



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

Update to Planning Commission Environmental Committee

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September 22, 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.
- Coordinating Team developing an Implementation Plan
- Achieving CECAP's Emissions Reductions Goals is a Long-Term Shared Responsibility

Community Goals

Community-wide Energy and Climate Action Plan (CECAP)

- Carbon Neutral by 2050
- Interim goals:
 - 50% GHG reduction by 2030
 - 75% GHG reduction by 2040
- Sector based goals:
 - Green buildings
 - Retrofitting existing housing for energy efficiency
 - Increasing transit and non-motorized commuting
 - Increasing use of electric vehicles
 - Natural resources
 - Waste

Fairfax County Community-wide Energy and Climate Action Plan



A Fairfax County, Va., publication
September 2021

County Operational Goals

- [Carbon Neutral Counties Declaration:](#)
 - Carbon Neutral by 2040
- [Operational Energy Strategy:](#)
 - Greenhouse Gas Emissions Reductions
 - Energy Use and Efficiency
 - Water Use and Efficiency
 - Green Buildings
 - Renewables
 - Fleet Electrification
 - Goods and Services
 - Waste Management and Recycling
 - Awareness and Engagement
 - Utility Cost Management
 - Reporting and Collaboration

Fairfax County Operational Energy Strategy

July 13, 2021



A Fairfax County, Va., publication

CECAP Implementation Plan: Components

Master Plan

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

Workplan

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

Workplan Program Factsheets

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

CECAP: Sectors, Strategies, GHG Emission Reductions

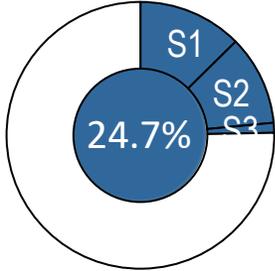
Buildings and Energy Efficiency



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

Strategy 2: Electrify existing buildings.

Strategy 3: Implement green building standards for new buildings.



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.



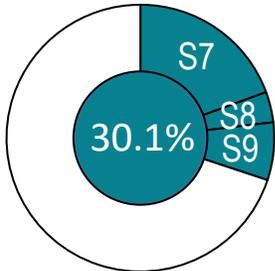
Transportation



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.

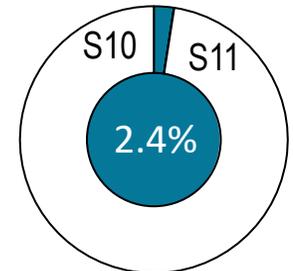


Waste



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

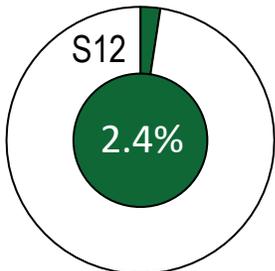
Strategy 11: Responsibly manage all waste generation, including collected residential and commercial waste, wastewater, and other items.



Natural Resources



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



Building Energy and Efficiency



- **CECAP Sector Goal:** All new, eligible buildings will have a commitment to Green Building

Community: New Buildings (Examples)

- Comprehensive Plan / Zoning Ordinance Changes
 - Creates framework for private development to align with CECAP energy goals
- Building Code Changes
 - Advocate for updated building code standards to increase energy efficiency

County Gov: Existing and New Facilities

- Operational Energy Strategy (OES)
- Sustainable Development Policy for capital projects
 - Net Zero Energy
 - Electric Ready
- ESCO Game Plan
- Solar Game Plan

Building Energy and Efficiency



- **Sector Goal:** Retrofit at least 100,000 housing units with energy efficient measures by 2030



Community: Existing Building Retrofits (Examples)

- 425,000 Housing units
- 278,500,000 SF Industrial, Office, Retail

Actions:

- Equity: Low to moderate income households
- Education and outreach
- Incentives and financing options
- Partnerships
- Technology

Transportation



Sector Goals:

- Increase transit and non-motorized commuting to 30% (including teleworking) by 2030.
- Increase plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs) to at least 15% of all light-duty vehicle registrations by 2030.

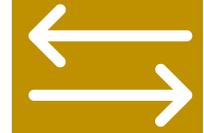
Community (Examples):

- EV Adoption Education and Outreach
- Charging Stations
 - Charge Up Fairfax: HOA, Common-Interest Community Property
- Fleet Conversion:
 - National vs Local Fleets

County Government

- Operational Energy Strategy Targets
 - Develop a plan to convert fleet by 2030
 - Convert buses and fleet vehicles by 2035
 - No diesel buses purchased after FY2024
- EV Game Plan
- Transportation Planning

Cross-Sector Initiatives



Community (Examples):

- Fairfax Green Bank
Establishing a clean energy financing entity as a catalyst for local investments. Will serve as a clearinghouse of information and trusted advisor to spur projects delivering energy efficiency, renewable energy, and adoption of electric vehicles, with an emphasis on equity and broad participation.
- Incentives
- Green Business Partners

Cross-Sector Initiatives



Community (Examples):

- Landuse codes, policies and plans

CECAP Strategy	Building Code	Comp. Plan	Tree Policies	Zoning Ordinance
3: Green Building Standards for New Buildings	X	X		X
4: Increase the Amount of Renewable Energy in the Electric Grid	X	X		X
5: Increase Production of Onsite Renewable Energy	X	X		X
7: Increase Electric Vehicle Adoption	X	X		X
8: Support Sustainable Land Use, Active Transportation, Public Transportation, and Transportation Demand Management		X	X	X
12: Support Preservation, Restoration, and Expansion of Natural Systems, Green Spaces, and Soil Quality		X	X	X

Next Steps

- Present CECAP Implementation Master Plan and Workplan to BOSEC
- Tracking and reporting progress
 - Climate Action Dashboard
 - MWCOG GHG Inventories
- Green Bank: local clean energy financing entity
- Charge-up Fairfax



