



Gold Book

State and Local Clean Air Measures

Presentation to: MWAQC
February 26, 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



COG Clean Air Rally - 1963



Wet Scrubber Installed at the
Morgantown Coal Plant - 2009



Local Measures: Voluntary
& Important

3

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



4

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



5

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



6

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



7

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



8

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



9

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



10

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



11

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



12

Regional Partnerships

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



- Public-Private Partnerships

Airports

Colleges & Universities



13

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



14

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



15

Transportation Demand Reduction

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



16

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



17

Additional Ideas

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



18

Additional Ideas

- Regulate Distributed Generators
- Pay-as-you-drive insurance
- Eco Driving Programs
- Parking management / impact fees
- Traffic Signal Optimization
- Hoteling



19

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



20

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**



21

For more information

Contact:

Isabel Ricker

iricker@mwkog.org

202-962-3245

Jeff King

jking@mwkog.org

202-962-3238



22