



Updates on the Community-wide Energy and Climate Action Plan (CECAP)

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and Energy Coordination

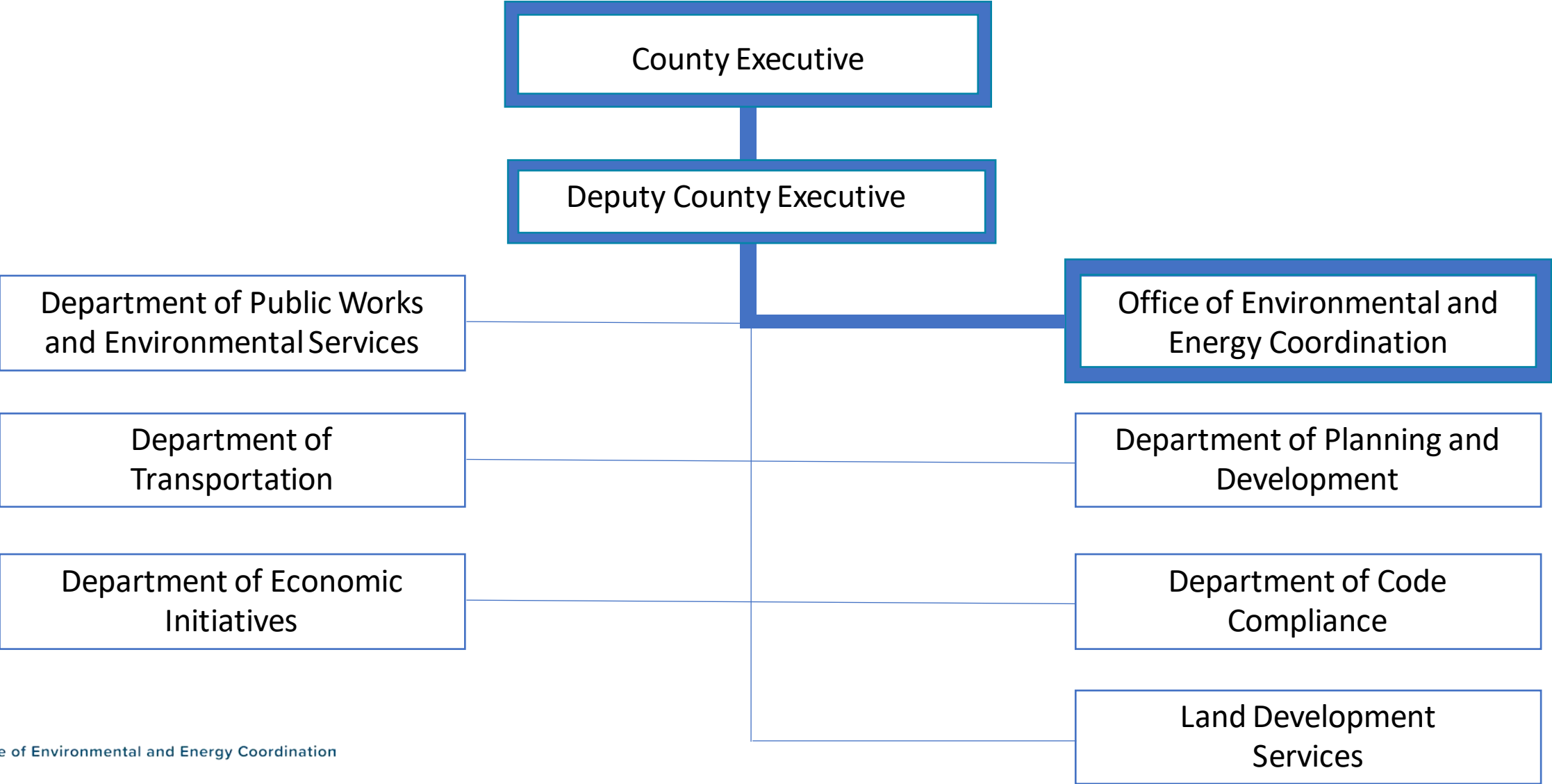
MWCOG – CEEPC

November 17, 2021

Presentation Overview

- Introduction to the Fairfax County Office of Environmental and Energy Coordination – OEEC
- Overview of CECAP – the Community-wide Energy and Climate Action Plan
- CECAP goals and strategies
- Next steps for CECAP implementation

OEEC Table of Organization



OEEC Core Areas of Focus

	<p>General Environmental Coordination</p>	<ul style="list-style-type: none"> • Board of Supervisors Environmental Vision • Environmental coordination with other county departments • State & local environmental policy coordination • Environmental coordination with neighboring jurisdictions & regional groups • Fairfax Green Initiatives #1 and #2 • Environmental Quality Advisory Council (EQAC) • Sustainability Initiatives
	<p>Community Programs</p>	
	<p>Greening County Operations</p>	<ul style="list-style-type: none"> • Carbon Neutral Counties • Operational Energy Strategy & Energy Dashboard • Solar PPAs • Environmental Improvement Program (EIP) • Joint Environmental Task Force (JET) • Fairfax Employees for Environmental Excellence (FEEE)
	<p>Climate Planning</p>	<ul style="list-style-type: none"> • Resilient Fairfax: Adaptation & resilience to climate effects like heat, storms, flooding • CECAP: Emissions reduction to lower our contributions to global climate change

CECAP Overview

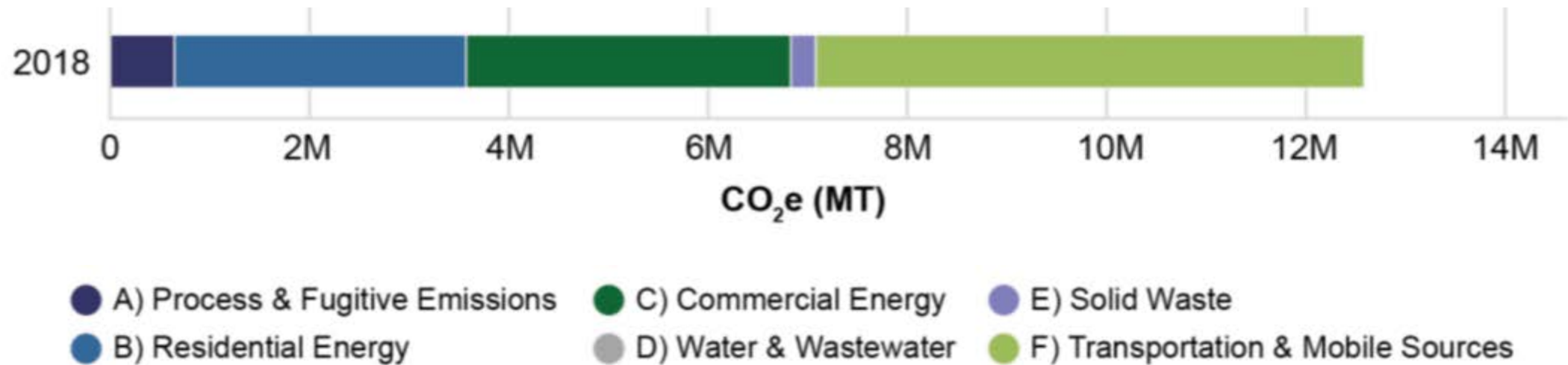
- CECAP is a community planning process focused on greenhouse gas (GHG) emission reduction, accepted by the Board of Supervisors on September 14, 2021
- The CECAP planning process was done in partnership with MWCOG and ICF
- OEEC is transitioning from the planning effort (January 2020 – July 2021) to implementation
- Short and long-term implementation planning is underway now
- Implementation success is dependent on county agency, community and partner organization involvement

CECAP Process



2018 Greenhouse Gas (GHG) Emissions by Sector

- Total Emissions = 12.56 MMT CO₂e



CECAP Goals

- **Overall CECAP Goal:** Carbon neutral by 2050, with 87% reduction in total greenhouse gas (GHG) emissions from 2005 level
- **Interim Goals – 2030 and 2040:** 2030: 50% reduction in GHG emission / 2040: 75% reduction in GHG emissions
- **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
- **12 Strategies, 37 actions, 270+ recommendations**

Fairfax County Community-wide Energy and Climate Action Plan



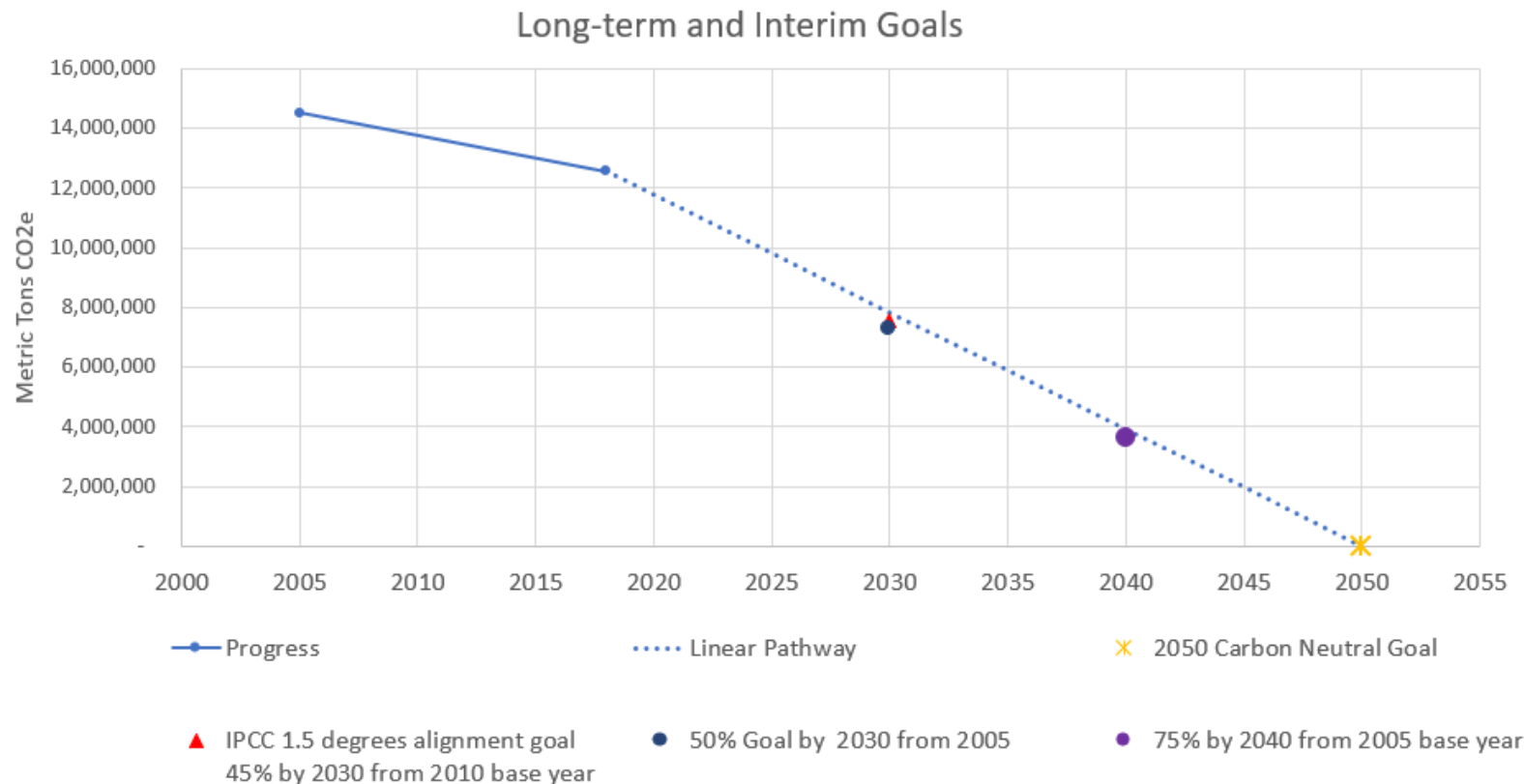
A Fairfax County, Va., publication
September 2021

Long-Term and Interim Goals

2030 Interim goal: 50% reduction by 2030 from a 2005 base year.

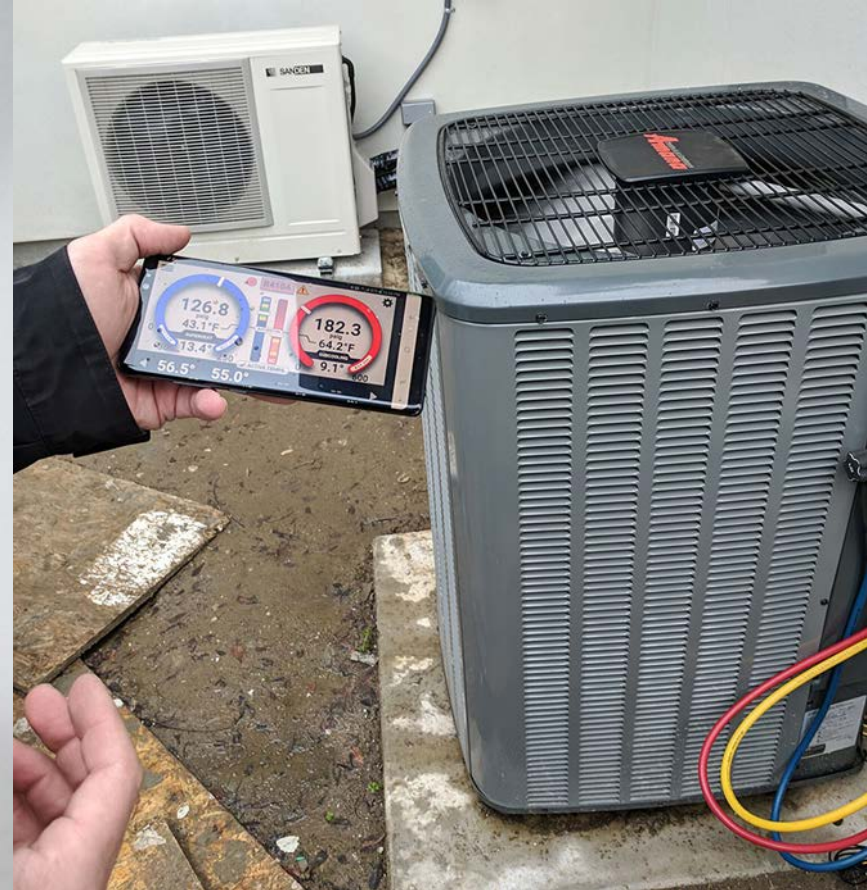
2040 Interim goal: 75% reduction by 2040 from a 2005 base year.

2050 Long-term goal: Carbon neutrality by 2050, with at least 87% achieved with emission reductions from a 2005 base year.



Sector-Based Goals

- **Buildings & Energy Efficiency:**
 - All new, eligible buildings will have a commitment to green building
 - Retrofit at least 100,000 housing units with energy efficiency measures by 2030
- **Transportation:**
 - Increase transit and non-motorized commuting to 30% (including telework) by 2030
 - Increase plug-in electric vehicles (PHEVs) and battery electric vehicles (BEVs) to at least 9% of all light-duty vehicle registrations by 2030
- **Natural Resources:** Expand the tree canopy to 60% with a minimum of 40% tree canopy coverage in every census block by 2030 and a minimum of 50% tree canopy coverage in every census block by 2050, prioritizing areas of highest socioeconomic need
- **Waste:** Achieve zero waste by 2040, defined as at least 90% waste diverted from landfill/incineration.



Buildings & 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 the amount of renewable energy in the 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 waste generated

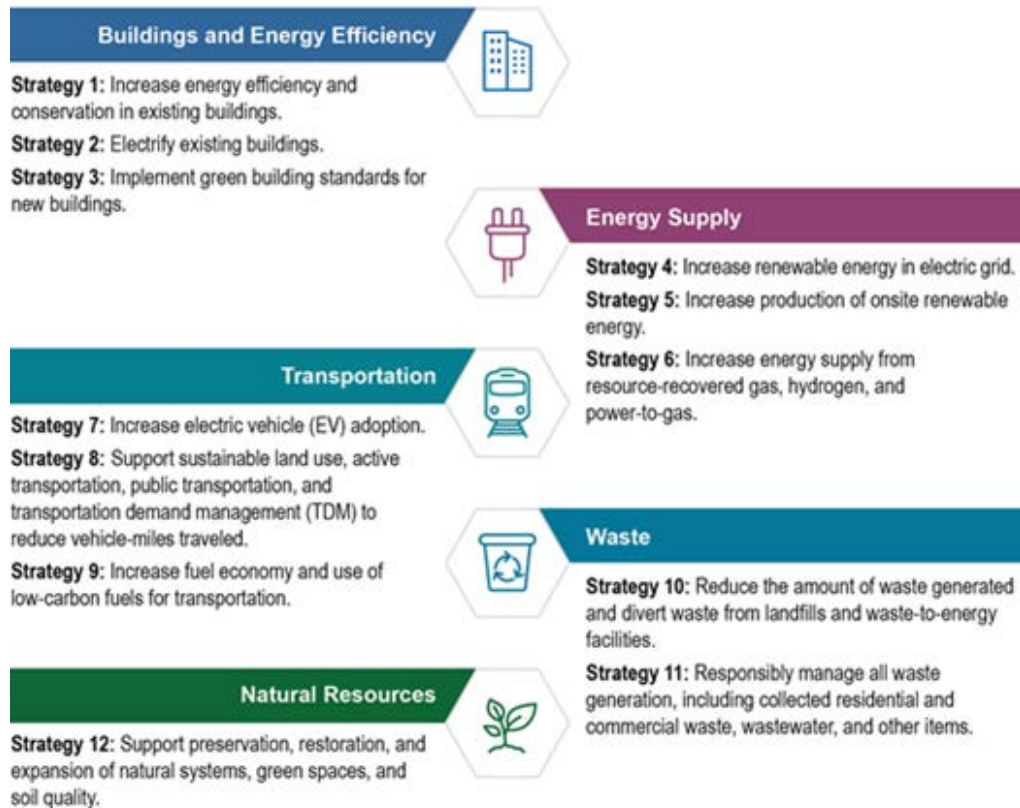


Natural Resources

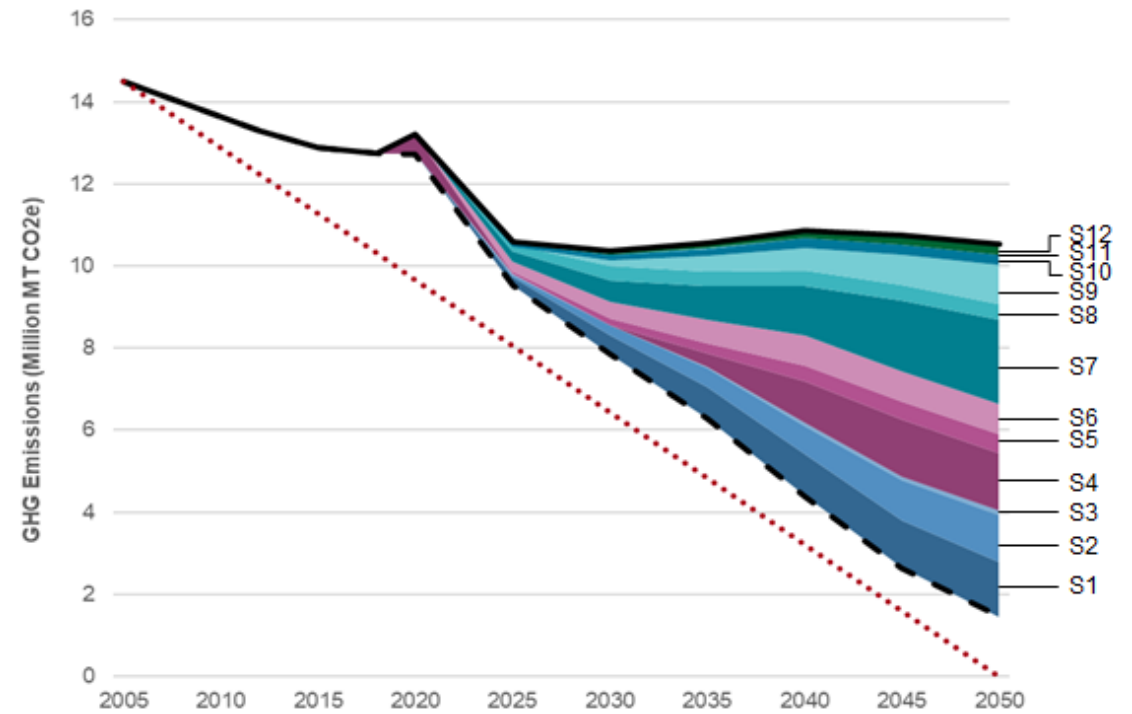
- Strategy #12: Support preservation, restoration, and expansion of natural systems, green spaces, and soil quality

CECAP Strategies

Strategies Organized by Sector



Modeled GHG Emissions Reduction by Strategy



CECAP Next Steps

- Short and long-term implementation planning has started:
 - Short-term:
 - Community outreach and education
 - Legislative review and recommendations
 - Long-term:
 - Annual workplan tied to funding/budget with prioritized recommendations
- Future community involvement:
 - Opportunities to give feedback during public surveys
 - Comments on budget process
 - Serving as community liaisons, building partnerships, and taking action!

Thank You!

For further questions, please contact:

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