



Community-wide Energy and Climate Action Plan (CECAP) Implementation

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Office of Environmental and Energy Coordination

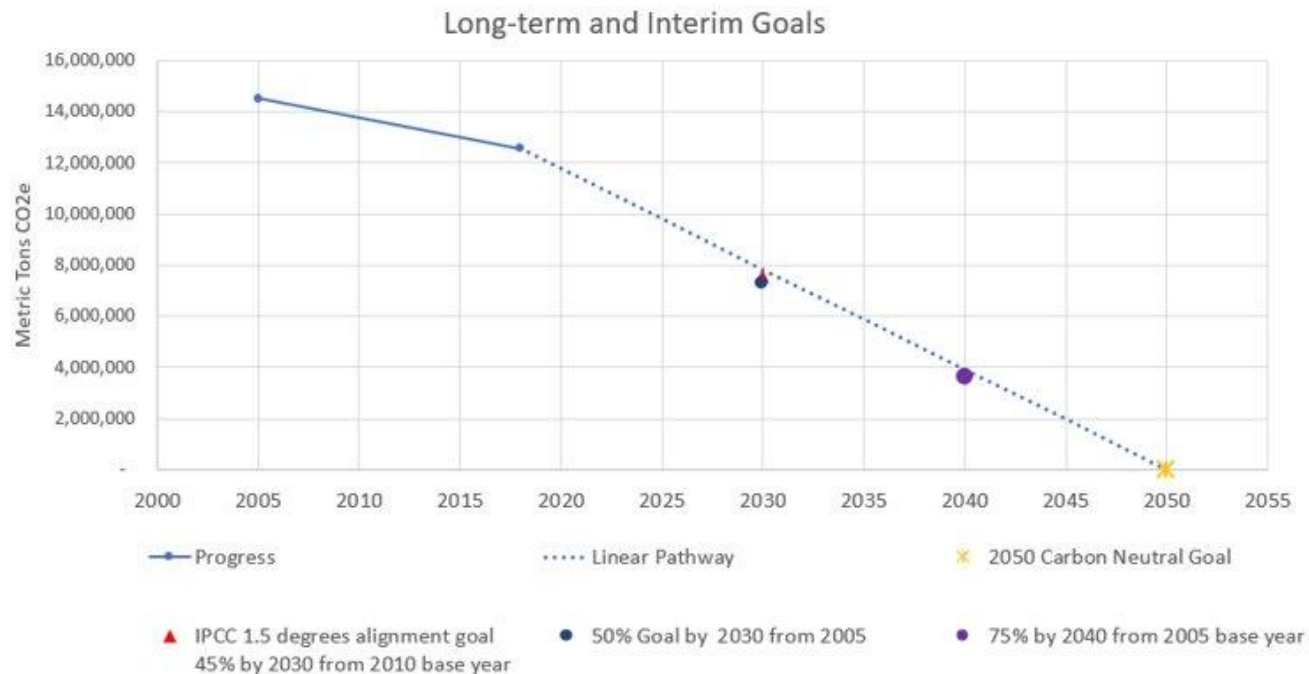
October 4, 2022

CECAP Background

- First-ever greenhouse gas (GHG) emission reduction plan developed by and for the community.
 - Planning process: January 2020 – July 2021
- Accepted by the Board of Supervisors: September 2021
 - BOS directed staff to prepare a community implementation plan to guide both the short- and long-term strategies, actions and recommendations described in the Final Report.
- Achieving CECAP's Emissions Reductions Goals is a Long-Term Shared Responsibility

CECAP Goals

- **Overall CECAP Goal:** Carbon neutral by 2050, with 87% reduction in total greenhouse gas (GHG) emissions from 2005 level
- **Interim Goals:**
 - 2030: 50% reduction in GHG emission
 - 2040: 75% reduction in GHG emissions



CECAP Implementation Plan: Components

CECAP Implementation Master Plan

- All implementation actions
- Guides implementation for many years to come

CECAP Implementation Workplan

- Prioritized implementation actions in the short-term
- Implementation actions for the next 2 calendar years (2023-2024)

CECAP Implementation Workplan Program Factsheets

- Easy-to-understand one-page factsheets
- Additional detail about specific programs in the Workplan

CECAP Implementation – Master Plan

Fairfax County CECAP Implementation Master Plan

*Reducing Community Greenhouse Gas Emissions to
Achieve Carbon Neutrality By 2050*



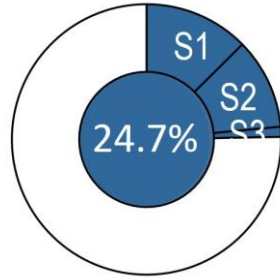
- Distills CECAP sectors, goals, strategies and actions into a summary document intended to guide staff efforts for CECAP implementation
- Operationalizes and combines CECAP recommendations to facilitate implementation
- Organized by CECAP sectors and strategies

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October 2022

A Fairfax County, Va., publication

CECAP: Sectors, Strategies, GHG Emission Reductions



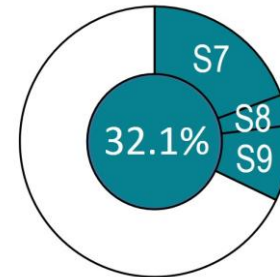
Buildings and Energy Efficiency



Strategy 1: Increase energy efficiency and conservation in existing buildings.

Strategy 2: Electrify existing buildings.

Strategy 3: Implement green building standards for new buildings.



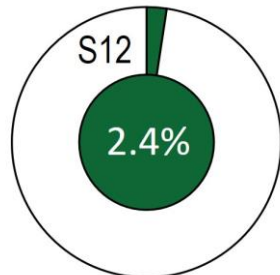
Transportation



Strategy 7: Increase electric vehicle (EV) adoption.

Strategy 8: Support sustainable land use, active transportation, public transportation, and transportation demand management (TDM) to reduce vehicle-miles traveled.

Strategy 9: Increase fuel economy and use of low-carbon fuels for transportation.



Natural Resources



Strategy 12: Support preservation, restoration, and expansion of natural systems, green spaces, and soil quality.

Energy Supply



Strategy 4: Increase renewable energy in electric grid.

Strategy 5: Increase production of onsite renewable energy.

Strategy 6: Increase energy supply from resource-recovered gas, hydrogen, and power-to-gas.

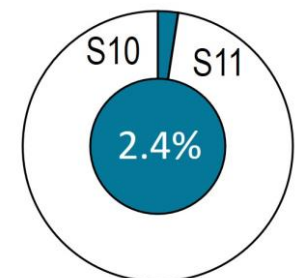


Waste





Strategy 10: Reduce the amount of waste generated and divert waste from landfills and waste-to-energy facilities.

Strategy 11: Responsibly manage all waste generation, including collected residential and commercial waste, wastewater, and other items.



CECAP Implementation – Workplan 2023-2024

- Prioritized items for next 2 calendar years
- Both continuing and new action items
- Both county operations and community programs
- Supports budget request
- Update periodically using an adaptive management approach
 - Funding opportunities
 - Partners and agencies capacity
 - Enabling legislation
 - Emerging technologies

Transportation 		Modeled contribution to emissions reduction: 32.1% CECAP Strategies: <ol style="list-style-type: none"> Increase Electric Vehicle (EV) adoption: 19.4% Support sustainable land use, active transportation, public transportation, and Transportation Demand Management (TDM) to reduce Vehicle-Miles Traveled: 3.7% Increase fuel economy and use of low-carbon fuels for transportation: 9.0% 						
Implementation Action	CECAP Strategy #	Program Name(s)	Program Description	Leads and Partners	RF	2022 Status	2023	2024
Actions that Apply to the Community								
T-1: Streamline existing permitting and	7	LDS EVSC permit process	LDS is currently reviewing and revising Electric Vehicle Charging Stations (EVCS) permitting to waive fees pending Board Matter	LDS		Ongoing	X	X
Buildings and Energy Efficiency 		Modeled contribution to emissions reduction: 24.7% CECAP Strategies in this sector: <ol style="list-style-type: none"> Increase energy efficiency and conservation in existing buildings: 12.6% Electrify existing buildings: 10.9% Implement green building standards for new buildings: 1.2% 						
Implementation Action	CECAP Strategy #	Program Name(s)	Program Description	Leads and Partners	RF	2022 Status	2023	2024
Actions that Apply to the Community								
BEE-1: Support Property Assessed Clean Energy (PACE) financing programs that assist property owners in upgrading their buildings with energy efficiency, renewable energy, and water management systems.	1	C-PACE	The C-PACE is a financing tool administered by Virginia-PACE Authority. It is designed to provide long-term private funding to building owners for energy-saving and water-saving projects. The County's C-PACE ordinance will be updated in the first quarter of 2023 to: 1) opt-in to the revised statewide program and 2) add in a two-year retroactive clause allowing the finance of eligible projects that were completed up to two years ago.	OEEC	CRC, 1d	Ongoing	X	X
BEE-2: Develop and fund energy audit or assessment programs to identify opportunities to reduce energy use and to provide incentives to implement energy efficiency and electrification recommendations.	1, 2	HomeWise	There are several existing energy efficiency programs provided both by the county and external entities. The county's programs include HomeWise, which helps low and moderate income residents with small energy and water efficiency improvements. Nearly 500 HomeWise efficiency kits have been distributed along with instructions and information on how to save energy and water at home. Those efforts will continue in 2023 and 2024. Additionally, the county will promote external energy efficiency opportunities such as the NYSWCD's Energy Conservation Assistance Program, energy efficiency programs from Dominion, Washington Gas, and other utilities, LEAP's Thermalize program, and programs through LIHEAP.	OEEC	CRC, 3b	Ongoing	X	X
BEE-3: Support and advocate for the strengthening of building energy codes in local development projects.	3	Virginia Uniform Building Code	LDS will continue enforcing building energy codes, with an eye towards opportunities to increase the statewide building energy codes for lower consumption.	LDS	RIB, 2b	Ongoing	X	X

CECAP Implementation – Factsheets

- Provides additional detail for Workplan items
- Highlights strategies and goals

CHARGE UP FAIRFAX

OVERVIEW

LAND USE CODES, POLICIES, AND PLANS

OVERVIEW

FAIRFAX COUNTY CANOPY PROGRAM

OVERVIEW

The Fairfax County Canopy Program is intended to advance the county's tree canopy goals by funding tree plantings in commonly owned open space, including properties owned by homeowners' and condominium associations (hereinafter HOAs). The Canopy Program will support tree plantings throughout the community, including in communal areas owned by HOAs and non-profit organizations, at schools and on other publicly and privately owned lands. The Fairfax County Canopy Program is a joint effort between the Office of Environmental and Energy Coordination (OEEC) and the Urban Forest Management Division (UFMD) of the Department of Public Works and Environmental Services (DPWES).

The Fairfax County Canopy Program will directly support the CECAP Natural Resources sector-based goal:

- Expand the tree canopy to 60 percent with a minimum 40 percent tree canopy coverage in every census block by 2030 and 50 percent by 2050, prioritizing areas of highest socioeconomic need first.

HOW THIS INITIATIVE SUPPORTS CECAP IMPLEMENTATION

The program supports the following strategy:

Sector	Strategy Number and Name
Natural Resources	12: Support Preservation, Restoration, and Expansion of Natural Systems, Green Spaces, and Soil Quality

The implementation actions under Strategy 12 are expected to lead to reductions of 251,000 MT of carbon dioxide equivalent emissions by 2050. While this is just 2.4 percent of the emissions reductions needed to meet the CECAP carbon neutrality goal by 2050, the recommended actions in Strategy 12 have numerous co-benefits for the environment, public health, and local economy. For instance, expanding the county's tree canopy and green space can increase carbon sequestration, support wildlife and ecosystem diversity, reduce runoff, improve air and water quality, reduce the Urban Heat Island effect, increase property values, and positively impact public health.

As currently envisioned, the new Fairfax County Canopy Program will be promoted and funded by the county and administered by a local non-profit organization. This organization will conduct outreach to county residents, Fairfax County Public Schools, HOAs and non-profit organizations to solicit participation in the program; it will then work directly with the participants to identify planting locations, plant trees, and ensure proper maintenance of the trees through the provision of educational resources. The county will work closely with the non-profit to identify and target those communities or associations most in need. Using the Vulnerability Index and other mapping tools, the county can identify areas of opportunity in which the non-profit should focus its outreach efforts.

The Fairfax County Canopy Program will complement the county's Tree Planting and Preservation Fund (TPPF), which dates back to 2005. The TPPF was established as a funding mechanism to support programs and policies relating to the preservation and management of existing forest tracts and the planting of new trees by governmental and non-profit entities on public properties. The Canopy Program is being established to focus tree planting efforts on commonly owned open space, such as HOAs. Together, these programs will support the expansion of the county's tree canopy and support the goals of CECAP.

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Next Steps

Next Steps:

- Staff Coordination Team to finalize CECAP Implementation Master Plan and CECAP Implementation Work Plan – October/November 2022
- CECAP Implementation Master Plan and CECAP Implementation Work Plan presentation to the Board's Environmental Committee – December 13, 2022

