### **Sustainability Commission Annual Report for 2025**

Presented to: Supervisor XX Presented by: Sustainability Commissioner YY [date, 2025]



## **Objectives & Outline**

► Briefing Objectives

- Summarize SC's activities in 2024, and key challenges ahead
- Background
- ► Key accomplishments in 2024
- Challenges
- Next Steps





## Background

- In Nov 2020, BOCS adopted five climate, energy, and sustainability goals
  - The MWCOG regional Climate Mitigation (CM) Goal of 50 percent greenhouse gas emission reductions below 2005 levels by 2030,
  - The MWCOG regional Climate Resilience (CR) Goal of becoming a Climate Ready Region and making significant progress to be a Climate Resilient Region by 2030.
  - A county-specific goal for Prince William County Government operations to achieve 100% renewable electricity by 2030,
  - A county-specific goal of 100% of Prince William County's electricity to be from renewable sources by 2035, and
  - A county-specific goal for Prince William County Government to be 100% carbon neutral by 2050.
- On Dec 7, 2021, BOCS
  - Authorized development of Community Energy & Sustainability Master Plan (CESMP) to provide a roadmap for accomplishing these goals, and



Created the Sustainability Commission (SC) to guide the county on developing CESMP policies and programs.





### Community Energy and Sustainability Master Plan Prince William County, Office of Sustainability October 2023





A Roadmap For Climate Mitigation and Resiliency

## Background

- SC started meeting in May 2022, and as mandated by the BOCS, submitted an annual report <u>Sustainability Commission Prog Rpt</u> to BOCS Final.pdf in January 2024.
- Last year's annual report listed key accomplishments revolving around the development of the CESMP (adopted by the BOCS in November 2023). The report also noted that the SC:
  - recommended a set of fast-track implementation measures to jump-start climate actions (subsequently adopted by the BOCS);
  - recommended that the BOCS assess the climate mitigation and resilience impacts of key decisions; and
  - provided input to the Pathway to 2040: Comprehensive Plan and the Comprehensive Plan Amendment on the Prince William Digital Gateway.
  - This briefing provides an update on activities from Jan 2024 -Jan 2025

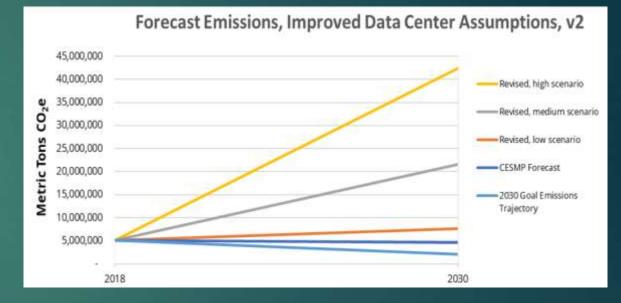
#### Table 1. CESMP High Priority Climate and Resiliency Actions

Topic Are	ea CESMP High Priority Actions	Related Goal #
Electricity	E.1: Acquire Clean Electricity Sources for the County	1, 2, 3, 4
	E.2: Promote Renewable Energy Incentive Programs and Develop Additional Solar Incentives	1, 2
	E.3: Encourage Renewable Energy Use in Energy-Intensive Commercial Buildings	1, 2
	E.4: Promote Existing Green Power Products	1, 2
	E.5: Install Solar on County Government Facilities	1, 2, 3, 4
<ul> <li>Buildings</li> </ul>	B.1: Encourage Energy Efficiency and Electrification Retrofits	1
	B.2: Propose Green Zoning Regulations	1
	B.3: Encourage Energy Efficient and Electric New Construction	1
	B.4: Promote Energy Efficiency and Electrification Incentives	1
	B.5: Transition to Net Zero County Government Facilities	1, 2, 4, 5
Transportation	T.1: Improve Pedestrian and Bicycle Infrastructure and Enhance Connectivity	1
	T.2: Encourage Transit-Oriented Development	1
	T.3: Expand Existing Programs that Reduce Single-Occupancy Vehicle Trips	1
	T.4: Upgrade Public Transit Infrastructure	1
	T.5: Encourage Zero-Emission Vehicles and Charging	1
	T.6: Expand Public EV Charging Network	1
	T.7: Adopt Zero- or Low-Emissions County Fleet	1, 4
Natural Resources	N.1: Adopt Natural Open Space Requirements	1,5
Adaptation	A.1: Develop Adaptation Plans for Critical Facilities	5
	A.2: Manage Stormwater Flooding in Areas Outside of the Floodplain	5
	A.3: Improve Power Resiliency for Critical Infrastructure	5
	A.4: Implement Shoreline Protection and Nature-Based Solutions	5
	A.5: Restore Streams to Reduce Flooding	5
	A.6: Encourage Technology for Residents to Make Homes Adaptive	1,5
	A.7: Plan Alternate Evacuation Routes for Flood-prone Areas	5



### Key Accomplishments in 2024

- Analyzed impact of data centers on the county's climate mitigation goal. The SC noted that our current trajectory has us on a path to quadruple emissions by 2030, rather than meeting the goal of halving emissions. The Commission provided straightforward recommendations to the BOCS on how to manage this growth, focusing on solutions involving zero-carbon electricity and energy efficiency.
- Provided detailed input to support the Comp Plan Amendment process. The SC provided draft language to integrate the CESMP into the ongoing CPA, focusing on the 25 priority actions in the CESMP.





# Key Accomplishments in 2024 (Cont'd)

- Recommended that the BOCS authorize a Groundwater Study to assess groundwater supply, with capability to ensure sustainability of the water supply by identifying and managing problems related to climate change, urbanization, and other stressors. The BOCS subsequently directed staff to conduct this study.
- Recommended that the BOCS and the Planning Commission immediately begin to consider GHG emissions implications in all residential land-use applications being considered by the county, to include factoring in proximity to existing or planned high-capacity transit availability.
- Supported the Sustainability Office in the development of a long-range resource plan that would make the CESMP feasible and actionable. There's a gaping hole between resources needed to implement the CESMP actions and the budget allocated to the Sustainability Office and other offices responsible for actions. The SC provided extensive conceptual support and review of the SO's efforts to develop a long-range plan.



### Key Accomplishments in 2024 (Cont'd)

- Provided input on the County's legislative agenda related to climate and clean energy. Recognizing that many of the most difficult sustainability challenges would be addressed more effectively at the state level than at the local level, the SC provided specific suggestions on priority issues.
- Recommended that the BOCS follow the recommendation of the Metropolitan Washington Council of Governments and strive to plan for 75% of new residential development within a half-mile of high-capacity transit availability. This will reduce GHG emissions while promoting transit ridership and preparing for Metro expansion.
- Made recommendations on a solar installation project. This was the first landuse application that the SC reviewed at the request of the Planning Commission and dealt with important trade-offs between expanding renewable energy capacity vs other environmental impacts.





### Challenges

CESMP requires departure from business as usual in order to achieve CM/ CR goals, but instead BOCS decisions continue digging the hole deeper

- GHG emissions are increasing by 4x rather than dropping by 0.5x. In fact, data center proliferation in PWC and Loudoun will probably result in the entire MWCOG region missing it's CM goal, despite aggressive actions in neighboring jurisdictions
- Countywide clean energy goal is slipping away due to vast increase in electricity use without clean energy requirements
- Climate resilience is only improving slowly; hurricane impacts in Western NC/ Southwestern VA illustrate urgency of better risk management
- Leadership from staff, the Planning Commission, and the BOCS is needed to achieve the land-use goals

Other than Sustainability Office, CESMP hasn't been fully embraced in strategy and operations of government offices.



### Challenges (Cont'd)

- Actions by citizens and businesses will be needed to accomplish CM/ CR goals, but there's little awareness much less action in the community.
  - There's a huge gap in resources needed to implement the CESMP actions versus the budget allocated to Sustainability Office and other offices responsible for actions. The current budget request asks for a large increase with respect to FY25, and this amount will need to be ramped up considerably for the next several years if the CESMP is to be implemented successfully.
  - In short, there's a significant risk that PWC will not achieve the CM/CR goals, and will even prevent the rest of the MWCOG region from meeting the goals.



### Next Steps

SC will push for implementation of the 3 foundational actions in CESMP

- Adaptive management framework develop metrics, conduct monitoring to determine effectiveness of actions, make mid-course corrections
- Expand environmental assessments for major BOCS decisions, like how the placement of new development affects GHG emissions
- Institutional capacity building grant applications, communication/ outreach
- SC will push for full integration of CESMP into key operational documents (strategic plan, comp plan)
- SC advocates for filling some of the resource gap to enable implementation of CESMP

### Next Steps (Cont'd)

- SC recommends that BOCS request mid-course status report for 2026 on implementation progress and prospects for achieving CM/CR goals
- SC will concentrate on BOCS-achievable goals, such as land-use decisions and permitting/oversight functions that can be streamlined/improved to incentivize achievement of CESMP goals.
- SC will work with staff and the BOCS to identify new strategies and procedures that will help achieve the CESMP goals.
- SC will work with staff and the BOCS to undertake cost-benefit analyses to identify actions that provide the most benefit for the expenditure.



## Questions?