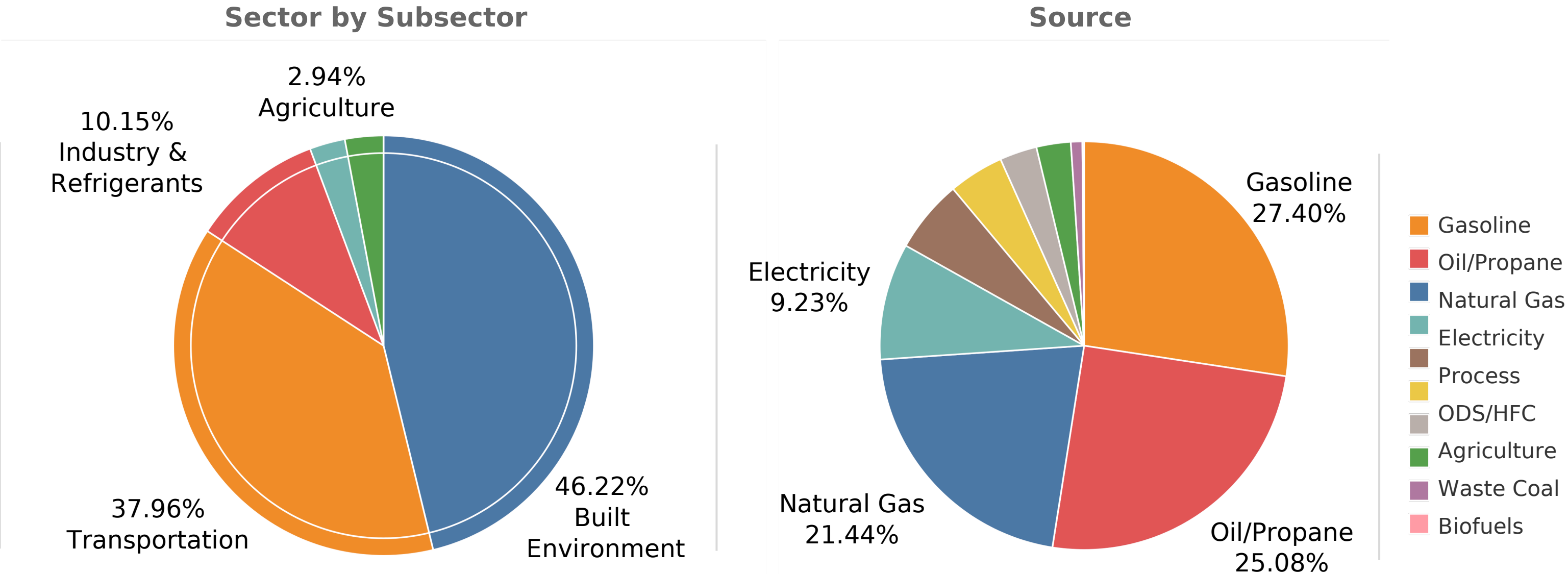
Additional Partners

**NYS Certified
Climate Smart
Communities**

**NYSERDA Designation Clean
Energy Communities in
Capital Region**

GREENHOUSE GAS INVENTORY

Total GHG Emissions for the 8-County Capital Region:
14,504,638 MTCO₂e

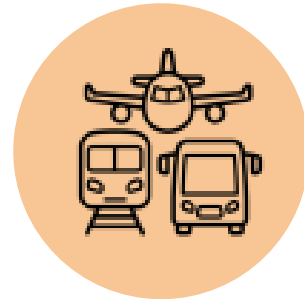


Source: CDRPC Greenhouse Gas (GHG) Inventories Dashboards

Change in GHG Emissions from 2010 to 2022 for the 8-County Capital Region



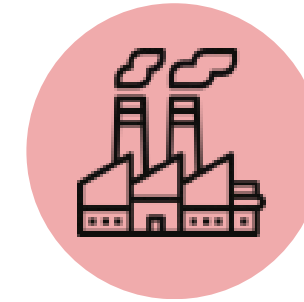
Built Environment
6,704,594 MTCO₂e
Down -8.75%
from 2010



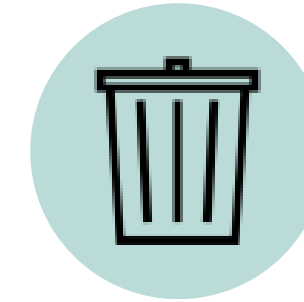
Transportation
5,506,679 MTCO₂e
Down -12.01%
from 2010



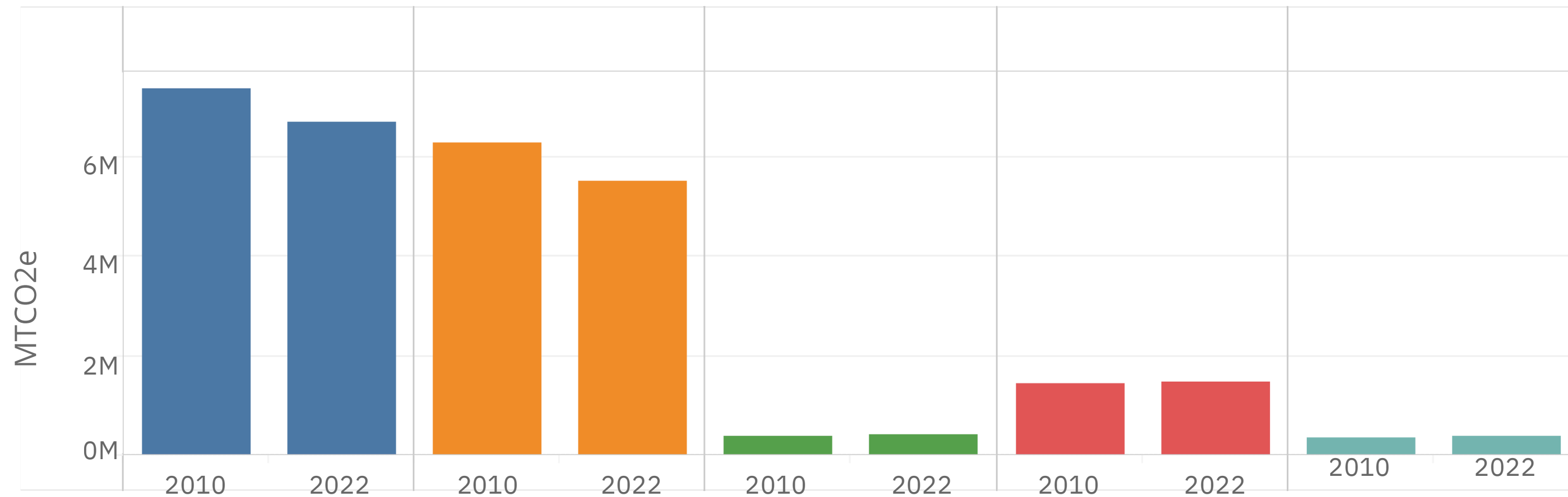
Agriculture
426,381 MTCO₂e
Up 12.46%
from 2010



Industry & Refrigerants
1,472,432 MTCO₂e
Up 1.38%
from 2010

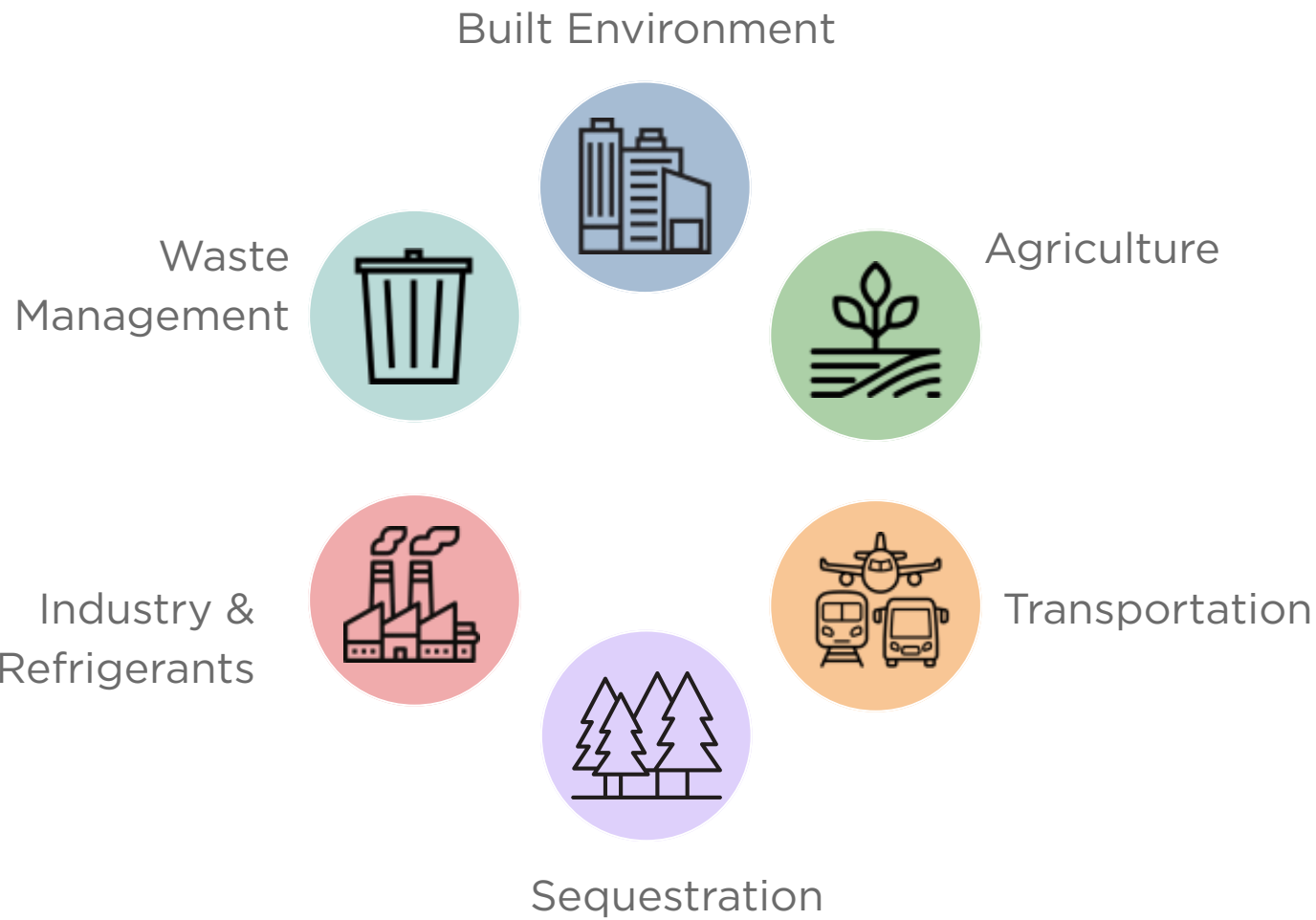


Waste
394,552 MTCO₂e
Up 9.70%
from 2010



Source: CDRPC Greenhouse Gas (GHG) Inventories Dashboards

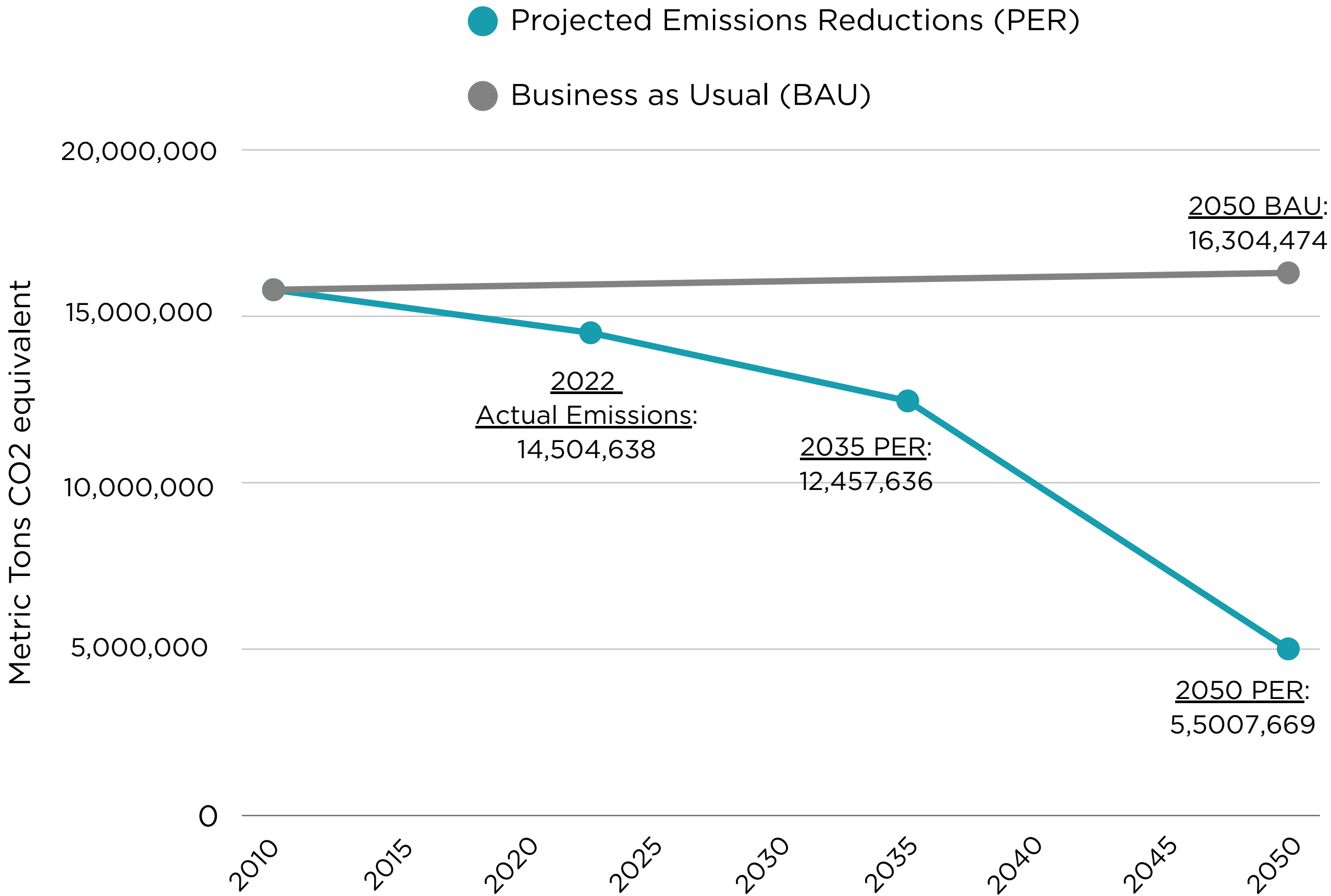
MEASURES



Built Environment

Measure	Description	Authority to Implement	Potential GHG Reductions (MTCO2e/year)	
			By 2035	By 2050
Expand Local Renewable Generation through Land Use & Energy Planning	Identify and expand renewable power generation opportunities such as solar, energy storage, and anaerobic power generation through enhanced coordination with utility companies, NYSERDA, and municipalities, land use and zoning policies that support solar and energy storage systems.	Local Governments, Developers, Commercial Sector	78,067	312,268
Clean Energy Supply Access	Promote clean Energy Policies and Programs such as Community Choice Aggregation and cost-effective clean energy supply choices.	Local Governments	22,339	55,849
Energy Performance, Standards and Codes	Adopt and enforce advanced energy codes.	Local Governments	9,332	18,664
Microgrids and Thermal Loops	Identify and implement thermal loop systems to leverage ground source geothermal and heat recovery from municipal wastewater and steam systems.	Local Governments	9	61
Rental Housing Energy Initiative	Develop a comprehensive program in partnership with housing advocates, developers, landlords, and municipalities to build or upgrade rental housing that provides tenants with clean, healthy, and affordable energy.	Local Government, NYSERDA, Housing Authorities	27	84

GHG Emissions Projections



GHG Savings Since 2010 (MTCO2e/year)				
Sectors	Measures	Current-2022	By 2035	By 2050
 Built Environment	11	643,411	771,502	3,862,436
 Transportation	13	751,898	672,862	3,968,191
 Industry	13	(20,653)	438,847	1,251,176
 Waste Management	9	(34,904)	111,405	279,012
 Agriculture	13	(47,245)	52,386	136,154
 Sequestration - Removals	8	643,411	-	-
Total	67	751,898	2,047,002	9,496,969

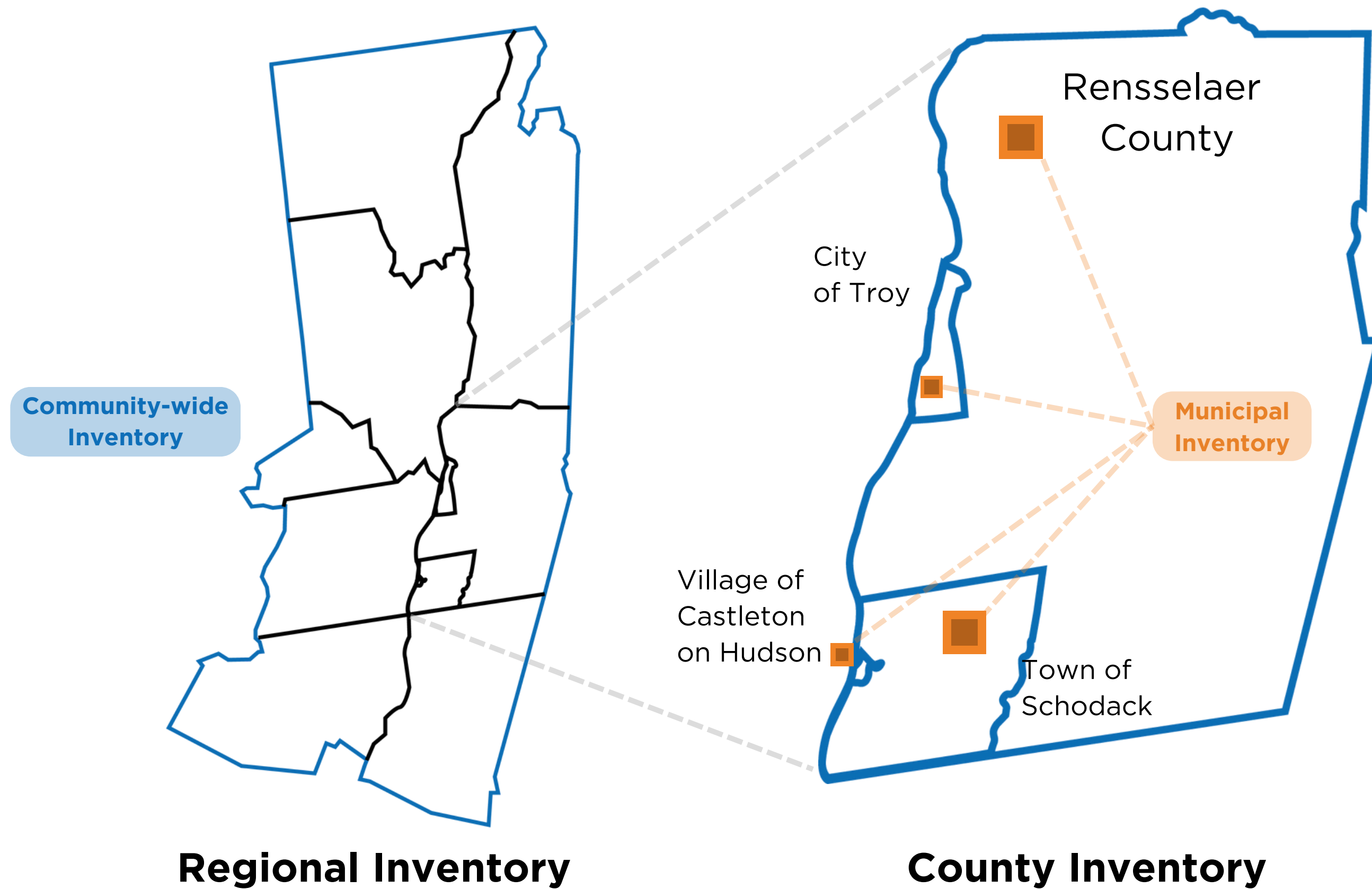
TARGETS

This plan includes the following aspirational GHG reduction targets from 2010 levels:

Short-Term Reduction Target
20% by 2035

Long-Term Reduction Target
65% by 2050

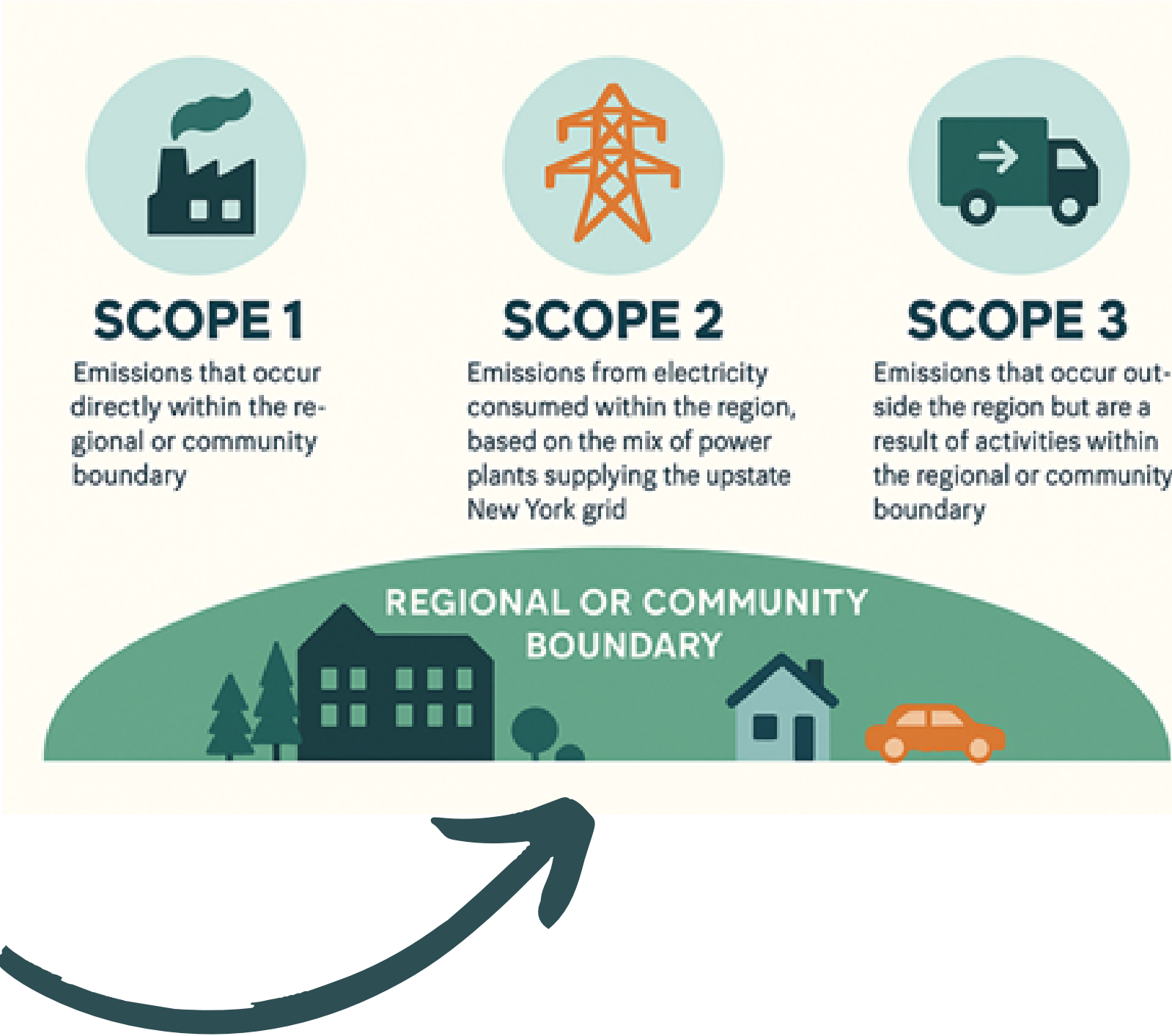
GREENHOUSE GAS INVENTORIES



A Greenhouse Gas (GHG) Inventory is a comprehensive accounting of all greenhouse gas emissions and removals within a defined boundary (such as a region, county, or municipality) over a specific period of time.

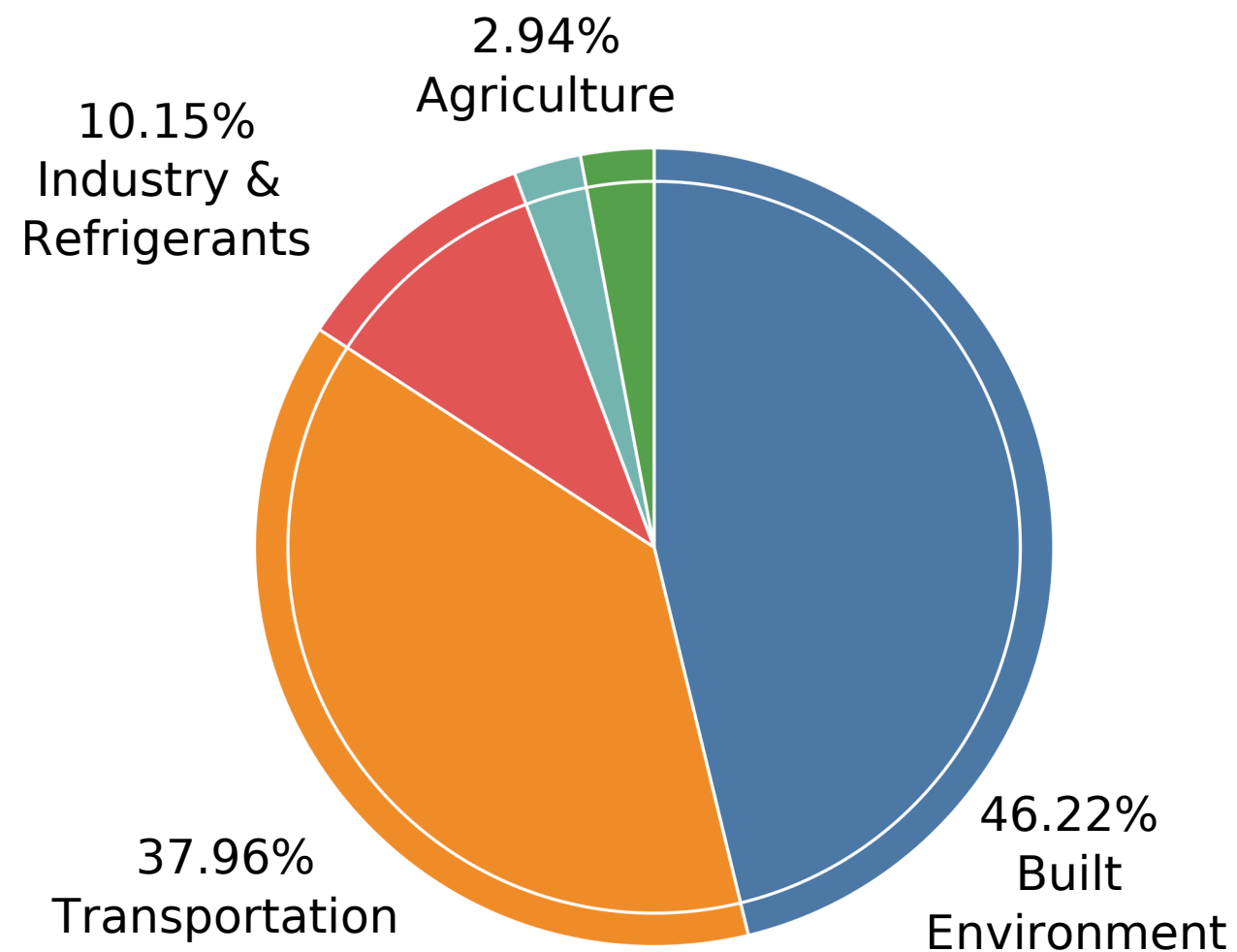
GHG INVENTORIES 101

Term	Definition	Examples / Notes
Sector	A category or part of the economy or business where emissions happen.	e.g. Built Environment, Transportation, Agriculture, Waste
Source	A specific thing or action that produces greenhouse gases.	e.g. Natural Gas, Fuel Oil, Electricity
Scope	Classification framework (Scope 1 / 2 / 3) that defines which emissions are counted, based on ownership / control / value chain	As per GHG Protocol: direct vs indirect emissions

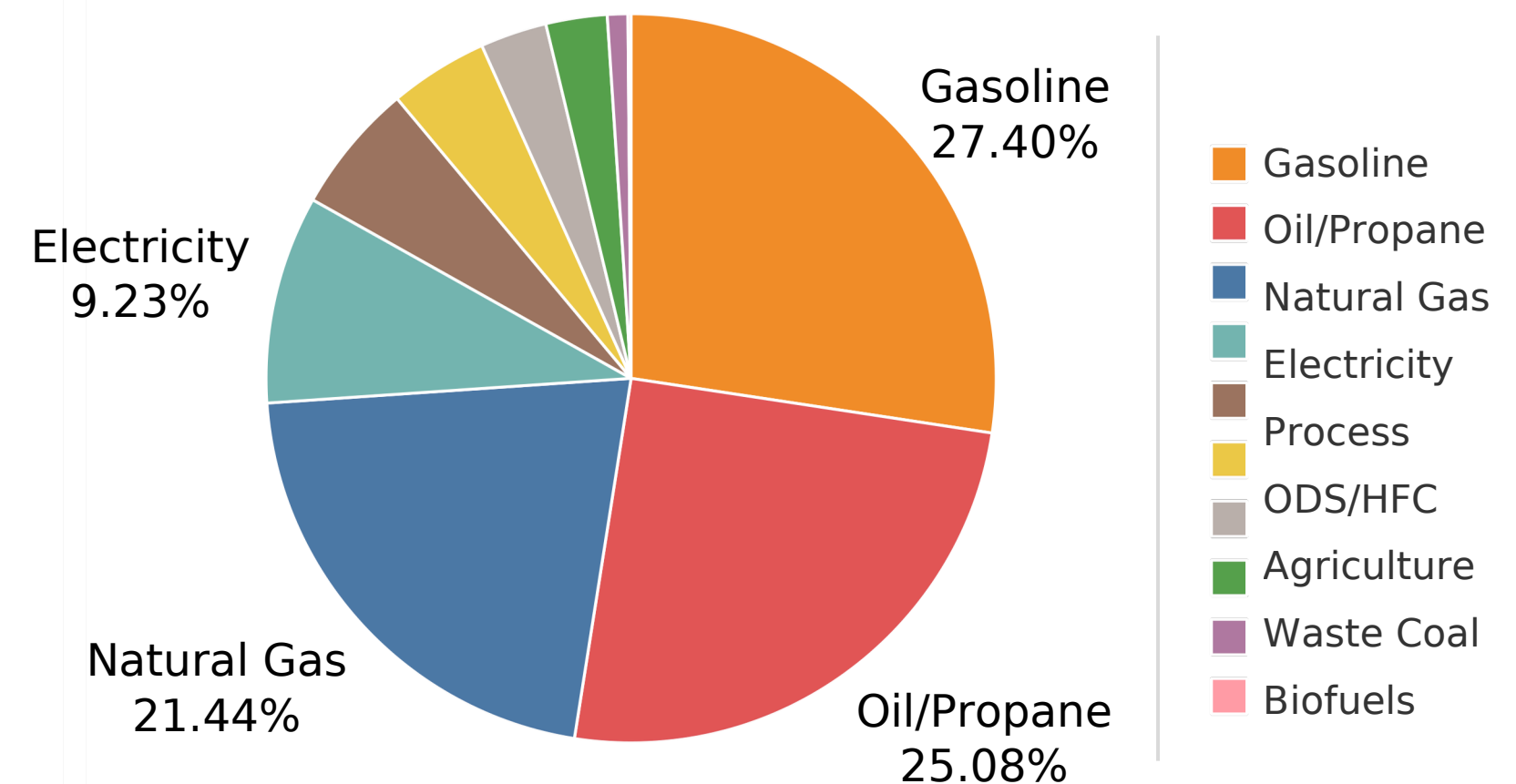


Total GHG Emissions for the 8-County Capital Region: 14,504,638 MTCO₂e

Sector by Subsector



Source

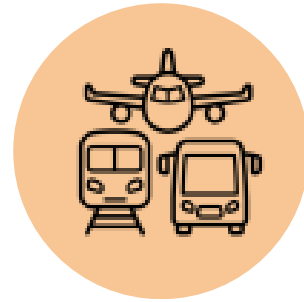


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Change in GHG Emissions from 2010 to 2022 for the 8-County Capital Region



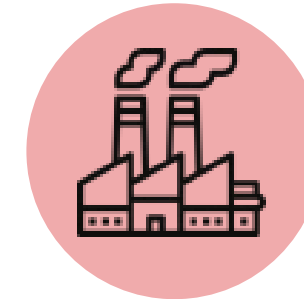
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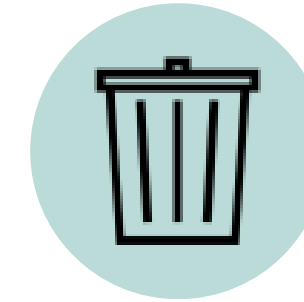
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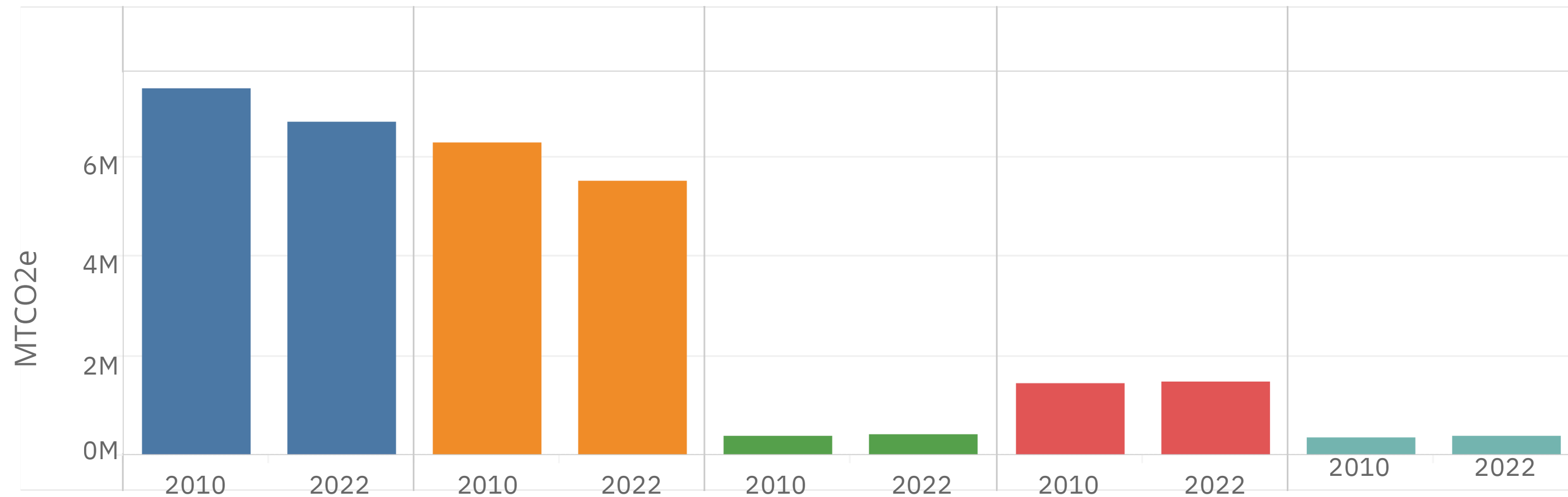
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Source: CDRPC Greenhouse Gas (GHG) Inventories Dashboards



[MUNICIPALITY]
2022 COMMUNITY GREENHOUSE
Gas Inventory Summary Report
COMPILED ON [DATE]

CREDITS AND ACKNOWLEDGEMENTS

This report was prepared by The Capital District Regional Planning Commission, with the support of [insert name(s) and affiliation(s), e.g., *Jane Smith, Member of the Climate Smart Communities Task Force*].

This Community Greenhouse Gas (GHG) Inventory draws on the 2022 Regional GHG Inventory developed in 2025 by the Capital District Regional Planning Commission (CDRPC) and Climate Action Associates LLC.

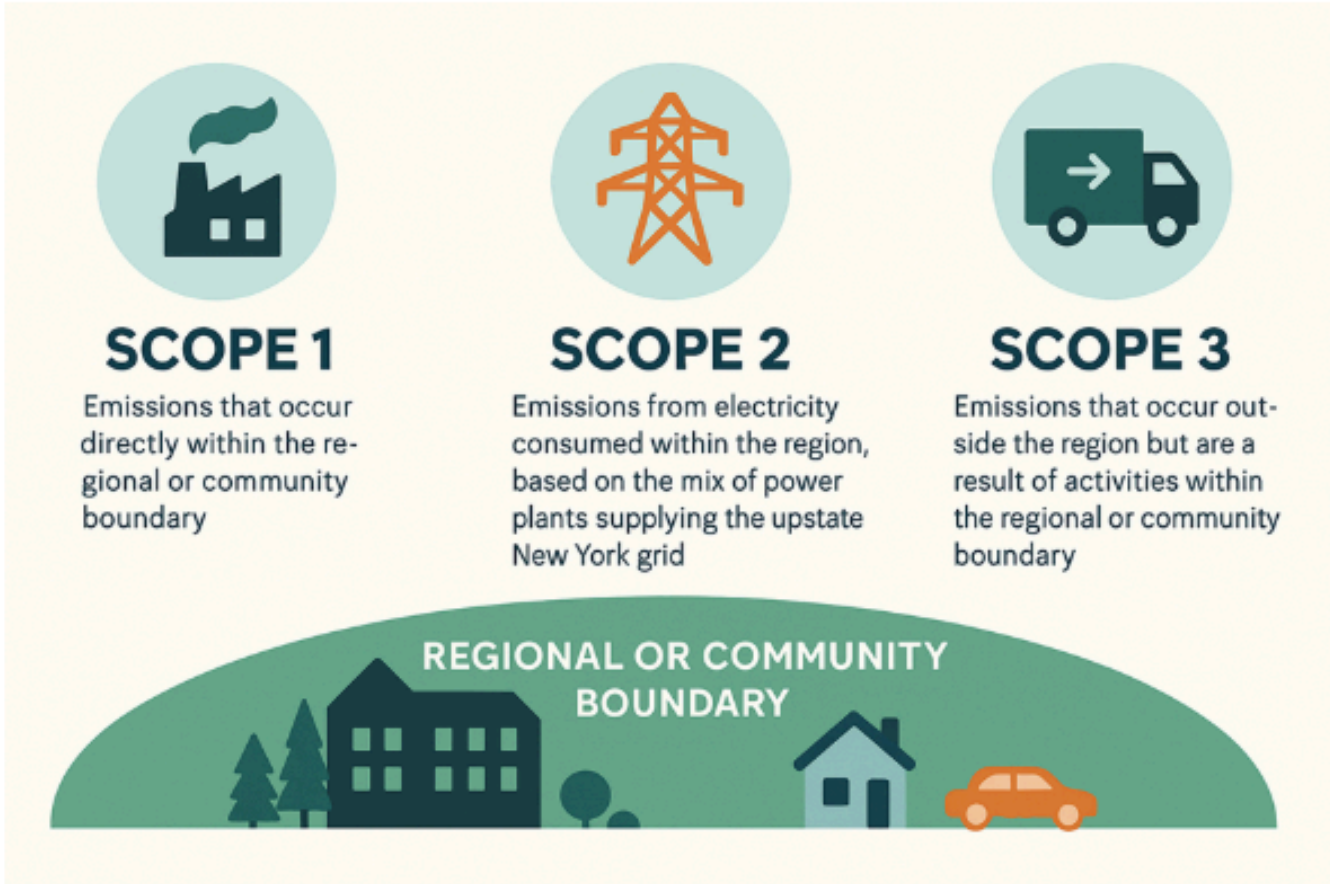
BACKGROUND

The [MUNICIPALITY] recognizes that human-caused greenhouse gas (GHG) emissions drive climate change, threatening our community’s health and safety. To address this, the [MUNICIPALITY] adopted the New York State Climate Smart Communities (CSC) pledge on [DATE] and earned [Bronze/Silver] Certification on [DATE].

The CSC program, administered by the New York State Department of Environmental Conservation (DEC), supports local governments in reducing emissions and adapting to climate



EMISSIONS SCOPES



The inventory includes Scope 1, Scope 2, and selected Scope 3 emissions, as available in the regional dataset.

GHG EMISSIONS ACCOUNTING FRAMEWORK

GHG Sector	Description
Built Environment	All Energy-related emissions in the residential, commercial, industrial, and power generation Sectors
Transportation	Emissions from transportation-related fuels in all on-road and off-road vehicles and equipment across all modes of travel (road, rail, marine, and air)

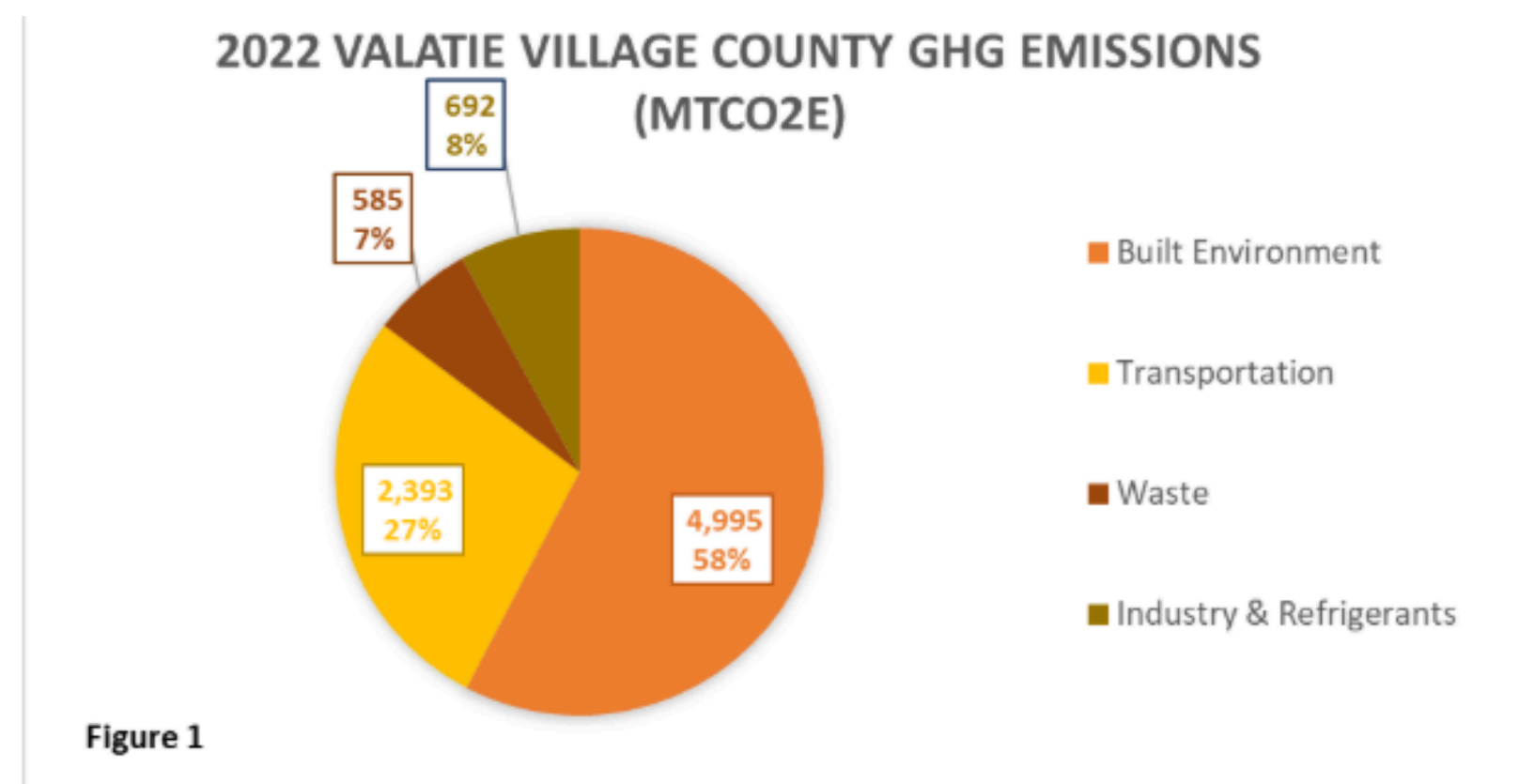


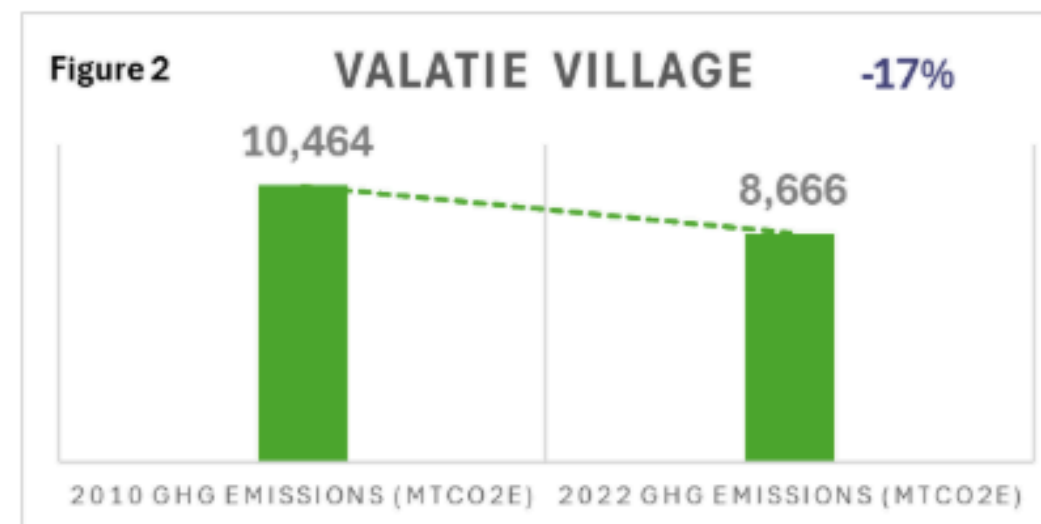
Figure 1

Pull from here: "P:\Sustainability\EPA Climate Pollution Reduction Grant\GHG Inventory\2022 Inventory\2022 GHG Inventory Final.xlsx"

Figure 1 demonstrates [Largest emitter sector] is the largest contributor to community-wide GHG emissions, accounting for [X%] of total emissions. The second-largest contributor is [Second-largest emitter sector], responsible for [Y%] of emissions. The remaining emissions are distributed across other sectors, including [list remaining sectors if desired], each contributing a smaller share to the overall total.

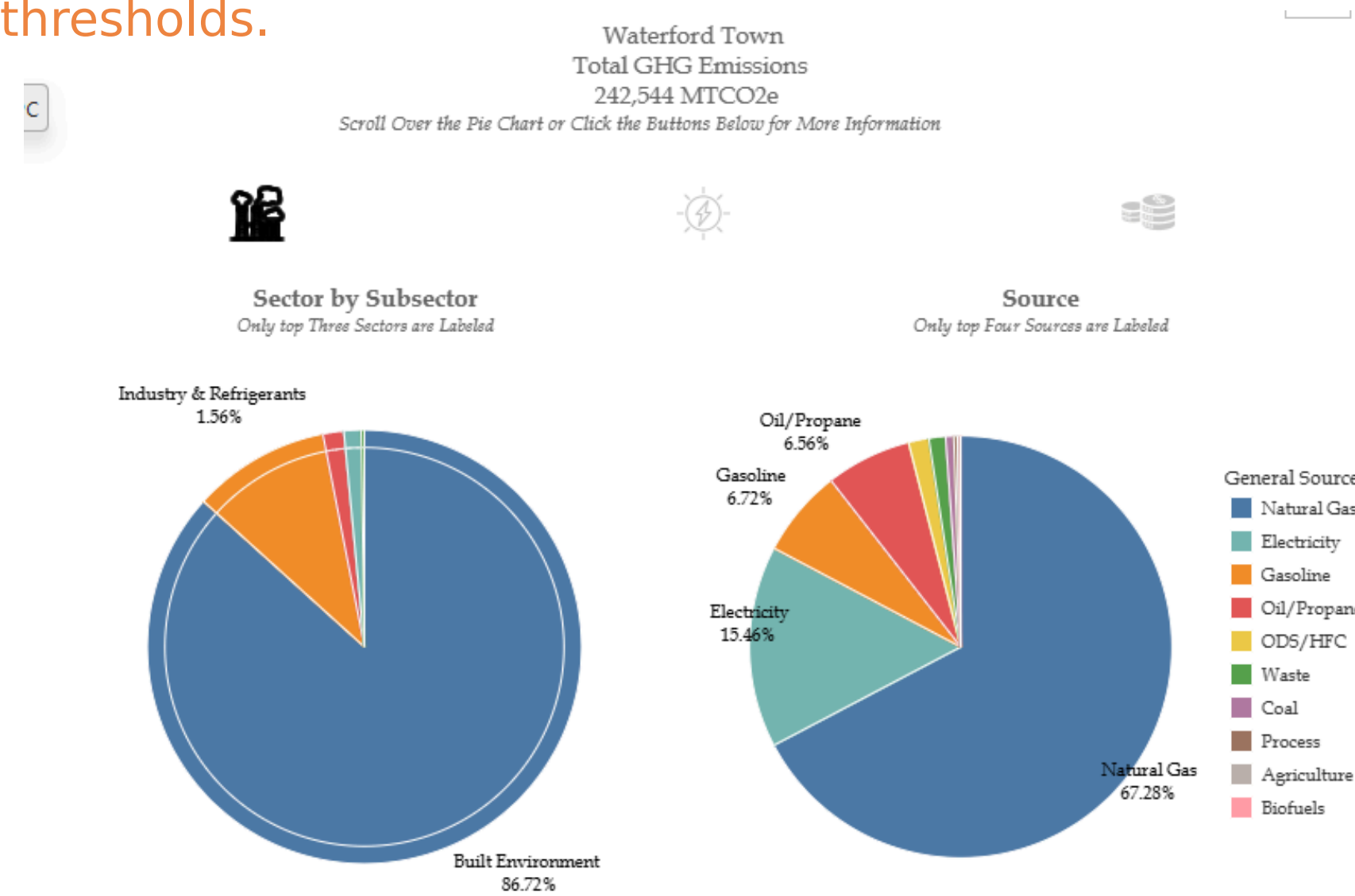
The [County/City/Town/Village]'s per-capita emissions were [X] metric tons of carbon dioxide equivalent (MTCO₂e) per person, based on the 2020 Census population of [X]. This is [lower/higher] than the per-capita emissions of 13.1 MTCO₂e per person for the entire Capital Region.

[To find this, go to <https://data.census.gov>, in the search bar type: B01003 Total Population [Your Geography], pull 2020

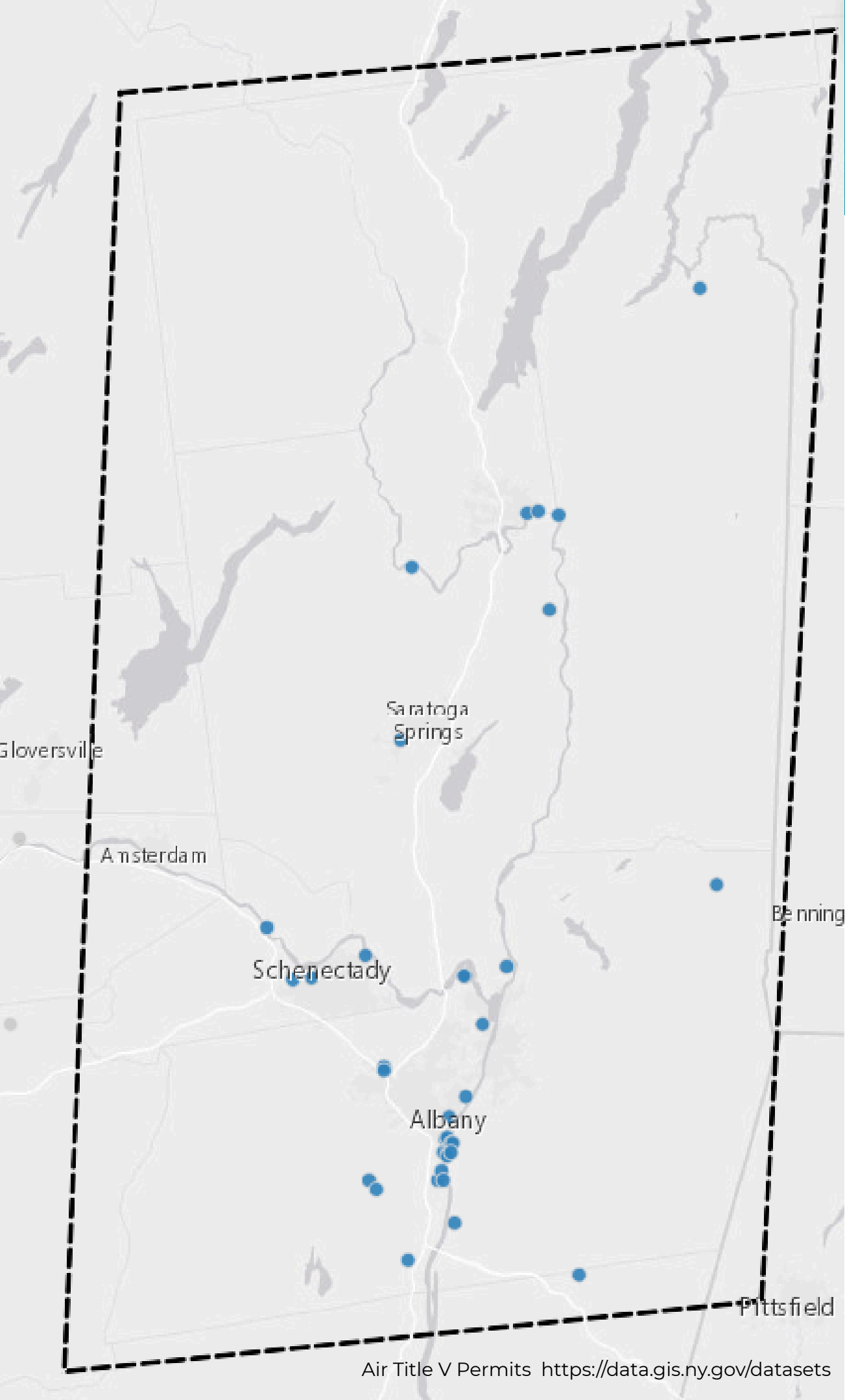


POINT SOURCE EMISSIONS

Title V emission sources are the large industrial and energy facilities that are legally required to hold operating permits and report & control their greenhouse gas and traditional pollutant emissions. A facility is a Title V source if it emits, or has the potential to emit (PTE), pollutants above certain thresholds.



Momentive Performance Materials	Saratoga County	Town of Waterford	67,906 MTCO ₂ e	Plastic Material and Resin Manufacturing	Built Environment
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DIVING DEEPER INTO YOUR DATA

Some categories within the Regional Inventory are based on assumptions, such as *Vehicle Miles Traveled* (VMT) for transportation.

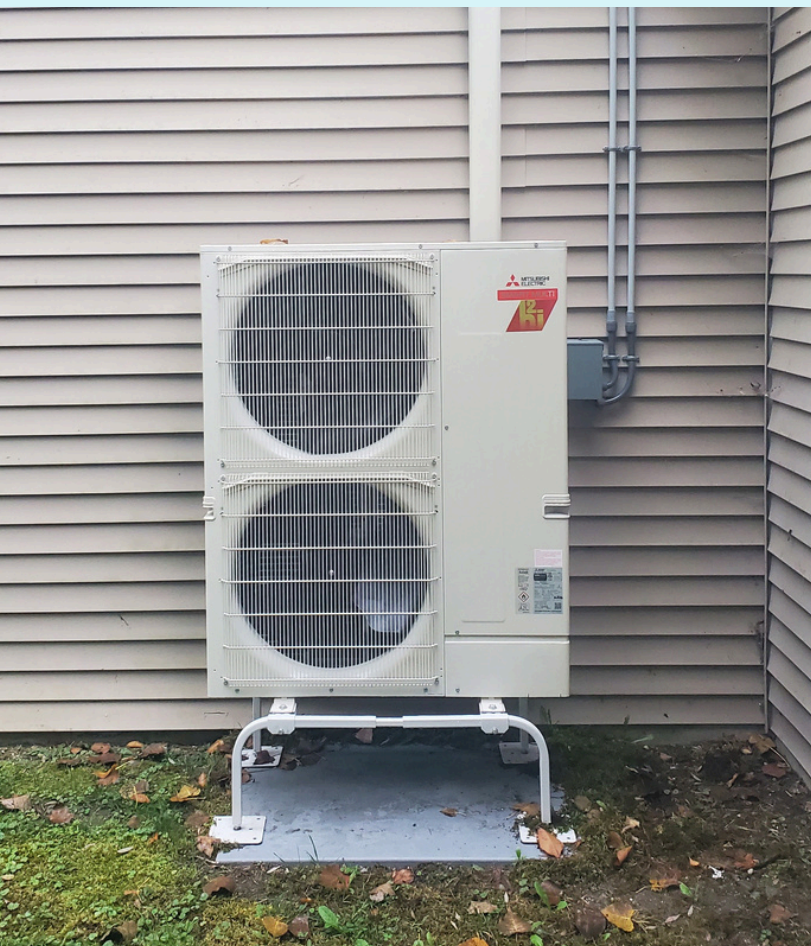
- *Vehicle Miles Traveled (VMT)** is a common transportation metric that quantifies the total distance all motor vehicles—such as cars, trucks, and buses—travel annually within a specified area.

To calculate VMT, you multiply the number of vehicles X the distance each vehicle travels. Often, this figure is estimated using traffic counts, GPS data, or fuel sales. The results are averaged based on the community's population, meaning it may not always be precise. If you believe your community is trending more towards electric vehicles or has particularly effective land use planning, it may be beneficial to seek out resources to refine this data.



LOCAL CLIMATE ACTION PLANNING

LOCAL CLIMATE ACTION PLANNING & IMPLEMENTATION



Town of Stephentown



City of Albany



Town of Ballston



Village of Kinderhook

Sources, from Left: Bill Jennings, Chris Reohr (NYSERDA), Haley Balcanoff (CDRPC), Village of Kinderhook

WHAT IS A LOCAL CLIMATE ACTION PLAN?

- A climate action plan (CAP) is a strategy document that sets goals and outlines a set of initiatives that reduce greenhouse gas (GHG) emissions.
- Using a GHG emissions inventory as the foundation, a CAP defines GHG reduction targets and identifies priority actions.

**Municipal Operations
Climate Action Plan**

**Community
Climate Action Plan**

CAP STRUCTURE

- Analysis of Baseline GHG Emissions
- GHG Reduction Targets
- Progress to Date
- Mitigation Measures
- Implementation
- Monitoring, Tracking & Adjusting Progress

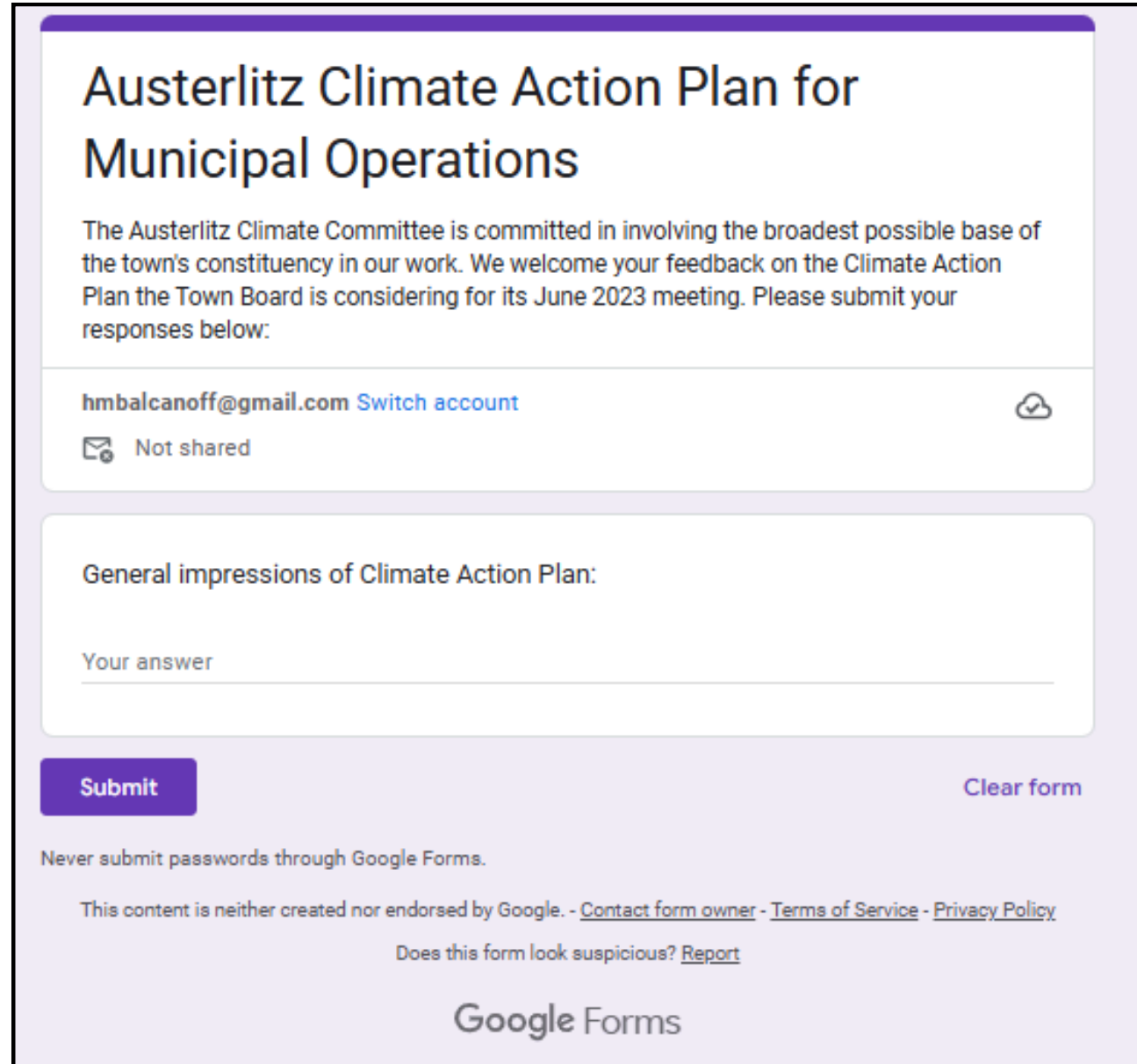
Mitigation Measures

Community Mitigation Measures Toolbox - Community Selection Tool .XLSX									
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Menus 100% \$ % .0 .00 123 11 B I A									
D4									
	A	B	C	D	E	F	G	H	J
1	Mitigation Measures Toolbox for Communities					Potential GHG Reductions (MTCDE/year)			Ranking by emissions impact (1 - highest, 40 - lowest)
2		Sector	Measure	Description	Authority to Implement	by 2035	by 2050	Status (select from drop-down)	by 2035
3	☐	Built Environment	Efficient Equipment & Weatherization	Incentivize building envelope insulation efforts and energy efficient purchases by supporting investments in certified energy-efficient appliances, heating and cooling equipment, lighting, and building products to replace older less efficient equipment. Support programs for end-use energy efficiency measures such as building envelope insulating, mold abatement, asbestos removal, and hazard remediation in existing government-owned, educational, commercial, industrial, and residential buildings.	State and Local Governments	233,299	1,166,494		3
4	☐	Built Environment	Transition to Clean Heating and Cooling Systems	Install air and ground source heat pumps in residential and commercial buildings to reduce demand for natural gas and fuel oil. Invest in low emissions refrigerant alternatives in industries such as hospitals, grocery stores and ice rinks.	State and Local Governments, and Communities	311,220	1,649,321		1
5	☐	Built Environment	Electrification Readiness	Prepare for implementation of clean energy through investments in insulation and envelope improvements, and electric service upgrades for air and ground source heat pumps, on-site renewables, battery storage, and EV charging.	State and Local Governments, and Communities	62,034	466,598		8
6	☐	Built Environment	Expand Local Renewable Generation through Land Use & Energy Planning	Identify and expand renewable power generation opportunities such as solar, energy storage, and anaerobic power generation through enhanced coordination with utility companies, NYSEERDA, and municipalities, land use and zoning policies that support solar and energy storage systems.	Local Governments, Developers, Commercial Sector	78,067	312,268		6
7	☐	Built Environment	Clean Energy Supply Access	Promote clean Energy Policies and Programs such as Community Choice Aggregation and cost-effective clean energy supply choices.	Local Governments	22,339	55,849		23
8	☐	Built Environment	Energy Performance Standards and Codes	Adopt and enforce advanced energy codes.	Local Governments	9,332	18,664		31

OUTREACH

Public engagement is encouraged for community climate action plans

- make draft available to the public for review and comment
- public meetings or events to facilitate discussion and receive feedback



Austerlitz Climate Action Plan for Municipal Operations

The Austerlitz Climate Committee is committed in involving the broadest possible base of the town's constituency in our work. We welcome your feedback on the Climate Action Plan the Town Board is considering for its June 2023 meeting. Please submit your responses below:

hmbalcanoff@gmail.com [Switch account](#)

Not shared

General impressions of Climate Action Plan:

Your answer

Submit [Clear form](#)

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Google Forms



TOWN OF
Claverack
NEW YORK

Menu

Public Hearing for Climate Action Plan

February 23, 2024

What can the Town of Claverack do to reduce Greenhouse Gas Emission in our town operations?

Review the proposed Climate Action Plan for Government Operations and join us for a Public Hearing at the Claverack Free Library on Wednesday March 6 at 6:00 PM

View/download the plan: [Claverack Climate Action Plan Document](#)

Since its inception in 2020, the ClaverackClimate Smart Committee has been working on actions to qualify Claverack for the NY State designation of Bronze Certification. These actions are part of a NYSERDA's list of over 130 activities to reduce greenhouse gas emission, transition to renewable energy, foster adaptation to the changing climate, and build resilience to the current climate realities. Claverack's proposed Climate Action Plan for Government Operations (CAP) is a guide for the town to achieve carbon neutrality, and an important step in this quest for Bronze Certification.

FINALIZE & ADOPT REPORT

RESOLUTION #XXX
UNDERTAKE A [MUNICIPALITY] [YEAR/S] COMMUNITY GREENHOUSE GAS
INVENTORY AND COMMUNITY CLIMATE ACTION PLAN

WHEREAS, the [MUNICIPALITY] pledged to take part in the NYS DEC Climate Smart Communities Certification Program that includes the preparation of a Community Greenhouse Gas Emissions Inventory Report and Community Climate Action Plan; and

WHEREAS, these publications are developed using [YEARS] data with no cost assistance from the Capital District Regional Planning Commission (CDRPC) through a NYS DEC Climate Leadership Coordinator Services grant toward completion of the following action items toward Climate Smart Communities certification:

- 1) Pledge Element 2.2 - Develop a Community Greenhouse Gas (GHG) Emissions Inventory; and
- 2) Pledge Element 2.4 - Develop a Community Climate Action Plan; and

WHEREAS, the Climate Smart Task Force, comprised of town officials and environmental volunteer community leaders, will collaborate with CDRPC in the development of these publications, reviewed drafts, and provide valuable feedback on iterations that result in final draft; and

WHEREAS, the task force will present a summary of the inventory results, target reduction plan and components of the draft government operations climate action plan to the [Council/Board] regular meeting...

NOW THEREFORE BE IT RESOLVED, that the [Town Board] hereby undertake the [Years] Community Greenhouse Emission Inventory Report and the Community Climate Action Plan; and

BE IT FURTHER RESOLVED, the Town Board authorizes submission of these documents to the NYS DEC Office for Climate Change for consideration of points toward Climate Smart Communities certification for the [Municipality].

The question of the adoption of the foregoing Resolution was duly put to a vote which resulted as follows:

NAME
NAME
NAME
NAME

The Resolution was thereupon adopted on [DATE].

County of Schenectady PE2 Action: Community Climate Action Plan

NYS Climate Smart Communities Program



Source: Schenectady, NY | Official Website. <https://www.cityofschenectady.com>



Climate Smart
Communities

May 2023

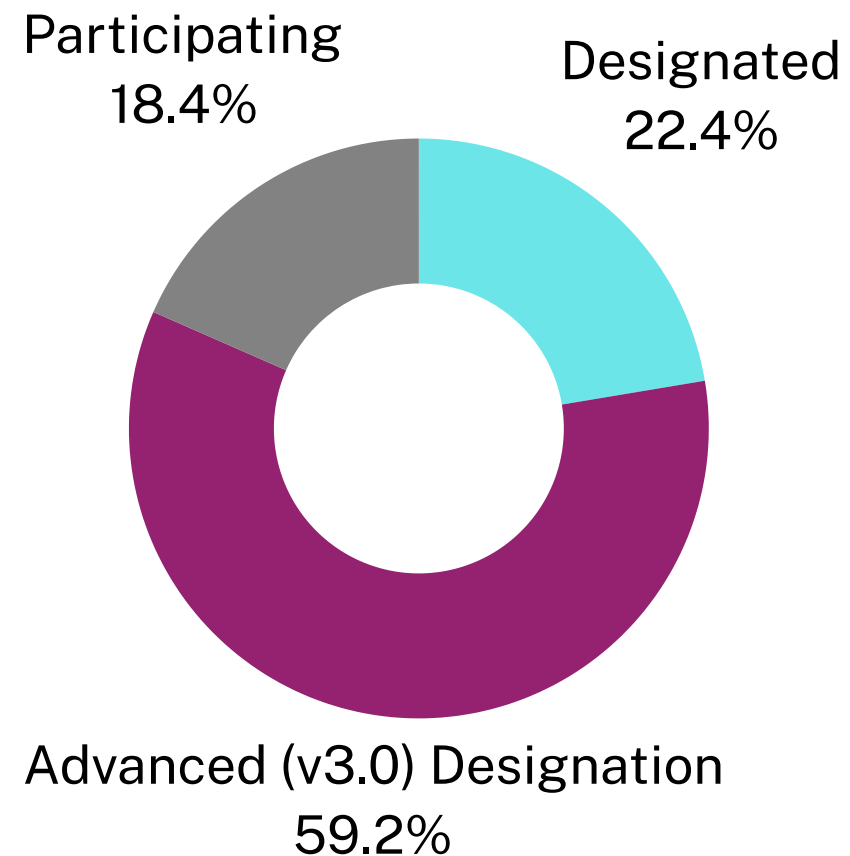


Local Government Implementation Support

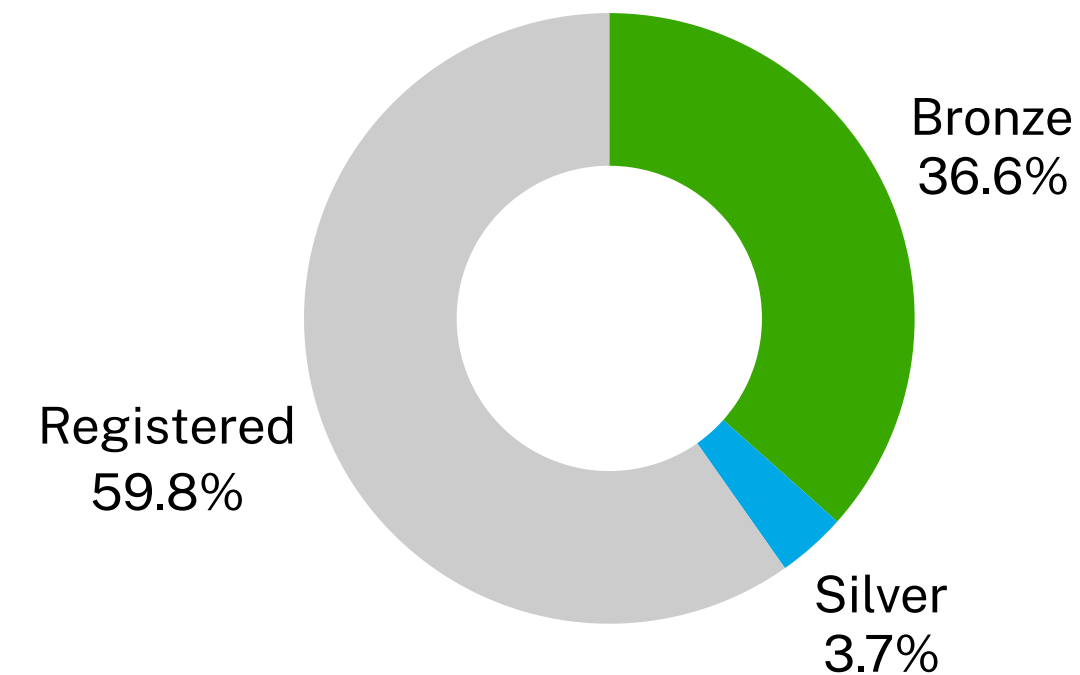
- Regional municipalities can participate in grant and recognition programs to support their climate goals:



76 Communities
Participating in CEC



82 Communities
Participating in CSC



Community-Wide Implementation Support

Local governments can influence community-wide emissions by supporting community campaigns

Village of East Nassau Community Solar

VEN Community Solar is the Village's campaign to bring the benefits of community solar to East Nassau residents. Our goal is to save money on electricity costs, support clean energy, and earn state grant funding for the Village.

How to Enroll in Community Solar Today:

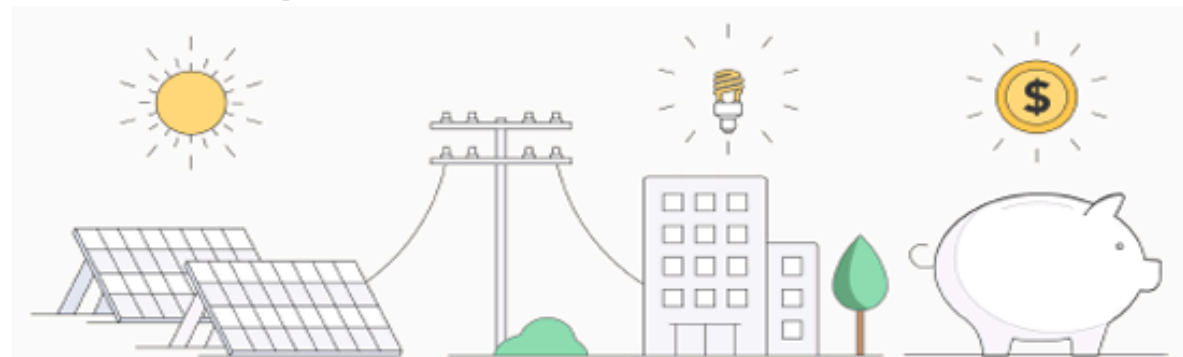
Step 1: Visit <https://portal.solar-scribe.com/residential> - (be sure to enter "EANA" in the promo code)

Step 2: Sign up in minutes

Step 3: Receive monthly savings once the solar farm becomes operational (expected May 2025)

The Village of East Nassau has partnered with SolarScribe, a community solar provider, to administer the VEN Community Solar effort. If you have any questions about the Village's involvement, please contact solar-project@villageofeastnassau.org. If you have any questions about the program or the enrollment process, please check out the FAQ on the web site above or call 315-400-3282.

How it works



Join a Renewable Energy Project

Enroll in the Community Solar project to feed clean energy into the local power grid

Power Your Home

You receive electricity as usual from National Grid, without installing any solar panels.

Save Money

You receive up to 10% discount on credits applied to your electric bill. This means lower

COLUMBIA COUNTY
SAVE MONEY
SAVE ENERGY
with heat pumps

HEAT SMART
CAPITAL REGION

HIGHLY EFFICIENT
TO -5 DEGREES

COVERS HEATING
AND COOLING

FREE ESTIMATES

VETTED CONTRACTORS

INCOME ELIGIBLE
NYSERDA ASSISTANCE

LOW INTEREST
FINANCING

LEARN MORE ONLINE
& AT UPCOMING EVENTS
EVENT INFO:



HeatSmartCapitalRegion.com

Community-Wide Implementation Support

A range of programs, state agencies, community-based partners, and regional organizations help provide tools, funding, and support for implementation.

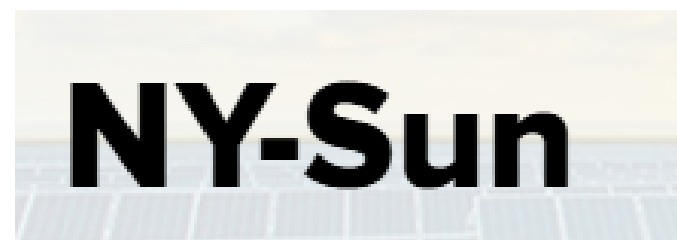


**Drive Clean
Rebate for
Electric Cars**



**CDRPC & Transportation Council's
Technical Assistance Program**

**NYSERDA's Small Business
Financing Program**

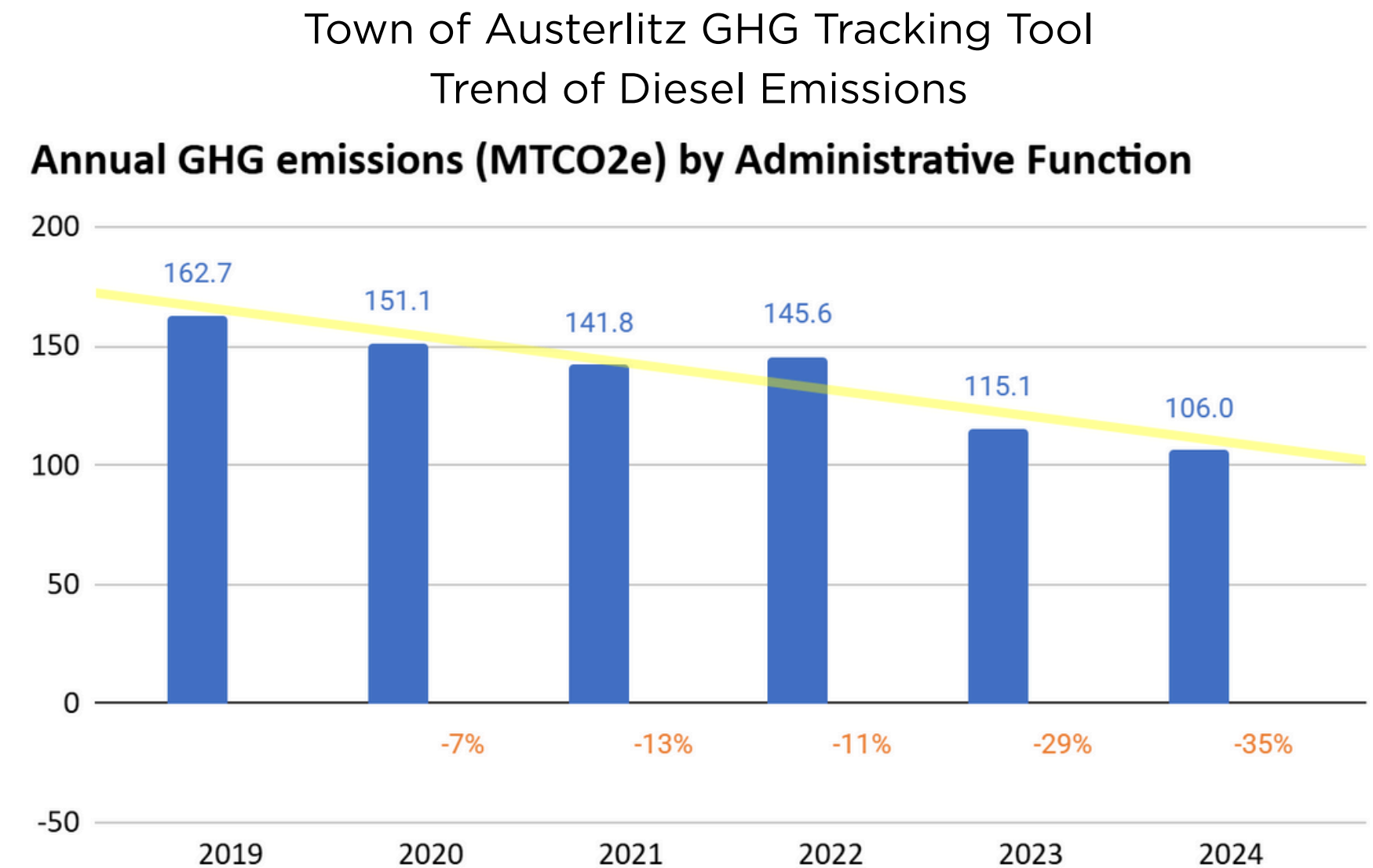


**Northern Border
Regional Commission**

MONITORING AND TRACKING PROGRESS

Climate Action Plans can be updated and revised periodically for several reasons, including:

- Updating the GHG inventory to analyze progress to date
- Technological updates
- New funding opportunities and incentives



MONITORING AND TRACKING PROGRESS



Capital Region Climate Action Portal

Climate Action in the Capital Region

Capital District Regional Planning Commission



To access the Capital Region Climate Action Portal, visit:
<https://cdrpc.org/capitalregionclimateactionportal>