### MITIGATION: GOALS AND ACTIONS FOR REGIONAL 2030 CLIMATE AND ENERGY ACTION PLAN

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### **2030 Regional Climate Plan Timeline**

2030 Action Plan Development Timeline		2019			2020									
		10	11	12	1	2	3	4	5	6	7	8	9	10
Regional GHG Inventory and BAU Projections			W											
Mitigation Targets and Low- Carbon Scenarios			W				W							
Regional Climate Risk and Vulnerability Assessment			W				W							
Climate Mitigation and Adaptation Actions							W							

W = Workshops



## **Global Covenant of Mayors (GCoM)**

GCoM Pledge Commitments	Reduce/Limit GHG Emissions	Prepare for Climate Change Impacts	Increase Access to Sustainable Energy	Track Progress
	GHG In	ventory		
CRF Reporting	GHG Reduc	ction Targets		
Elements		CRVA		
		Climate Action Plan		Progress Report



## **CEEPC's 10 Guiding Principles**

# 10 Guiding Principles of Collaborative Climate Planning

1. Collective Action	6. Transparency
2. Effective Partnerships	7. Innovation
3. Lead by Example	8. Community Leadership
4. Integration	9. Inclusive Engagement
5. Flexibility	10. Advocacy



### **CEEPC's 2020 Plan Action Areas**

# Regional Climate and Energy Action Plan's 9 Climate Action Areas

1. Reduce GHG Emissions	6. Move Toward Zero Waste
2. Reduce Energy Consumption	7. Build Regional Resilience
3. Increase Share of Renewables	8. Protect Equity and Health
4. Advance Sustainable Regional Mobility	9. Grow the Regional Economy
5. Increase Sustainable Urban Development	



### Goals for 2030

#### Goals:

- 40% by 2030, 80% by 2050
- Sub Goals/Targets/Indicators:
  - 40% of electricity comes from renewables
  - 100% of new construction is net zero by 2030
  - 20% of light duty vehicles are EVs by 2030 (new?)
  - Complete build out of EV network by 2030?
  - Zero waste by 2050 (what does that mean for 2030?)
  - Sub-goal @ sustainable energy access

#### Tracking Progress



### **Action List Review**

- Regional Support Activity
- Main Area of Focus/Desired Outcome
- Driving Factors
- How Can COG Help?
- ...Local Actions...



### **Action Topic Areas**

#### Topics:

- Planning
- Built Environment
- Sustainable Transportation
- Energy Supply
- Disaster Preparedness
- Waste
- Vulnerable Populations

- Inventories
- Energy Efficiency& Renewables
- Vehicles and Fuels
- Critical
   Infrastructure
- Zero Waste
- Equity



## Regional Activities Groupings

Retrofits

Inventories

Land Use

Codes

and Plans

**Planning** 

Benchmarking

**EVs** 

Renewables

Biofuels

**RPS** 

Bike Ped

CCA

Refrigerants

Microgrids

Coop

Energy

Reuse/Circular

Purchasing

Access Economy



## **Questions for Plan Development**

#### Questions to consider:

What measures are high priority that require a regional response?

What is COG's role to support achieving these goals?

What measures need to be completed immediately (1-3 years), midrange (3-5 years), and long-term (5-10 years)?

### **Inventories and Plans**

#### Regional Support Activity

Greenhouse Gas Emissions
Inventories and Plans

#### **Driving Factors**

Regional and local greenhouse gas emission reduction goals

#### How can COG Help?

- Complete and publish GCoM compliant greenhouse gas emission inventories at milestone dates to measure progress
- Track and document local measures and program development in local plans, share and encourage best practices

## Main Areas of Focus/Desired Outcome

Measure regional and locality greenhouse gas emissions changes over time to track progress toward goals



### **Built Environment**

#### Regional Support Activity

**Facilitate Building Retrofits** 

#### **Driving Factors**

Expanded use of PACE, Green Banks, and other financing tools for building retrofits

## Main Areas of Focus/Desired Outcome

Help coordinate scale up of financing; publicity; create project pipeline

- Create a regional Virtual Technical Assistance Hub
- Facilitate regional sharing of best practices on deep and net-zero retrofits, including work with the federal Department of Energy and national energy labs on sector-specific guidance materials
- Facilitate regional sharing of net-zero code language for building retrofits
- Foster local actions to provide for lead generation with installers



### **Built Environment**

#### Regional Support Activity

**Green Building Codes and Policies** 

#### **Driving Factors**

Enhance rigor of building codes across COG members to drive markets towards a more sustainable standard

## Main Areas of Focus/Desired Outcome

Foster local and state efforts to enhance planning and zoning guidelines and building codes

- Share best practices through regional meetings and materials (fact sheets, resource guides, etc.)
- Coordinate local government input to the national model energy code development process
- Encourage adoption of building codes and other incentives to facilitating net-zero building construction
- Enhance cooperation among COG's Department of Environmental Programs and Department of Community Planning and Services



### **Built Environment**

#### Regional Support Activity

**Building Benchmarking** 

#### **Driving Factors**

Opportunity to expand the use of benchmarking laws across COG members

## Main Areas of Focus/Desired Outcome

Support expanding building benchmarking requirements

#### How can COG Help?

- Share best practices through Regional meetings and materials (fact sheets, resource guides, etc.)

#### Regional Support Activity

Renewable Portfolio Standard

#### **Driving Factors**

- State actions to increase RPS standards
- Increasing solar carve-outs in RPS standards

## Main Areas of Focus/Desired Outcome

Advocate for higher overall standards or specific carve-outs

- Regional policy advocacy
- Encourage solar carve-outs in RPSs to enhance project development in the region



#### Regional Support Activity

**On-site Renewables** 

#### **Driving Factors**

Expanding proliferation of on-site solar systems

#### How can COG Help?

- Support solar coops
- Support solar mapping
- Share best practices
- Expand community solar
- Support solar on schools and infrastructure

## Main Areas of Focus/Desired Outcome

Foster expanded deployment of on-site solar systems



#### Regional Support Activity

Large Scale Off-site Renewables

#### **Driving Factors**

Expanding off-site solar PPAs can increase access to solar energy and improve overall solar capacity

#### How can COG Help?

## - Share best practices, increase understanding and capacity, support local action

- Attempt cooperative purchasing initiatives or energy purchasing consortia
- Examine possibility of regional demand aggregation
- Develop methods to reflect green power purchases from outside the region

## Main Areas of Focus/Desired Outcome

Foster expanded use of large off-site solar PPAs or other renewable energy options



#### Regional Support Activity

**Community Choice Aggregation** 

#### **Driving Factors**

Increasing interest in local government CCAs

## Main Areas of Focus/Desired Outcome

Advocacy for legal authorization of CCAs

#### How can COG Help?

- Regional policy advocacy, local mobilization of support



#### Regional Support Activity

**Green Cooperative Purchasing** 

#### **Driving Factors**

Allows COG members to access green purchasing at more cost-friendly rates

## Main Areas of Focus/Desired Outcome

Expand green cooperative procurement

- Share best practices, support local action
- Develop best practices to incorporate life-cycle energy and emissions provisions in purchasing



#### Regional Support Activity

Renewable Natural Gas

#### **Driving Factors**

- Financial incentives for renewable natural gas
- Increasing natural gas utility interest in integrating renewable natural gas into their systems

## Main Areas of Focus/Desired Outcome

Explore feasibility of renewable natural gas options

- Regional research coordination
- Enhance cooperation with regional natural gas utilities, the federal Landfill Methane Outreach Program, and renewable natural gas producers such as from landfill gas and wastewater treatment plant digester projects



### **Disaster Preparedness**

#### Regional Support Activity

Microgrids for Critical Infrastructure

#### **Driving Factors**

Local adoption of microgrids to improve resilience of critical infrastructure

## Main Areas of Focus/Desired Outcome

Foster and support implementation of government sector microgrids

- Partner on grant applications, provide engineering contract support through regional contracts with local riders.
- Share best practices through regional meetings and materials (fact sheets, resource guides, etc.).



#### Regional Support Activity

**Electric Vehicles Purchasing** 

#### **Driving Factors**

Economies of scale and obtain EVs at more cost efficient rates

## Main Areas of Focus/Desired Outcome

Cooperative procurement

- Regional aggregation of demand
- Publicize EV solutions
- Coordinate closely with Clean Cities, WANADA, and EVSE industry.
- Support local or subregional EV buying coops



#### Regional Support Activity

**Build out EV Charging Infrastructure** 

#### **Driving Factors**

Increasing availability of funding sources such as TCI, Federal High Administration's Congestion Mitigation and Air Quality Fund and DOT's Better Utilizing Investments to Leverage Development (BUILD) Grant Program

## Main Areas of Focus/Desired Outcome

Identify potential barriers and demand, and identify solutions for implementation

- Regional research coordination, information gathering, provisions of plans and resources
- Advocacy for national and regional programs
- Support local EV planning initiatives



#### Regional Support Activity

Electrify medium and heavy duty fleets (school, delivery, transit)

#### **Driving Factors**

Increasing percentage of heavy duty vehicle emissions as part of the region's mobile sector greenhouse gas emissions

## Main Areas of Focus/Desired Outcome

Identify potential barriers and demand, and identify solutions for implementation

- Regional research coordination, local information gathering
- Track State and Federal initiatives, advocate for State actions
- Support partners with grant applications or other resources
- Explore cooperative procurement



#### Regional Support Activity

**Biofuels** 

#### **Driving Factors**

Increasing availability of and interest in renewable biofuels

## Main Areas of Focus/Desired Outcome

Expand biofuel fueling facilities

- Share best practices through regional meetings and materials (fact sheets, resource guides, etc.)
- Scale up fueling facilities when, from a life-cycle perspective, consumption of biofuels contribute to GHG emissions reductions

### **Built Environment/Sustainable Transportation**

#### Regional Support Activity

Planning for Pedestrian and Cycling Infrastructure

#### **Driving Factors**

Facilitate sustainable planning processes to ensure infrastructure and development decisions incorporate considerations about emissions impacts

## Main Areas of Focus/Desired Outcome

Supportive improvements in transportation and land use planning for bicycling/pedestrians

- Share best practices through regional meetings and materials (fact sheets, resource guides etc.).
- Enhance cooperation among COG's Department of Environmental Programs and Department of Transportation Planning



### **Built Environment/Sustainable Transportation**

#### Regional Support Activity

**Planning for Activity Centers** 

#### **Driving Factors**

Increased use of sustainable planning processes that ensure infrastructure and development decisions incorporate considerations about energy efficiency, environmental sustainability, improved residential and commercial space utilization, and emissions impacts

## Main Areas of Focus/Desired Outcome

Enhanced sustainability focus in comprehensive planning and zoning

- Share best practices through regional meetings and materials (fact sheets, resource guides, etc.)
- Address both new and existing construction



### **Built Environment/Sustainable Transportation**

#### Regional Support Activity

Increase the Value of Land Resources

#### **Driving Factors**

Growing recognition of the positive valuation of land resources that have important roles in emissions reductions (i.e., carbon sinks, tree canopy)

## Main Areas of Focus/Desired Outcome

Update planning and zoning guidelines

- Share best practices through regional meetings and materials (fact sheets, resource guides, model ordinances, etc).
- Support protection and management of green infrastructure



#### Regional Support Activity

Organic Waste Pickup and Composting

#### **Driving Factors**

Increasing consumer interest in organic waste processing and circular economy principles

## Main Areas of Focus/Desired Outcome

Cooperative procurement

- Regional aggregation of demand
- Facilitate regonally shared composting projects

#### Regional Support Activity

Refrigerant Disposal and Leak Detection

#### **Driving Factors**

Increasing percentage of refrigerant emissions as part of the region's greenhouse gas emissions

## Main Areas of Focus/Desired Outcome

Develop handling and disposal programs

- Share best practices through regional meetings and materials (fact sheets, resource guides etc.)
- Develop region-wide education on proper handling and disposal of high Global Warming Potential Refrigerants from coolers, air conditioners, and other appliances; likely targeting grocery stores for leak detection



#### Regional Support Activity

Remove Barriers to Reuse

#### **Driving Factors**

Increasing recognition of the problems with single-use packaging

## Main Areas of Focus/Desired Outcome

Update health codes and guidelines

- Share best practices through regional meetings and materials (fact sheets, resource guides etc.)
- Implement a more direct measure at reducing waste than the more common approach of taxing plastic bags



#### Regional Support Activity

**Build Markets for Circularity** 

#### **Driving Factors**

Increasing public interest in circular economy principles

## Main Areas of Focus/Desired Outcome

Explore circular economy opportunities

- Share best practices through regional meetings and materials (fact sheets, resource guides etc.)
- Identify overall potential to build markets for recovered materials in public works projects



### **Equity**

#### Regional Support Activity

Incorporate equity in programs

#### **Driving Factors**

Increasing realization of the need to address vulnerable populations

## Main Areas of Focus/Desired Outcome

Assess impacts on vulnerable populations as part of program planning and measuring

- Share best practices
- Support local efforts to invest in solar and efficiency in the low and moderate income sector
- Work with GCoM to define what energy access means in the metropolitan Washington region



### **Next Steps**

- Circulate revised list reflecting feedback
- Begin developing draft 2030 Plan Document
- Re-Schedule In-Person Workshop or Work Together Virtually for further refinement
- Share with other US Metro Scale Climate Leaders
- Consider ways to incorporate local action support into the plan



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