



Gold Book

State and Local Clean Air Measures

Presentation to: MWAQC TAC
March 11, 2014



Long History of Delivering Clean Air



Air Pollution Control Act 1968

“They truly can be proud of the efforts they have made and the achievements that have resulted.”

Remarks on signing the Clean Air Act, President Lyndon Johnson, December 1963



No Code Red Days 2005



Regulatory Mandates & Local Voluntary Initiatives



State Implementation Plans:
Federal and State Control Measures
Permanent and Federally Enforceable



*Wet Scrubber Installed at the
Morgantown Coal Plant - 2009*



COG Clean Air Rally - 1963

Local Measures: Voluntary
& Important

State and Federal Measures

Federal and State Measures Provide Significant Air Quality Benefits to the Region

- Power Plant Emission Limits
- Vehicle Emission Standards
- Fuel Sulfur Standards
- Fuel Efficiency Standards – Light Duty, Heavy Duty Trucks
- Non-road Locomotive Standards
- Product Formulations



Delivering Clean Air – A Legacy of Local Leadership

1970 COG begins issuing daily air quality readings

1974 COG's Commuter Club Formed

1985 Commuter Club Becomes RideFinders Network

1990 COG Adopts Million Tree Planting Resolution

1991 MWAQC Founded

1996 RideFinders Becomes Commuter Connections

1996 Ozone Action Days Program Begins

1997 ENDZONE Partners Founded

1997 Guaranteed Ride Home Launched

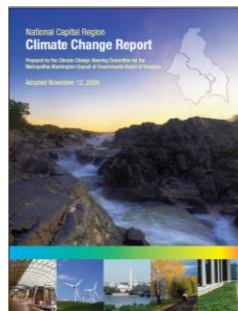
2000 ENDZONE Partners becomes Clean Air Partners

2000 20% Telework Goal Established with Board of Trade

2001 Bike To Work Day Program Launched

2008 Car Free Day Program Launched

2008 COG Climate Report Adopted



Voluntary Bundle Measures



- Wind Energy Purchases
- Clean Energy Rewards Programs
- LED Traffic Signal Retrofits
- Renewable Portfolio Standards
- Building Efficiency/Green Buildings
- High Electricity Demand Day (HEDD) Initiative



The Gold Book

- Compendium of state and local actions that improve air quality
(but are not easily quantifiable or are not being credited in the SIP)
- First Version: 2004, Revised 2009 &
2014
- For each measure:
 - Description
 - Progress/status
 - Benefits
 - Opportunity for Expansion



2009 vs. 2014

2009 Gold Book

- Existing Programs
- Existing but Available for Expansion
- Potential Future Initiatives

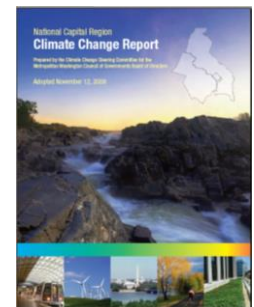
2014 Gold Book

- Climate, Energy & Sustainability Plans
- Renewable Energy & Green Power
- Energy Efficiency Programs
- Stakeholder Initiatives & Partnerships
- Land Use & Transportation Coordination
- Transportation Options
- Transportation Demand Reduction
- Vehicle Emission Reduction
- Other Initiatives



Climate, Energy & Sustainability Plans

- State plans:
DC, Maryland &
Virginia
- MWCOG Regional Climate plan
- Local Jurisdictions' Climate Action Plans
- Local Jurisdictions' Air Quality Programs
- Energy Security & Assurance Plans



Local Jurisdictions' Air Quality Programs



- Transportation Options, Reducing Congestion
- Alternative fueled vehicles
- VOC measures

Low-VOC Paint & Pesticides

Gas Can Replacement Program

Deferred Refueling, Striping & Pesticide Application

- Episodic Measures

Lawn Mowing Deferred

High Electricity Demand Day Initiative

- Tree Canopy & Green Space



Renewable Energy & Green Power

- Renewable Portfolio Standards
- Government Renewable Energy Purchasing

Green Power Partners & Communities

DC Renewable Energy Goals, MCDGS Solar RFP



- Private Sector Renewable Purchasing

Cooperative Solar Procurement, Community



- MD Game Changers Program

- Rooftop Solar Challenge



Energy Efficiency

- Energy Efficiency Financing

PACE, On-bill-repayment, Green Banks

Energy Performance Contracting

- High Performance Buildings

Government & Private Building Requirements

Building Codes, Green Leasing

- DC Sustainable Energy Utility



Regional Partnerships

- Clean Air Partners Program
- Cooperative Green Purchasing
- Urban Heat Island Mitigation



- Public-Private Partnerships

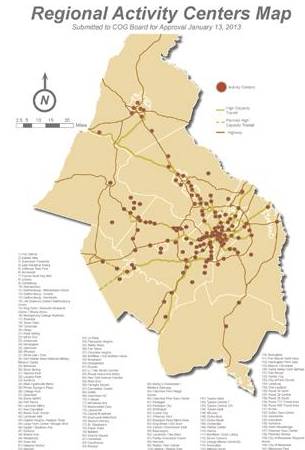
Airports

Colleges & Universities



Land Use & Transportation Coordination

- Smart Growth Development
 - Regional Activity Centers
 - Strategic Investment Plan
- Transit-Oriented Development
 - Regional Transportation Priorities Plan
 - Transportation-Land Use Connections Program
 - Bonus Densities



Transportation Options

- Public Transit
- Bus Rapid Transit & Bus Priority Enhancements
- Commuter Rail
- Bicycle & Pedestrian Programs

Capital Bike Share

Safety & Infrastructure Improvements

- Vehicle Share Programs

Car2Go, Enterprise, ZipCar

- Value Pricing (HOT Lanes)

I495 Express lanes, I95 Express Lanes, ICC



Transportation Demand Reduction

- Commuter Connections
- Incident Management and Communication
MATOC
- Telecommuting
- Safe Routes to Schools



Vehicle Emission Reduction

- Low Emission Vehicles & Fleets

 - Plug-In Hybrids

 - Electric Vehicles

 - Compressed Natural Gas Vehicles



- Enhanced Idling Enforcement

- Virginia Remote Sensing Program

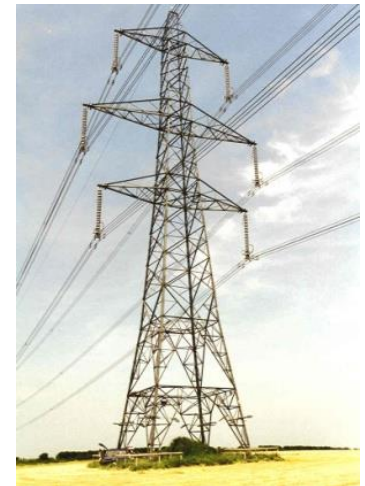
- Diesel Retrofits

- Traffic Signal Optimization



Additional Ideas

- Microgrids
- Combined Heat & Power
- Waste-to-gas & Cogeneration
- Improve access to energy efficiency & renewable energy financing
- Net Zero Emission Pledges



Additional Ideas

- Regulate Distributed Generators
- Usage-based insurance
- Eco Driving Programs
- Parking management / impact fees
- Hoteling



What's Next?

- What are the New Challenges and Opportunities for MWAQC, State, and Local Leadership?
 - New Lower NAAQS? 75 => 60-70? By 2015-2020
 - Use of Generators on High Electric Demand Days
 - Use of Controls on Power Plants
 - Low-Level NOx + Transported Pollution
 - Addressing Mobile, Area, and Non-road Emissions
- Areas of Possible Focus
 - Fleet Turnover, Fleet Electrification, CNG
 - More Telework, Smart Growth, Green Infrastructure
 - Clean Distributed Generation/Intelligent Grid



Schedule:

MWAQC TAC:

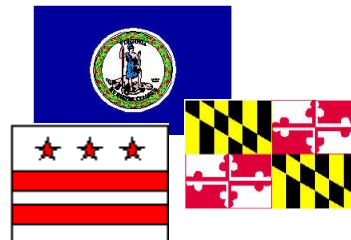
Approve Framework & List of Measures - **January 7**

Review and Comment - **February/March 11**

MWAQC

Briefing, Review, Comment - **February 26**

Adopt – **May 28**



For more information

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