

2019 ACPAC Orientation

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Environmental Planner III

Air and Climate Public Advisory Committee (ACPAC)
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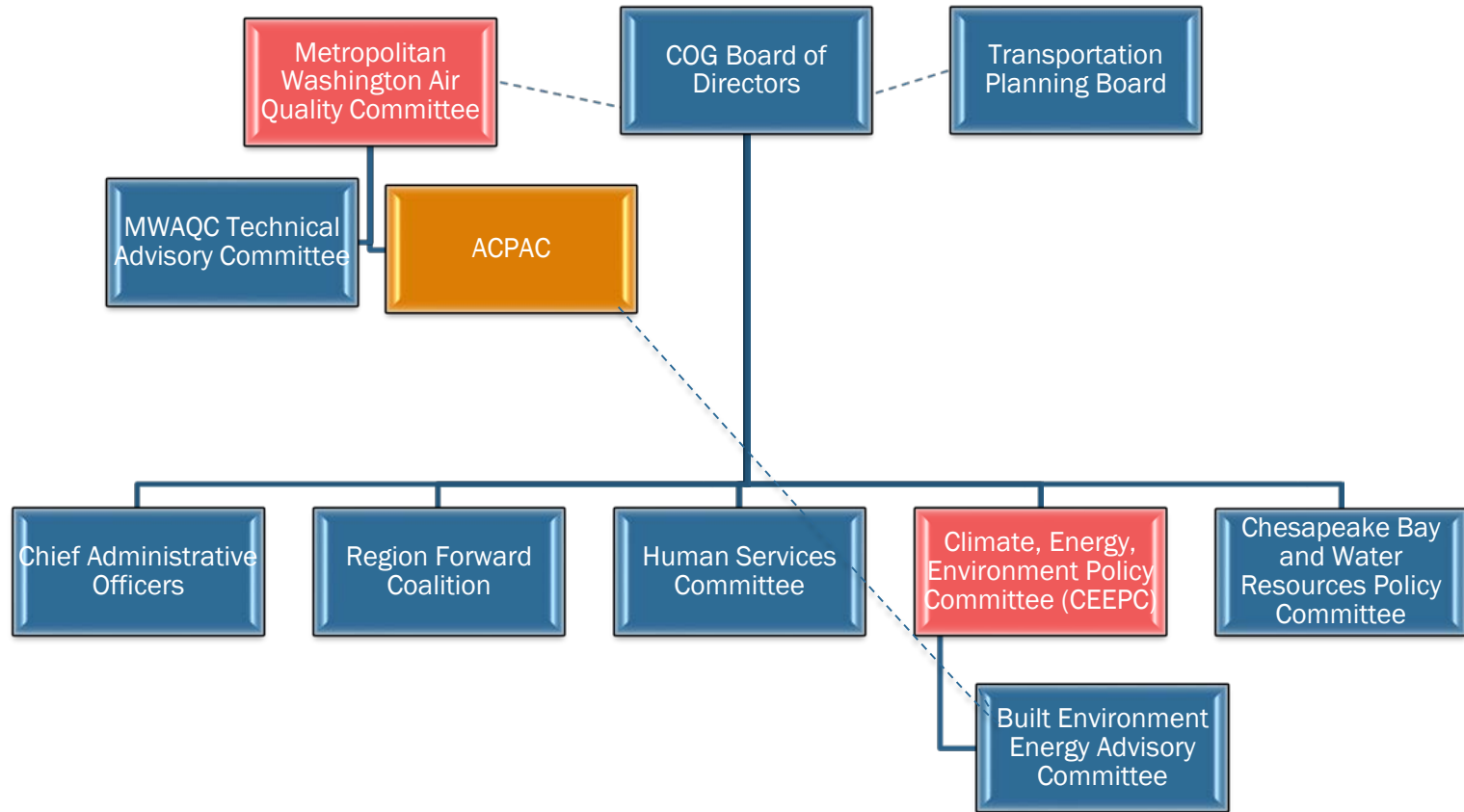
Metropolitan Washington
Council of Governments

COG

- The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association
- Brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland and Northern Virginia
- Membership is comprised of 300 elected officials from 24 local governments, the Maryland and Virginia state legislatures, and U.S. Congress



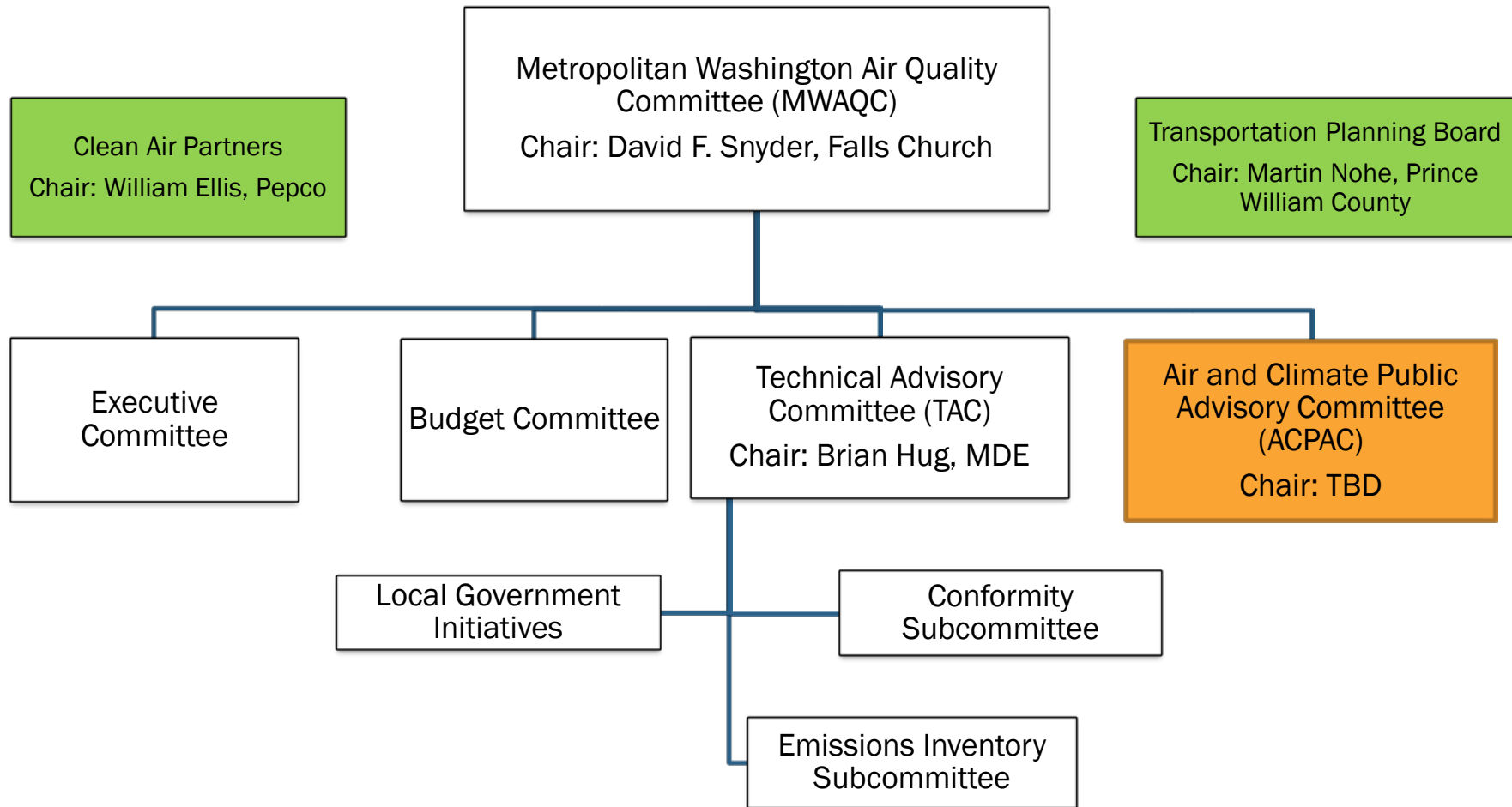
COG Committee Structure



ACPAC Mission

- Facilitate dialogue among diverse interest groups, the community and the Metropolitan Washington Air Quality Committee (MWAQC)
- Advise MWAQC in development of air quality plans and policies
- Advise the Climate, Energy and Environment Policy Committee (CEEPC) in development of climate and energy related plans and policies

Organizational Structure



Role of MWAQC

To meet Clean Air Act requirements,

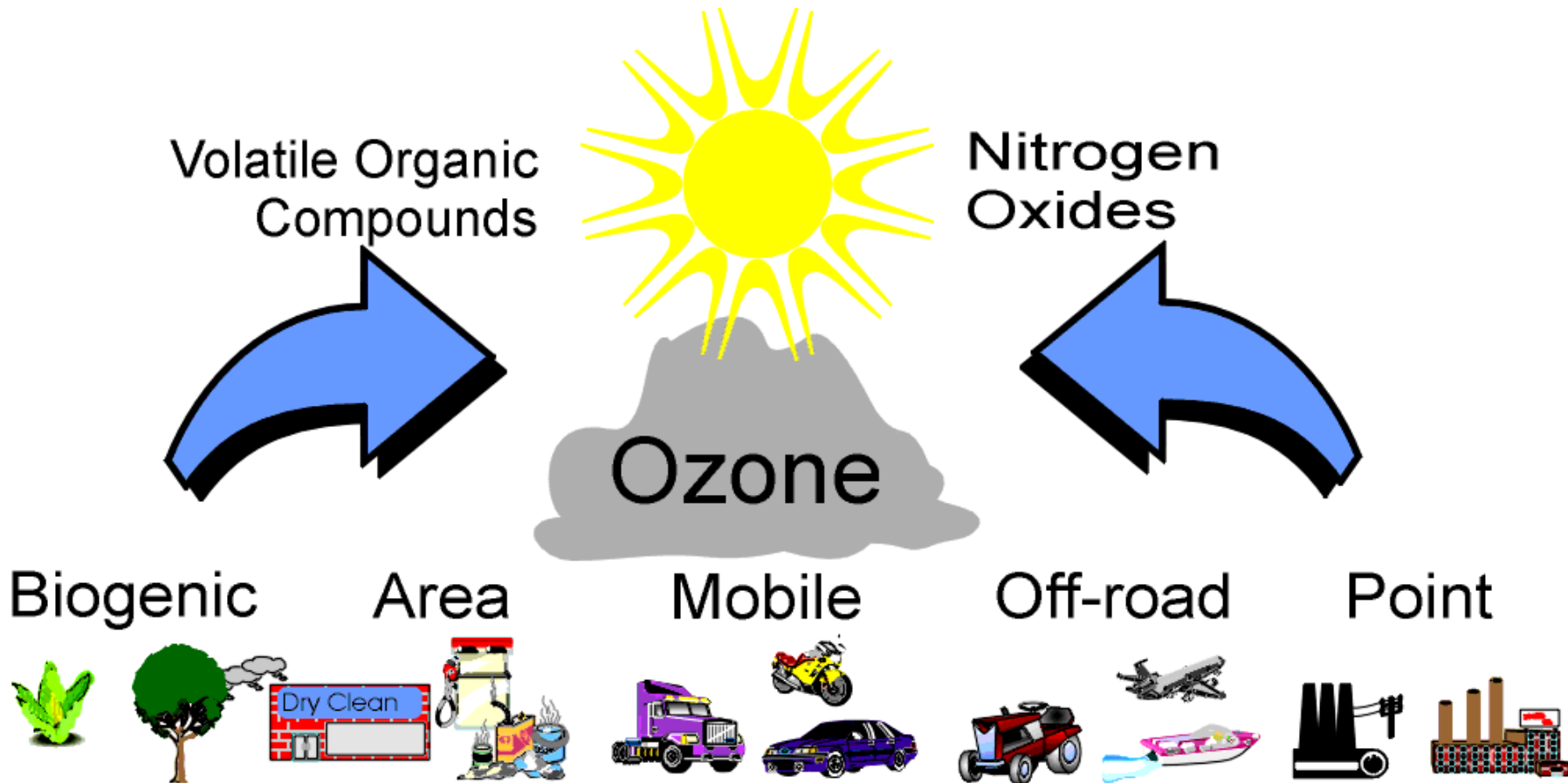
- Demonstrate an appropriate progress in reducing criteria air pollutants (Ozone, Fine Particles, Carbon Monoxide, Sulfur Dioxide, Nitrogen Dioxide, Lead)
- Demonstrate attainment of federal national ambient air quality standards (NAAQS) for criteria pollutants
- Prepare region-wide State Implementation Plan (SIP): a plan to reach attainment of criteria pollutants
- Conduct inventories and emissions budgets
- Prepare maintenance plans
- Perform other functions such as identifying innovative initiatives to improve air quality, upon member request.

Membership

District of Columbia (6)	
Mayor (2), Council (2)	
District Department of Energy and Environment	
District Department of Transportation	
Maryland (20)	Virginia (17)
City of Bowie	City of Alexandria
City of College Park	City of Fairfax
City of Frederick	City of Falls Church
City of Gaithersburg	City of Manassas
City of Greenbelt	City of Manassas Park
City of Rockville	Arlington County
City of Takoma Park	Fairfax County (3)
Frederick County	Loudoun County
Montgomery County (1 Executive, 2 Council)	Prince William County (2)
Prince George's County (1 Executive, 2 Council)	Stafford County (1-hour ozone issues only)
Calvert County	Virginia General Assembly (2)
Charles County	Virginia Department of Environmental Quality
Maryland General Assembly (2)	Virginia Department of Transportation
Maryland Department of the Environment	Other (1)
Maryland Department of Transportation	Transportation Planning Board Chair or Designee



Ground-Level Ozone

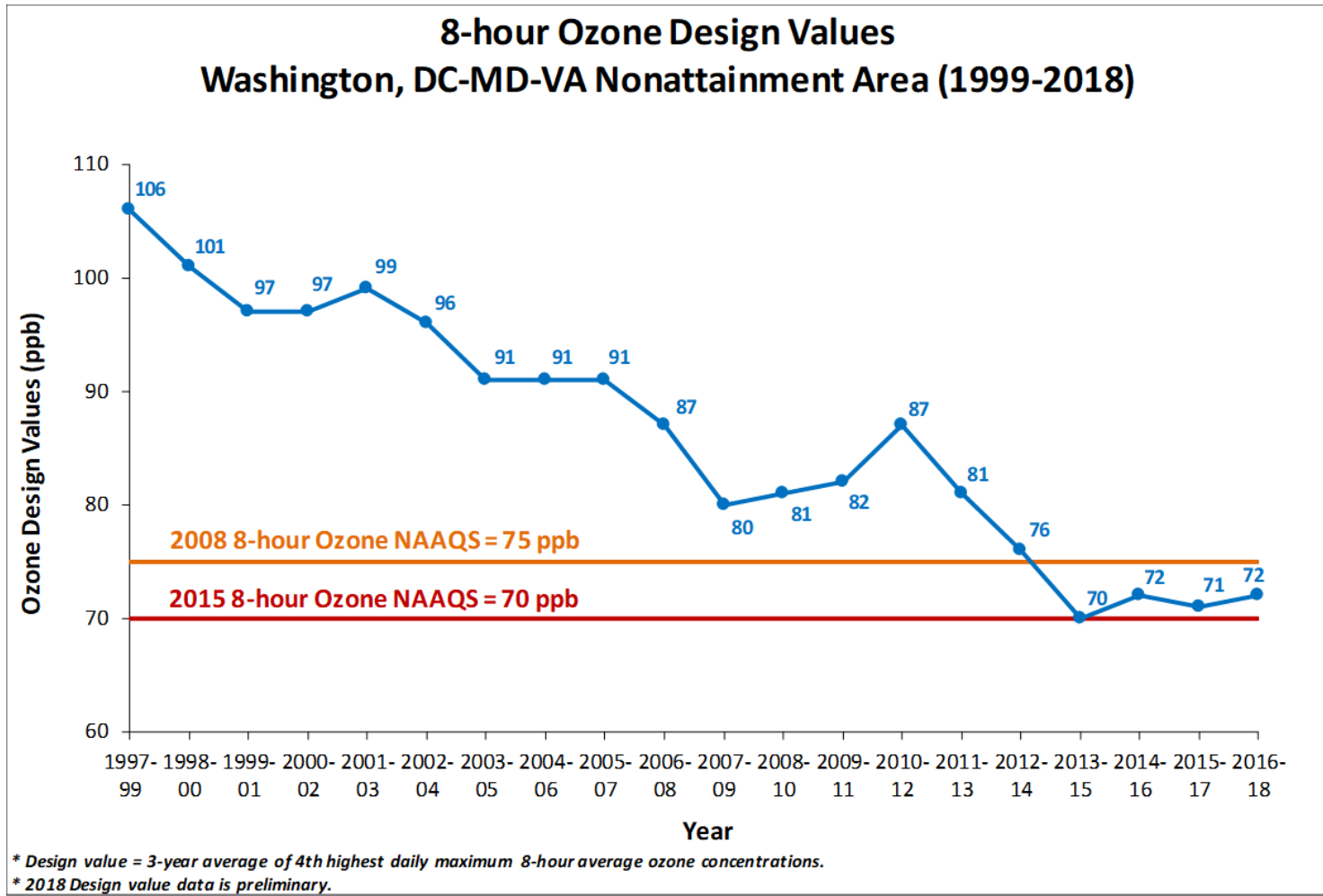


Health Effects of Ozone

- Irritate the respiratory system
 - Asthma attacks
 - Respiratory symptoms (cough, wheezing, etc.)
 - Decreased lung function
 - Airway inflammation



Ozone

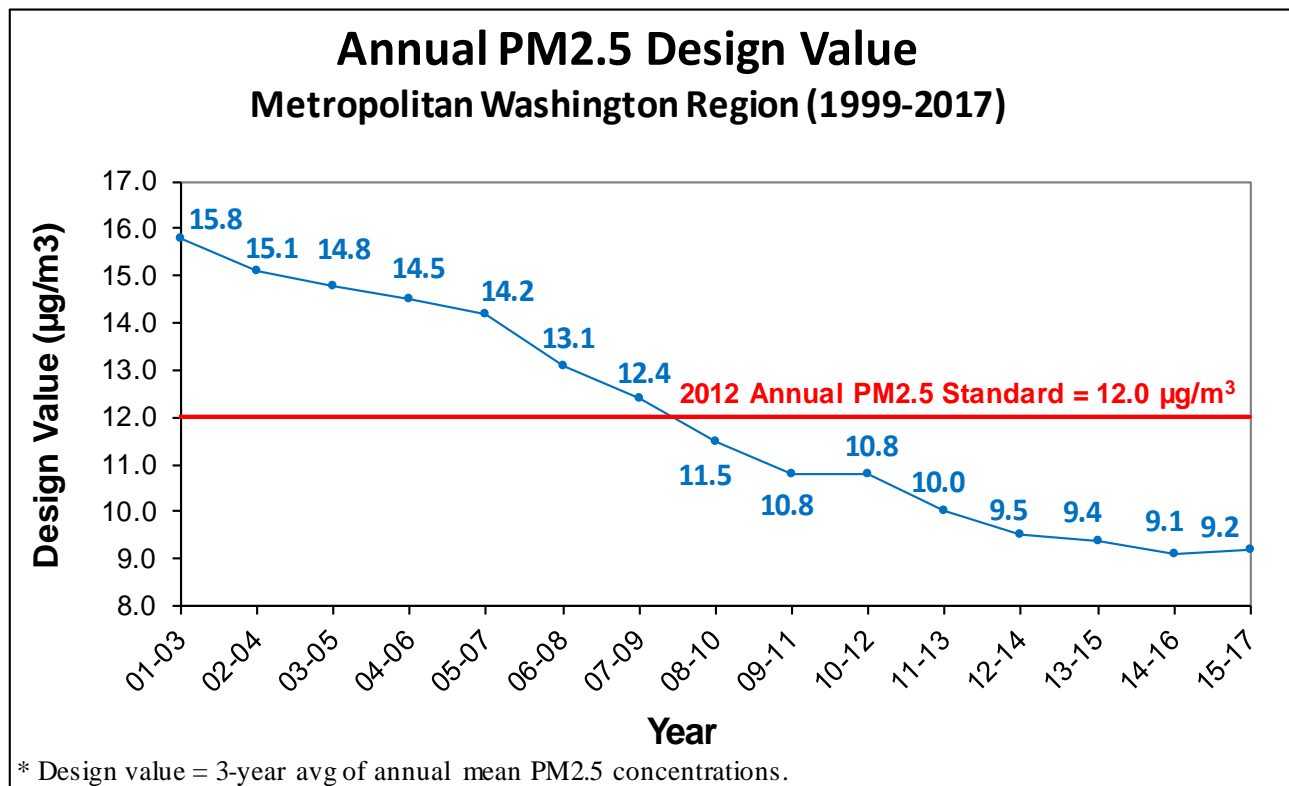


Fine Particles (PM_{2.5})



- Chemical, particulate matter or aerosol
- Combo of local emissions from coal burning, cars & trucks, construction and regional power plants, industry.
- Causes respiratory problems
- Impairs visibility.

Metropolitan Washington Fine Particle Trends



Monitors

Sign up for Air Alerts at
Cleanairpartners.net



The Air Quality Index (AQI)

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301 to 500	Health alert: everyone may experience more serious health effects.



Clean Air Partners



TODAY'S AIR QUALITY

BECOME A SPONSOR

ABOUT

GET INVOLVED

AIR QUALITY RESOURCES

MEDIA CENTER



Helping Our Region Breathe Easy!

About Clean Air Partners

Clean Air Partners is a public-private partnership educating the greater metropolitan Baltimore-Washington region about the health risks of poor air quality. For more than 20 years, we have empowered individuals and organizations to take simple actions to reduce pollution and protect public health.



Metropolitan Washington
Council of Governments

What Local Members Can Do

Renewable Energy Programs	Energy Efficiency Programs	Mobile Vehicle Programs
<ul style="list-style-type: none">• Community Solar and Solar Co-Ops• Green Power Purchasing Programs• Renewable Power Purchase Agreements	<ul style="list-style-type: none">• Building Energy Efficiency Programs• Green Building Programs• Back-up Generators	<ul style="list-style-type: none">• Idle Reduction Programs• Green Fleets Programs• EV Expansion and Infrastructure• Bike and Pedestrian Infrastructure

Full list of measures can be found in:

- What We Can Do Report
- [Gold Book](#)

Climate, Energy & Environment Policy Committee's Purpose



Provide leadership on climate change, energy, green building, alternative fuels, solid waste and recycling issues.

Support area governments as they work together to meet the goals outlined in the 2008 *National Capital Region Climate Change Report*.

CEEPC's Membership

COG MEMBERS - 25

1 Elected Official per COG local govt + 1

Additional Elected Official for:

- District of Columbia (Mayor)
- Fairfax County
- Montgomery County (Exec)
- Prince George County (Exec)

STATE GOVERNMENT - 13

- MD, VA Senate + House
- State Environment, Energy, Transportation Directors

STAKEHOLDERS - 20

- Federal/Regional Agencies - 4
- Electric & Gas Utilities - 3
- Environmental Community - 3
- Business Community - 3
- Academic Community - 3
- At-Large - 3
- Chair, Air and Climate Public Advisory Committee (ACPAC)

REGIONAL*

- Transportation Planning Board
- Metropolitan Washington Air Quality Committee
- WMATA Board of Directors

*Added if not represented by COG members.



Climate & Energy Action Plan (2017-2020)

Climate Action Areas

Section 1 - Reduce Energy Consumption

Section 2 - Increase Share of Renewables

Section 3 - Advance Sustainable Regional Mobility

Section 4 - Increase Sustainable Urban Development

Section 5 - Move Toward Zero Waste

Section 6 - Build Regional Resilience

Section 7 - Protect Equity and Health

Section 8 - Grow the Regional Clean Economy

See also: [Climate & Energy Progress Dashboard](#)



SECTION 1

Reduce Energy Consumption

Challenge - Energy consumption is the leading contributor to metropolitan Washington's GHG emissions, accounting for 51 percent of total emissions.⁴

Outcomes - Reduce total energy consumption 5 percent from 2015 to 2020.
- Increase total high performance buildings in the region to 5,000.

ELECTRICITY AND NATURAL GAS CONSUMPTION
Sustained continuous reductions in energy consumption will be a crucial component of meeting the region's GHG emission reduction goals. Figure 2 features the trends in regional energy consumption, represented by the combined million megawatt hour equivalent (MWh) of total annual electricity and natural gas consumption. Between 2005 and 2015, there has only been a 1 percent increase in total consumption, despite a 15 percent growth in population. This is primarily attributable to reductions in natural gas usage. In the same timeframe, energy intensity per capita has decreased 12 percent.⁴⁵

Figure 2: Progress Towards Reducing Regional Energy Consumption

Year	Total Energy Consumption (Million MWh)	Energy Intensity Per Capita
2005	59.95	12.65
2010	60.00	11.50
2015	60.79	11.14
2020	57.82	11.14

Between 2005 and 2015, there has only been a 1% increase in total annual energy consumption, despite a 15% growth in population.

In the same timeframe, energy intensity per capita has decreased 12%.

Note: This figure represents a combined MWh of total annual electricity and natural gas consumption.
Source: OOG 2018 Metropolitan Washington Annual Utility Data Survey Analysis

HIGH PERFORMANCE BUILDINGS
GHG emission reduction is supported by development that prioritizes energy efficiency. Buildings with a higher level of environmental performance are verified through programs such as LEED, ENERGY STAR, EarthCraft, and Passive House. Figure 3 shows the total number these certified high performance buildings in the region and the potential to achieve 5,000 by 2020 if current growth rates continue.⁴⁶

2017-2020 Regional Climate and Energy Action Plan | 9

Climate & Energy - Recent Successes

- #1 in ENERGY STAR buildings (2017)
- Projected to exceed 20,000 grid-connected renewable energy systems (2017)
- Tripled EV stations from 2012 -2016
- #5 in Clean Tech (2015)



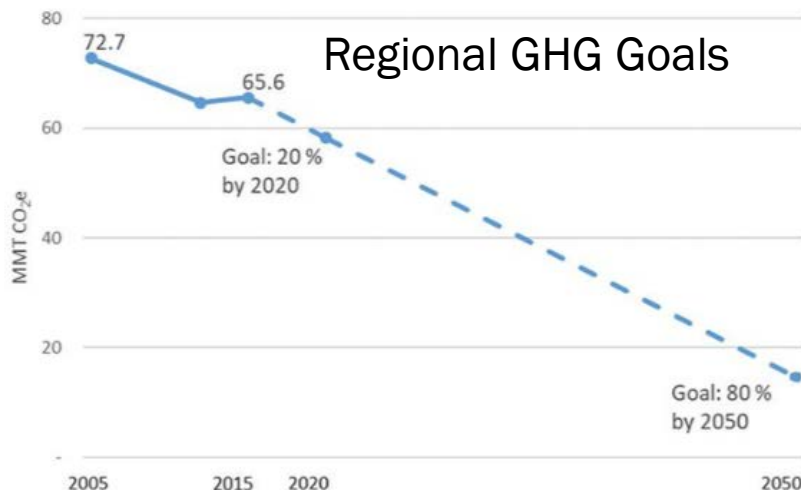
Climate & Energy

2019 Priorities

- Renewable Energy and Energy Efficiency
- Low Emission Mobility
- High Performance Buildings
- Sustainability and Resiliency
- Tree Canopy

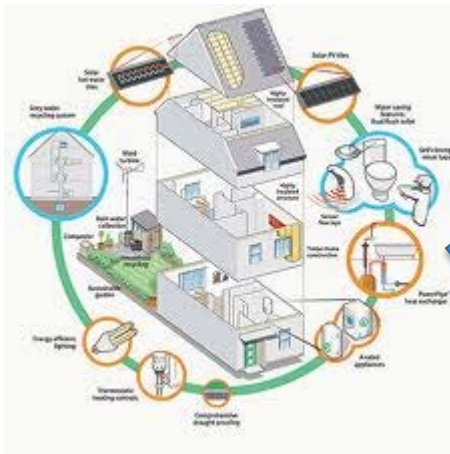
Activities

- Action Plan update
- Awards
- Grants
- Training and technical assistance
- Cooperative Purchasing
- Legislative advocacy



BEEAC

IGBG = Intergovernmental
Green Building Group



EAC= Energy Advisors
Committee



BEEAC = Built Environment
Energy Advisory Committee



ACPAC Activities

- Learn about air and climate policies, initiatives, and projects and share with networks (and vice versa)
 - 2021 Climate Action Plan
- Provide input/review MWAQC and CEEPC plans, reports, comment letters
- Provide input and guidance on topics of interest
- Climate Awards
- Environmental Justice – projects, grants?
- Other: Auto Show, tour, book sharing, workshops, etc.

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