



# Climate & Energy Initiatives

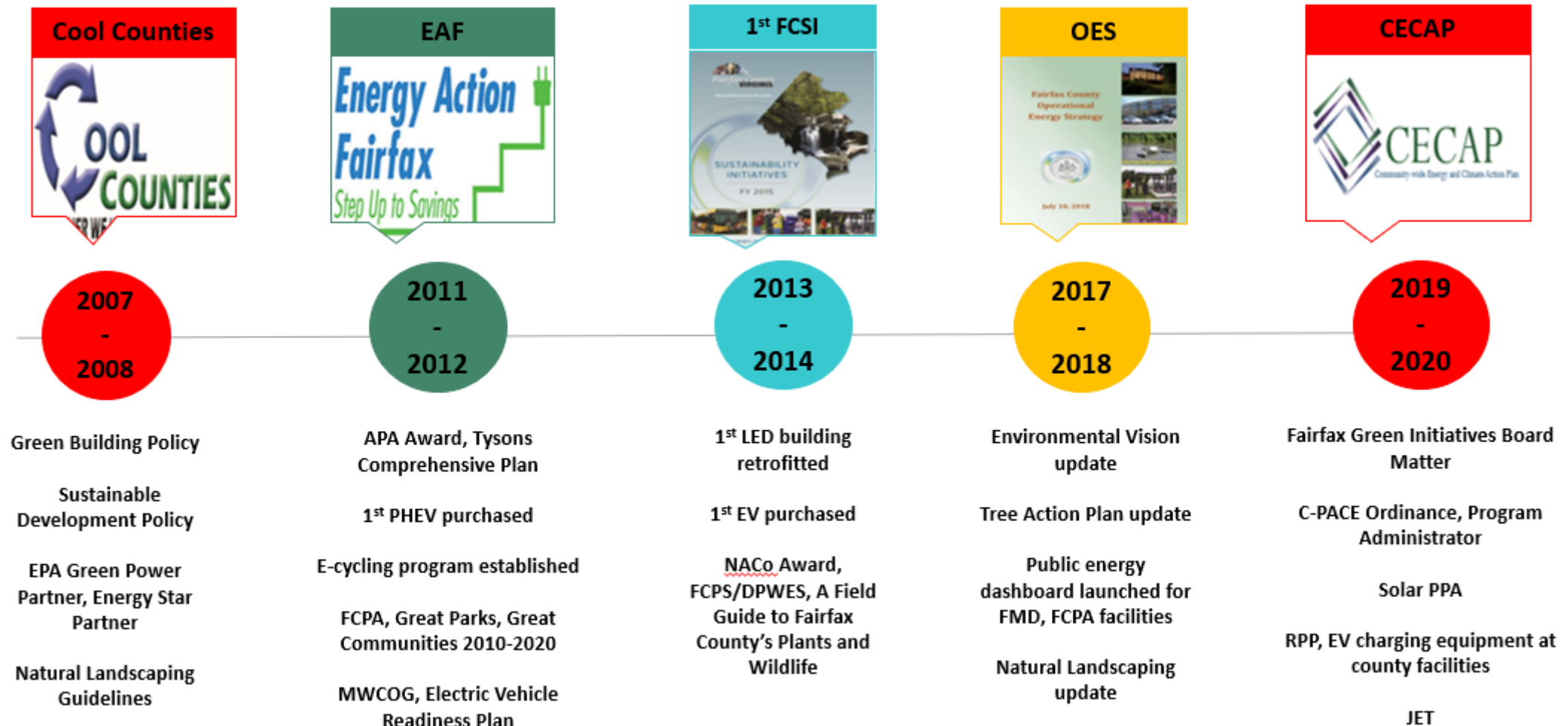
## Overview

Kambiz Agazi, Director

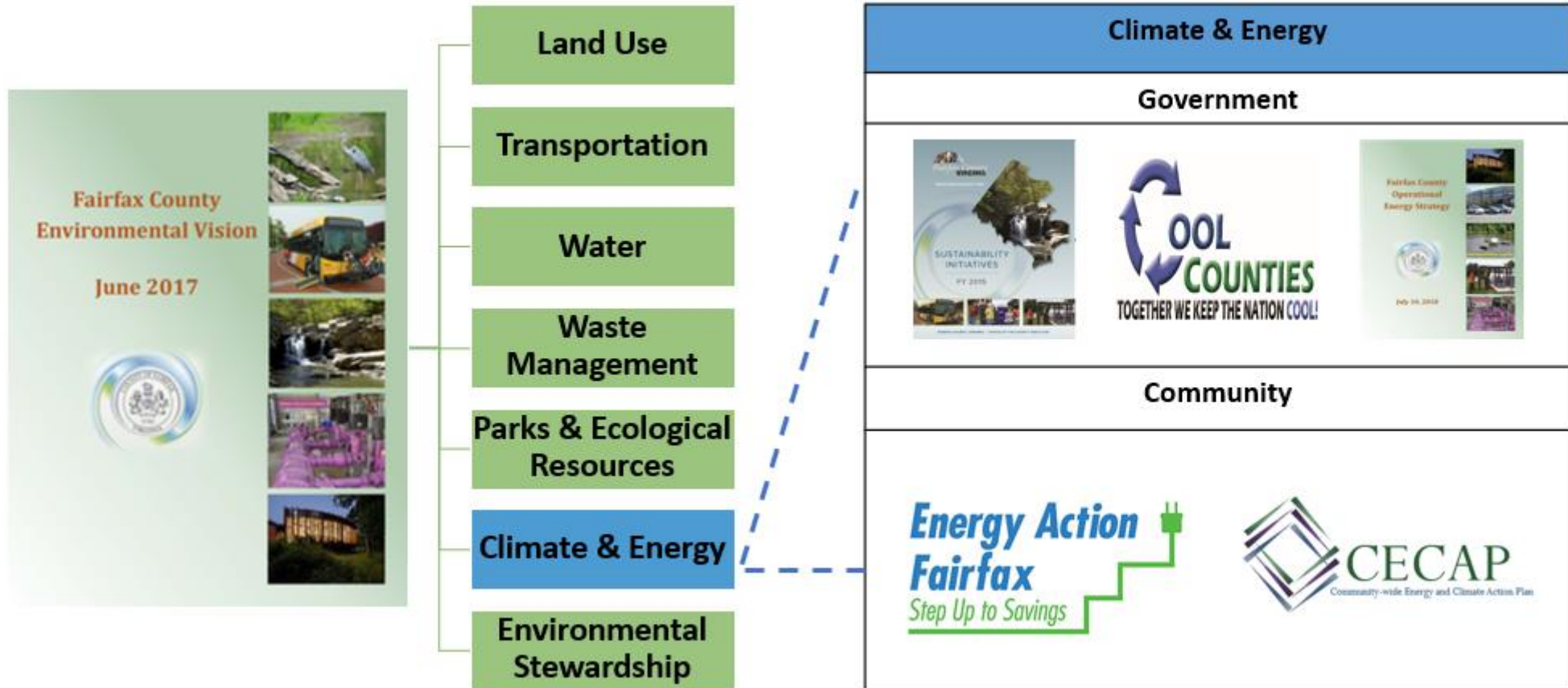
Office of Environmental and Energy Coordination

February 4, 2020

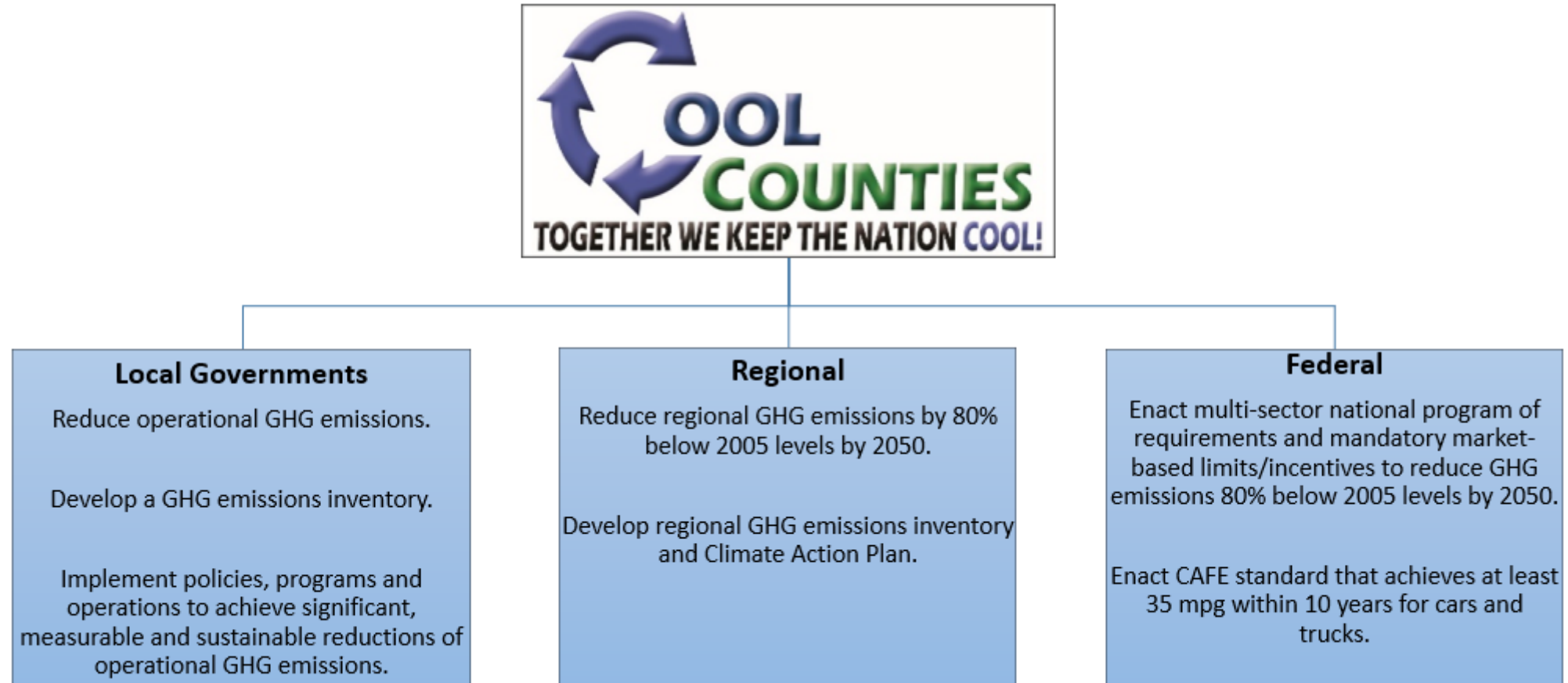
# 2007 – 2019 Climate & Energy Highlights



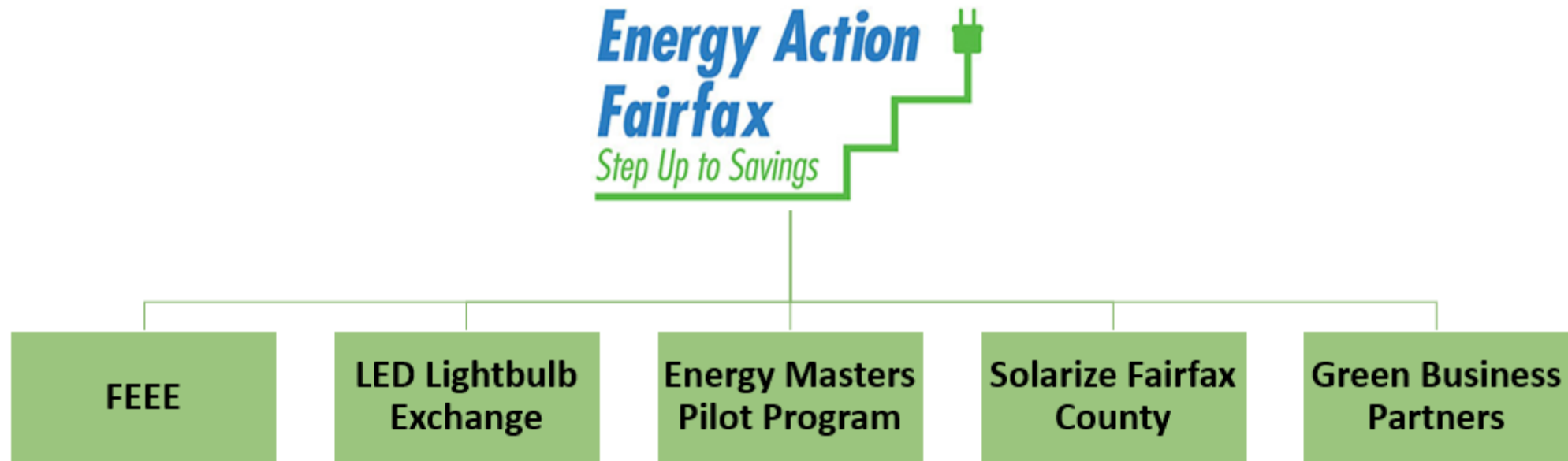
# Overview



# Cool Counties Climate Stabilization Initiative



# Energy Action Fairfax Programs

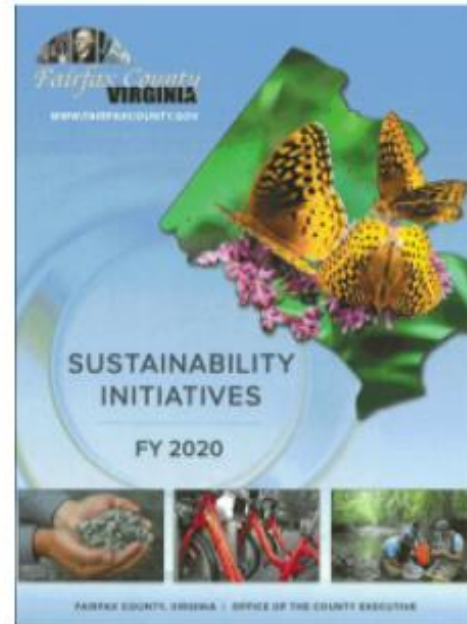


# Energy Action Fairfax Programs

Program	Goal	Updates
Fairfax Employees for Environmental Excellence (FEEE, est. 2010)	Foster a greener workplace culture in Fairfax County.	<ul style="list-style-type: none"><li>• Employee Composting Pilot Program</li><li>• Blog</li><li>• Quarterly newsletter</li><li>• Monthly meetings</li><li>• Earth Day 2020 Fair</li></ul>
LED Lightbulb Exchange (est. 2018)	Educate residents about energy and costs savings associated with the adoption of LED lightbulbs.	<ul style="list-style-type: none"><li>• 12 events in 2018 – 2019</li><li>• 12,000 LEDs distributed</li><li>• Estimated 270,000 kWh saved</li><li>• Estimated \$30,000 saved/year</li></ul>
Energy Masters Pilot Program (2020)	Promote efficiency in low-income housing.	<ul style="list-style-type: none"><li>• Expected kickoff Spring 2020</li></ul>
Solarize Fairfax County (est. 2017)	Educate residents and businesses on opportunities to adopt solar.	<ul style="list-style-type: none"><li>• 57 contracts signed in 2019, equal to ~563 kW</li><li>• Returning Spring 2020</li></ul>
Green Business Partners (est. 2016)	Recognize local businesses that are leaders in environmental stewardship.	<ul style="list-style-type: none"><li>• 20 Green Business Partners</li><li>• 5 Small Green Business Partners</li></ul>



# Fairfax County Sustainability Initiatives Highlights



# Operational Energy Strategy Highlights



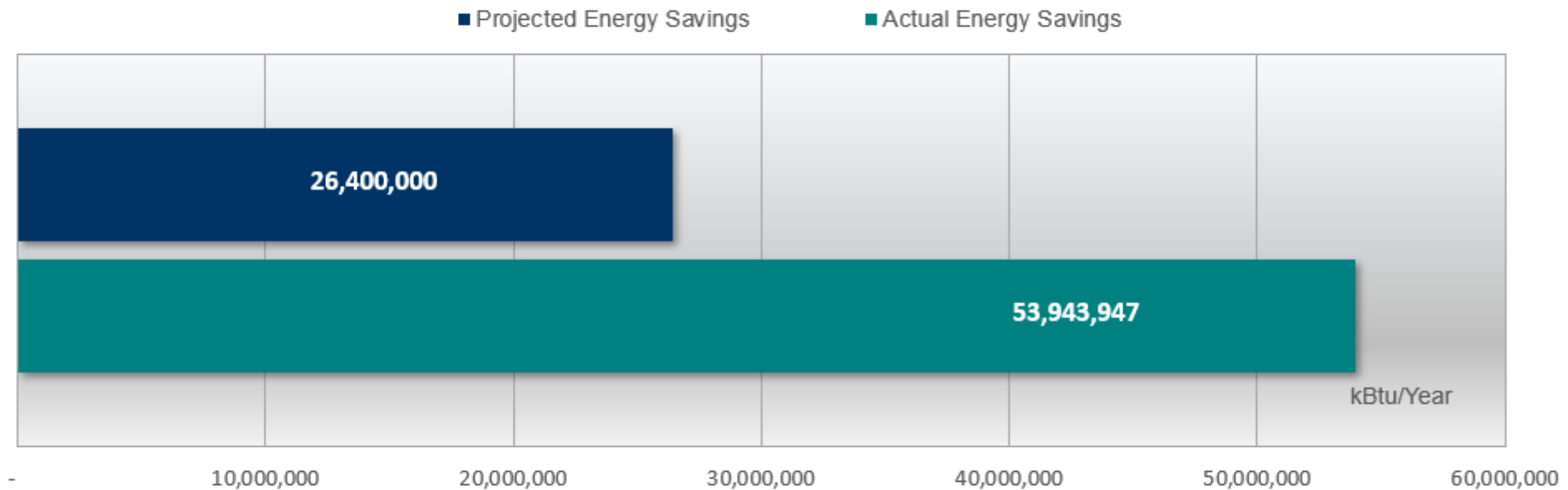


# Operational Energy Strategy Highlights

Focus Area	Goal	Target	Updates
Energy Use & Efficiency	Reduce electricity and natural gas use in existing county facilities and operations.	Reduce energy use 20% from 2019 to 2029, equivalent to a reduction of 2% per year over the 10-year period.	<ul style="list-style-type: none"> <li>Energy Improvement Projects</li> <li>LED Streetlight Conversion Program</li> <li>ESCO Pilot Program</li> </ul>
Innovative Energy Solutions	Reduce fossil fuel consumption through the application of innovative concepts and technologies.	Implement a rooftop solar pilot project at the Springfield Warehouse capable of generating electricity equivalent to the warehouse's expected annual electricity consumption.	<ul style="list-style-type: none"> <li>Solar PPA               <ul style="list-style-type: none"> <li>113 facilities</li> <li>7 FCPS projects underway</li> </ul> </li> </ul>
Green Buildings	Ensure that new construction and major renovations of county facilities are energy- and water-efficient.	Achieve LEED Silver or equivalent on all new facility construction, additions and renovations with an occupied area greater than 10,000 square feet.	<ul style="list-style-type: none"> <li>16 LEED Silver projects</li> <li>15 LEED Gold projects</li> </ul>
Electric Vehicles (EVs)	Minimize energy used in the transportation of county staff and goods and the delivery of services.	By 2025, ensure that Level 2 charging infrastructure is installed at up to 20 major gov't facilities and by 2030 5% of gov't passenger vehicle purchases are electric or plug-in hybrid.	<ul style="list-style-type: none"> <li>EV Charging RFP closed November 2019</li> </ul>

# Operational Energy Strategy Highlights, con't

Progress Through FY 2019 Energy Efficiency Target



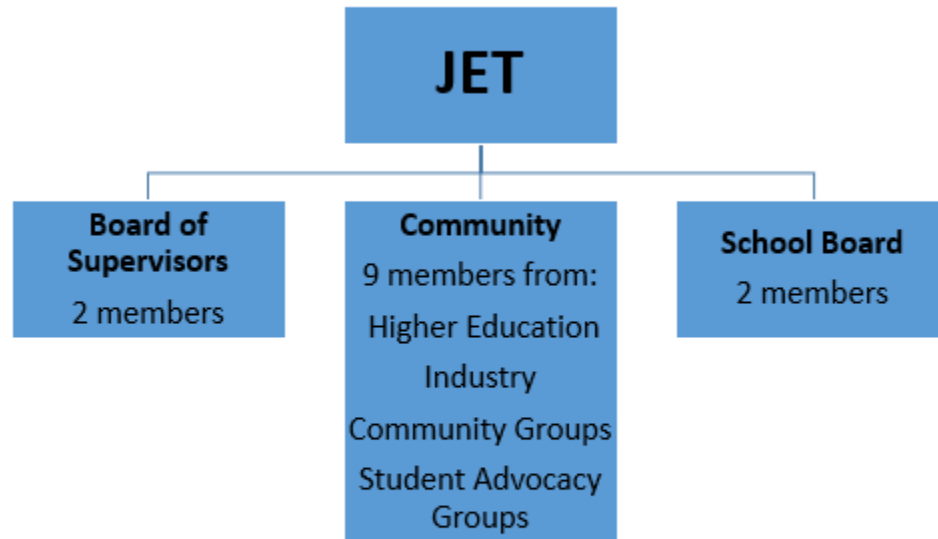
Within the Energy Use & Efficiency focus area of the Operational Energy Strategy, the county's goal is to reach overall energy savings of 264M kBtu by 2029.

# Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration	
					CY2019	CY2020
<b>1. Direct the County Executive to report to the Environmental Committee no later than June 2019 on:</b>						
1a. A draft process, resources and timeline to develop a CECAP.	OEEC	X		X		
1b. A process for contracting with an ESPC or recommend other such initiatives that produce a similar outcome and timeframe.	DPMMD	X				
<b>2. Refer to the Development Process Committee for discussion and consideration whether County staff should review and report back to the Committee on the costs and benefits of the following:</b>						
2a. Comprehensive Plan and Zoning changes that would incentivize and support more environmentally sustainable development.	DPD		X	X		
2b. Building design and code changes, including the International Green Construction Code, that could inspire and expedite energy saving practices on all new construction and significant renovations.	LDS		X			X

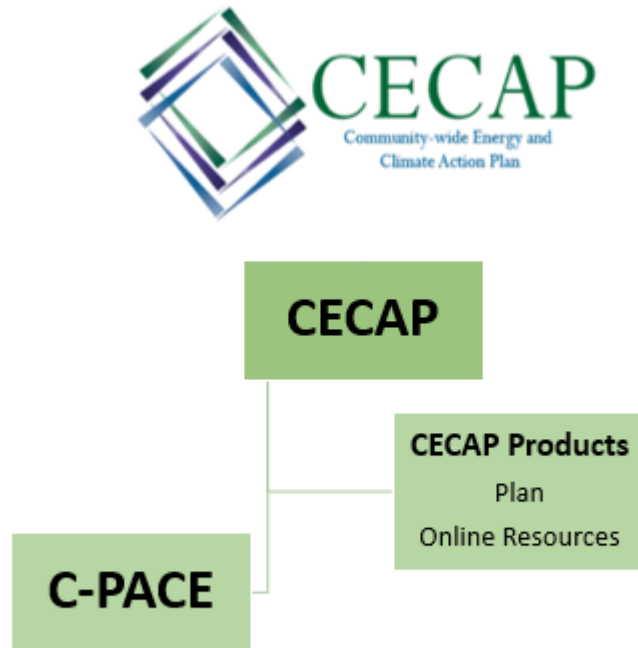
A complete update to the Fairfax Green Initiatives Implementation Matrix may be found at:  
<https://www.fairfaxcounty.gov/boardofsupervisors/board-supervisors-environmental-committee-meeting-feb-4-2020>.

# Joint Environmental Taskforce (JET)



- Joint political and administrative capabilities of FCG and FCPS systems to:
  - Proactively and equitably address climate change and environmental sustainability
  - Establish aggressive goals in areas of common FCG and FCPS operations and influence
- Focus areas include:
  - Energy
  - Transportation
  - Workforce
  - Waste Reduction/ Recycling

# Community-Wide Energy & Climate Action Planning



Program	Goal	Updates
CECAP	Develop community-wide climate mitigation goals and strategies.	<ul style="list-style-type: none"><li>Focus Group and Task Force kickoff meetings occurred in January 2020</li></ul>
C-PACE	Facilitate energy efficiency and renewable energy projects for commercial building owners.	<ul style="list-style-type: none"><li>Virginia PACE Authority designated Program Administrator in Fall 2019</li></ul>

# For More Information

[One Fairfax](#)

[Fairfax County Environmental Vision](#)

[Fairfax County Operational Energy Strategy](#)

[Sustainability Initiatives](#)

[Green Buildings](#)

[Energy Action Fairfax](#)

[CECAP](#)

[OEEC Latest News](#)

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# Glossary

- **APA** – American Planning Association
- **CECAP** – Community-Wide Energy and Climate Action Plan
- **C-PACE** – Commercial Property Assessed Clean Energy and Resiliency Program
- **DPWES** – Department of Public Works and Environmental Services
- **EAF** – Energy Action Fairfax
- **EECBG** – Energy Efficiency and Conservation Block Grant
- **ESCO** – Energy Service Company
- **EV** – Electric Vehicle
- **FCG** – Fairfax County Government
- **FCPA** – Fairfax County Park Authority
- **FCPS** – Fairfax County Public Schools
- **FCSI** – Fairfax County Sustainability Initiatives
- **FEEE** – Fairfax Employees for Environmental Excellence
- **FMD** – Facilities Management Division
- **GHG** – Greenhouse Gas
- **JET** – Joint Environmental Taskforce
- **kBtu** – 1000 British thermal units
- **kW/ kWh** – kilowatt/ kilowatt-hour
- **LED** – Light-emitting diode
- **MWCOG- CEEPC** – Metropolitan Washington Council of Governments, Climate Energy & Environment Policy Committee
- **NACo** – National Association of Counties
- **OES** – Operational Energy Strategy
- **PHEV** – Plug-in Electric Vehicle
- **PPA** – Power Purchase Agreement
- **RFP** – Request for Proposal